

Health I - Life Management Skills

Course No. 0800300

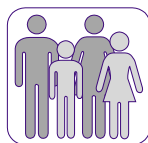
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Health I - Life Management Skills

Course No. 0800300

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**Curriculum Improvement Project
IDEA, Part B, Special Project**



Exceptional Student Education

<http://www.leon.k12.fl.us/public/pass/>

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Table of Contents

Acknowledgments	xi
Introduction	xiii
Unit 1: Self-Esteem: Valuing Yourself	1
Unit Focus	1
Vocabulary	3
Introduction	5
Self-Esteem: Our View of Ourselves	5
Where Does Self-Esteem Come From?	6
Practice	10
Enemies of High Self-Esteem	12
Building Self-Esteem	15
The Best Kind of Revenge	18
Summary	19
Practice	20
Unit 2: Connections: Living Well with Others	29
Unit Focus	29
Vocabulary	31
Introduction	35
Why We Need Relationships	35
Establishing Relationships: Connecting	37
Practice	40
Communication: The Way We Connect to Others	41
Practice	46
Levels of Communication: Showing More and More of Ourselves to Others	47
Practice	51
Characteristics of Friendship and Healthy Relationships: Sharing Trust, Affection, Respect, and Disagreements	54
Communicating through Behavior: Passive, Aggressive, and Assertive	55
Resolving Conflicts: Mending Differences	56
Practice	59
When Relationships Hurt	62
Summary	64
Practice	67
Unit 3: Stress: Finding the Balance	75
Unit Focus	75
Vocabulary	77
Introduction	79
Stressors: Demands Made on the Body	80
The Body's Response to Stress: Readiness and Recovery	81
Practice	85

When Stress Becomes Too Much: The Negative Effects of Stress	86
Living with Stress: Learning to Cope	86
Practice	96
When Stress Takes Over: Depression	101
Beyond Depression: Suicide	102
Summary	104
Practice	105
Unit 4: Nutrition: Food for Life	109
Unit Focus	109
Vocabulary	111
Introduction	115
Food: Much More Than Just Filling and Tasty	116
Practice	126
Developing a Nutritious Diet: The Food Guide Pyramid	128
Calories: The Measure of Energy	129
Focusing on Health: Body Weight and Body Composition	131
Improving Body Composition: Dieting and Exercising	133
Controlling Weight: Tips on Making the Right Food Choices	135
Practice	137
Understanding Food Labels: What's Inside This Package Anyway?	139
Food Fallacies: Separating Mistaken Ideas from the Truth	141
Eating Disorders: When Food Becomes an Enemy	143
Summary	144
Practice	146
Unit 5: Drugs: Uses and Misuses	153
Unit Focus	153
Vocabulary	155
Introduction	159
Drugs: Affecting the Body, the Mind, or Both	160
The Different Kinds of Drugs: Over-the-Counter, Prescription, and Illegal Drugs	161
Practice	165
The Misuse and Abuse of Drugs: Self-Abuse	167
Drugs of Abuse: Altering the Mind and Causing Addiction	167
The Cycle of Drug Use: Use, Abuse, Addiction, and Withdrawal	170
Practice	173
Why People Start Using Drugs	175
Why People Continue Using Drugs	176
How to Say "No" to Alcohol and Other Drugs	176
Alcohol: The Most Commonly Abused Drug	177
How to Know If You or Someone You Know Has a Drinking Problem	183

Recovering from Alcohol Abuse: Returning to a Productive Life	184
Call for Help: Begin a Program to Recover	185
Practice	186
Tobacco: The Legal Drug That Damages the Body on Contact	187
Why People Start Using Tobacco: Copying Other People's Behavior	187
Why People Continue to Use Tobacco: The Addictive Drug Nicotine	188
How Tobacco Affects the Body	189
Passive Smoke: How Cigarettes Kill Nonsmokers	191
Smokeless Tobacco: Chewing and Dipping	191
Quitting: Being Good to Your Body	192
Practice	194
Psychoactive Drugs: Drugs That Affect the Mind	196
Cannabinoids: Marijuana and Hashish	196
Hallucinogens: LSD, Mescaline, Psilocybin, and MDMA	198
Stimulants: Amphetamines and Cocaine	200
Depressants: Barbiturates and Tranquilizers	203
Narcotics: Codeine, Heroin, Morphine, and Opium	204
Inhalants: Solvents and Aerosols	205
Practice	207
Other Illegal Drugs Produced and Sold: <i>Look-Alikes</i> and <i>Designer Drugs</i>	208
Drug Use: The Penalties You'll Pay	208
What to Do If You Have a Drug Problem	209
Alternatives to Drugs	210
Summary	211
Practice	213
Unit 6: First Aid: Emergency Care	225
Unit Focus	225
Vocabulary	227
Introduction	229
Responding to an Accident: Look First; Act Second	230
Practice	236
Rescue Breathing: The Breath of Life	240
CPR: Keeping the Lungs and Heart Working	246
Training in CPR: Responsible Citizenship	251
Practice	253
The Abdominal Thrust: Opening a Blocked Airway	255
Severe Bleeding: Life-Threatening Loss of Blood	258
Shock: The Body's Response to Severe Injury or Illness	259
Summary	261
Practice	263

Unit 7: Consumerism: How to Use Money Wisely	271
Unit Focus	271
Vocabulary	273
Introduction	277
Budgeting: Taking Control of Our Money	278
Practice	282
Using Credit: Borrowing Money	284
All Credit Cards Are Definitely Not Created Equal	287
Protection against Credit Card Fraud	287
Practice	289
Installment Loans: Borrowing Money for Expensive Items	290
Wise Borrowing and What to Do If You Can't Make Payments	291
Buying for Value: Knowing the Questions to Ask	292
Don't Make Snap Judgements: Don't Be Fooled by Price or Brand Name ...	294
Buyer Satisfaction: Don't Settle for Less	294
Consumer Fraud: Buyer Beware	295
Advertising: Pressing Our Buttons	296
Summary	297
Practice	299
Unit 8: Puberty: Maturing into Adulthood	311
Unit Focus	311
Vocabulary	313
Introduction	317
Physical Changes in Females during Puberty	318
Menstruation: Passing the Uterine Lining	321
Practice	325
Physical Changes in Males during Puberty	329
Nocturnal Emissions: "Wet Dreams"	332
Masturbation: Self-Stimulation	332
Practice	334
Puberty and Changing Emotions	336
What Causes Puberty?	338
The Biological Clock: The Body's Timetable	338
Summary	339
Practice	341
Unit 9: The Reproductive System	351
Unit Focus	351
Vocabulary	353
Introduction	359
Why Study the Reproductive Systems?	359

The Female Reproductive System: Parts and Organs	360
Personal Health Issues and Prevention: Females	363
Disorders of the Female Reproductive System	365
Practice	367
The Male Reproductive System: Parts and Organs	373
Caring for the Male Reproductive System	375
Diseases of the Male Reproductive System	375
Disorders of the Male Reproductive System	376
Practice	377
Pregnancy, Birth Control, and Prenatal Care	383
Summary	386
Practice	387
Unit 10: Sexually Transmitted Diseases	403
Unit Focus	403
Vocabulary	405
Introduction	409
Sexually Transmitted Disease—The Words Say a Lot	409
STDs: How They Grow	411
STDs Caused by Bacteria	413
STDs Caused by Viruses	416
Practice	420
STDs Caused by Parasites	423
AIDS: The Deadly Disease	424
Protecting against STDs	428
Responding to STDs	429
STDs and Love	430
Summary	431
Practice	433
Appendices	441
Appendix A: Index	443
Appendix B: Help Agencies	447
Appendix C: References	449

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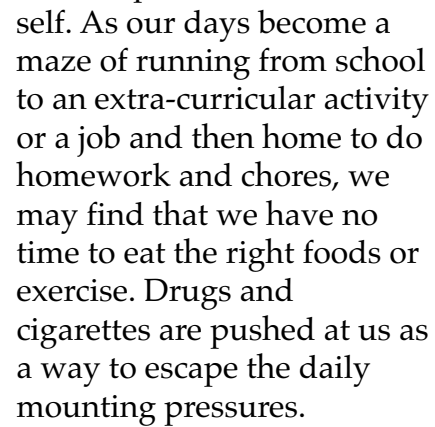
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To be healthy in body and mind seems to grow more difficult with each passing day. The more complex the world becomes, the harder we may find it to maintain our values and protect our sense of



the challenges you face. *Health I - Life Management Skills* is designed to help you do the following.

- xiii

- wisely and responsibly manage the thousands and thousands of dollars you will earn and borrow
- understand the ways your body is changing as you develop from a child to an adult
- learn how to care for your reproductive system and understand the enormous responsibility of producing a life
- protect yourself and others from the many diseases passed during sexual relations

A truly healthy body and mind does not stop with the care of the self. *Health I - Life Management Skills* assumes that to be truly healthy, we must be good caretakers of our communities and other people. Our bodies are powerful instruments and used ignorantly they can do great harm to others. The excuse “I didn’t know” is another way of saying “I didn’t care.” We must learn how to speak to and how to behave with others. We must learn how to manage stress so we do not create stress for others. We must learn how to treat an injured person so he or she does not suffer needlessly. We must learn how to avoid drug use so we do not victimize others with our bad habits. And we must learn how to respect our own bodies and the bodies of others and protect them from sexual diseases.

Health I - Life Management Skills—it is all about you and the way you will manage some of the important facets of your life.

Unit 1: Self-Esteem: Valuing Yourself

This unit discusses what self-esteem is, how it effects our daily lives, and different ways to build self-esteem.

Unit Focus

- meaning of self-esteem
- role self-esteem plays in our lives
- ways to build and maintain high self-esteem
- causes of low self-esteem





Vocabulary

Study the vocabulary words and definitions below.

abusive hurtful or insulting; treating someone poorly

clique a group that demands its members act and think alike
Examples: dressing alike, accepting or rejecting the same peers

condemn to strongly disapprove; to judge harshly

conformity behavior or thought that follows the rules or practices of a group or other persons

contentment satisfaction

criticism disapproval; passing unfavorable judgment

criticize to find fault with or to judge

culture the beliefs, thoughts, and behaviors of a community or society

distorted twisted or misshaped; inaccurate or false

fiction something that is made up; not a true story



- imperfections** skills and traits that are not ideal
- internalize** to take something inside yourself; to make something a part of yourself
- positive self-talk** talking to yourself in a positive way about your characteristics and abilities
- satisfy** to fulfill (a need or desire)
- self-concept** the current mental image you have of yourself
- self-esteem** pride in and acceptance of yourself
- self-ideal** your mental image of what you would like to be
- self-satisfaction** pleasure or happiness gained through your accomplishments or efforts
- undemanding** not asking or requiring much
- vulnerable** unprotected; open to attack or hurt
- worthy** deserving of respect; valuable or honorable



Unit 1: Self-Esteem: Valuing Yourself

Introduction

Few things in life are so important to our emotional health as the way we feel about ourselves. Look around and see for yourself. Is the happiest or most satisfied person you know also the wealthiest? Is he or she the most popular or talented? Is he or she the thinnest or most muscular? For most of us, the answer to these questions is *no*.

Most of us do need a certain amount of money to make our day-to-day lives comfortable. And most of us prefer that others like us. But neither of those achievements means very much to the boy who does not like himself and walks around feeling angry at the world. Success in school or popularity means little to the girl who does not think she is worthwhile and must constantly look to others for praise and acceptance. Almost all people who feel good about themselves and others have *high self-esteem*.

Self-Esteem: Our View of Ourselves

Self-esteem is pride in and acceptance of ourselves. To measure our self-esteem, we ask ourselves the following questions: Do we respect ourselves? Do we feel our lives are worthwhile and important to our families and communities? If our answers are *yes*, then we have a positive attitude about ourselves. We have *high self-esteem*.

When we have *high self-esteem*, we like ourselves for who we are. We recognize that we are not perfect. We give ourselves room to fail because



Self-esteem is pride in and acceptance of ourselves.

we appreciate the effort we put into living **worthy** lives. When we live a worthy life, we improve the world around us. We don't have to discover the cure for a deadly disease or be famous to live a worthy life. Treating others and ourselves with respect and being productive in our daily lives are characteristics of a worthy life. Because people with *high self-esteem* do not need to **criticize** or find fault with others to build themselves up, they tend to respect other people. Their confidence in their efforts and abilities makes them less dependent on the praise of others for **self-satisfaction**.



When we see ourselves as having little value, we are experiencing *low* self-esteem. We have trouble liking ourselves. We may demand perfection from ourselves, and we constantly criticize ourselves. We see our own **imperfections** as flags waving in the wind, announcing our lack of value to others and ourselves. We may try to explain away our faults because we cannot accept ourselves as imperfect.

Low self-esteem makes us **vulnerable** to the judgments of others. We are unprotected and open to attack or hurt. We may do things to gain praise from others. No matter how much effort or thought we put into our education, our jobs, a project, or a relationship, our satisfaction will depend on the judgment of others. If we have low self-esteem, we may criticize someone to make ourselves look better in the eyes of other people. We may spend a lifetime seeing ourselves as we believe others see us instead of looking inward and facing and appreciating who we are.

Even some of the healthiest people will have moments of low self-esteem. All of us have to do some work in order to build and maintain high self-esteem.



Healthy people will also have moments of low self-esteem.

Where Does Self-Esteem Come From?

Self-esteem begins to develop at birth. When we are newborns, our needs are very basic. We feel hunger and cry for food. We need our soiled diapers changed. We find warmth in our parents' arms and comfort in their loving voices. In time, we develop more than physical needs. We begin to have emotional needs. We want love and a sense of security from our parents and caretakers. All of our happiness and **contentment** comes from our surroundings—the world *out there*.



The Family: Where It All Begins



We do not understand all of the factors that create our self-esteem. We do know that much of our feelings about ourselves first developed from how our world responded to us. Our families or our caretakers were the earliest people to influence our self-esteem. If they made us feel good about ourselves, we had a good chance of developing high esteem. If they let us make mistakes without **condemning** or harshly judging us, we could learn to accept ourselves—and others.



Our families or our caretakers were the earliest people to influence our self-esteem.

If, however, they belittled us or continually criticized our efforts, we tended to develop low self-esteem. Low self-esteem can make any mirror reflect a **distorted** image. Every

time we look in a mirror, we see someone who is less than we really are. We see the person others have described to us: someone who is not lovable or capable. We see a lie; we see a false image.

The Self: Where the Development of Self-Esteem Continues

Once we grew old enough to make choices and do things for ourselves, much of the responsibility for our self-esteem became our own. Both the way we approached our daily responsibilities and our willingness to examine ourselves honestly greatly influenced our self-esteem.

Our Daily Life. Those of us who make a sincere and worthy effort in our daily lives are most likely to develop high self-esteem. Do we study for exams? Do we sit down and focus on our notes and class materials? Do



we pay attention to our duties at our jobs? Do we try to be understanding and respectful towards our parents and siblings? If we can answer *yes*, then we are making a worthy effort. This effort will be reflected in our self-esteem.

If, on the other hand, we do not make an effort to do things well, we will see ourselves as having little value. If we behave selfishly towards our families and friends, we will not feel our role in our family and community is important.

Seeing Ourselves Clearly.

The famous Greek philosopher Socrates claimed self-knowledge is the starting point: *know thyself*. The *maxim* (general rule expressed in a few words) *know thyself* is attributed to a number of ancient Greek philosophers. “Know thyself” means learning the good, the bad, and the ugly of who you are as an individual. The first rule to good health is to know thyself. Knowing ourselves, knowing our positive qualities and our imperfections, and accepting ourselves are important in building high self-esteem.



Sarah has received a positive message while growing up which has helped her develop a good self-concept.

Your **self-ideal** is your mental image of what you would like to be, while your **self-concept** is the current mental image you have of yourself. The truth about ourselves is easier to live with than the **fictions**, false images, and lies we sometimes develop about ourselves. Living with an honest image of ourselves makes life satisfying. Living with a fiction is tiring—we have to constantly remember the lies we’ve told ourselves and others.

The Inner Voice: Talking to Ourselves

Our ability to think about ourselves develops as we grow. We might say that we develop a point of view about ourselves. Whereas the newborn sees only the surrounding world, the older child sees both the surrounding world and himself or herself. We find ourselves actually



thinking about ourselves. We begin to develop attitudes about ourselves. A voice within ourselves begins to speak. All of us have heard this voice inside. It is hard to ignore and can carry great authority.



Our ability to think about ourselves develops as we grow.

Our minds often comment on how we feel and see ourselves. Our inner voice very likely will comment on whether we are worthy or unworthy people. “Yes,” it may say, “you deserve to be well liked and appreciated. You are not perfect, but you are still lovable and full of good qualities.”

In some of us, the inner voice is not so kind. “No,” it may say, “no matter how hard you try or what you do, you’re just not as worthwhile as others. And look at all your imperfections. Why aren’t you perfect?”

Fortunately, we can always improve our self-esteem.



Practice

Use the list below to complete the following statements.

**distorted
fictions
imperfections**

**self-esteem
self-satisfaction
worthy**

1. The truth about ourselves is easier to live with than the _____, lies, and false images we sometimes develop about ourselves.
2. To have confidence in your own efforts and abilities makes you less dependent on the praise of others for _____.
3. Most people who feel good about themselves and others have high _____.
4. Treating others and ourselves with respect, and being productive in our daily lives are characteristics of a _____ life.
5. We see our own _____, or faults as flags waving in the wind, announcing our lack of value to others and ourselves.
6. Low self-esteem can make any mirror reflect a _____ image of ourselves, and we see ourselves as less than we really are.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|---|-----------------|
| _____ 1. satisfaction | A. condemn |
| _____ 2. the current mental image you have of yourself | B. contentment |
| _____ 3. to find fault with or to judge | C. criticize |
| _____ 4. your mental image of what you would like to be | D. self-concept |
| _____ 5. to strongly disapprove; to judge harshly | E. self-ideal |
| _____ 6. unprotected; open to attack or hurt | F. vulnerable |



Enemies of High Self-Esteem

The Unsupportive Family

Our families were the first to influence our self-esteem. For some of us, they are the most important influence in raising or lowering our self-esteem. Unfortunately, some of us grow up in unsupportive families. Our families may be verbally **abusive**. Their **criticism** and hurtful words can stunt or wear away our positive sense of who we are.

In time, we may begin to believe what they say about us. We may **internalize** or take these hurtful words *inside* ourselves and think they are true. We may *internalize* statements such as “You can’t do anything right!” or “Why are you so stupid?” or “Why can’t you be like your sister or brother?” Later in life, we may very likely accept the same abuse from our girlfriend or boyfriend or spouse. As our self-esteem lessens, we begin to expect the abuse and believe we deserve it. Our inner voice begins to repeat these abusive statements, like a tape recorder that can’t be turned off. We will begin to hear these comments running through our heads.

The Undemanding Self

Building high self-esteem is not easy. However, some of us have fallen into the habit of taking the easy road. We don’t study for a test. When we do poorly or flunk the test, we then feel bad about ourselves and consider ourselves “not too smart in algebra” or a “loser at school.” If we don’t make a good effort in our daily lives, is it fair for us to feel bad or pity ourselves for our failures? Obviously not. And if we do make a good effort, then whatever the outcome, we should not criticize our effort.

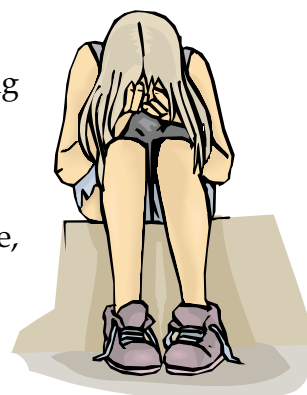
Some social scientists argue that our national **culture** encourages us *not* to take responsibility for ourselves. We permit ourselves to feel like victims who cannot change our lives. The news often carries stories of people who commit crimes and then blame some problem in their life. “I took to crime because my parents didn’t love me,” or “I abused my spouse (or children) because my parents abused me.” Nobody doubts the difficulty of growing up abused. The **undemanding** self, however, lets this abuse become the reason for living an unworthy life. It can be hard, but each of us needs to learn that feeling bad about ourselves is a good reason to build a better life. It is not a good reason to hurt others.



The “Any Failure Makes Me a Total Failure” Trap

The *undemanding* self can create another enemy of high self-esteem: the “this failure means I’m a total failure” trap. Suppose you take a dance class. You notice others in the class who have more talent in dancing than you do. Almost all of us will at one time or another find ourselves in this situation. It may not be in a dance class; instead, it may be in an English or biology class. Perhaps it is on a baseball field, in an art class, or in a group learning how to juggle. **Remember:** No one is instantly good at everything!

The problem is never that we are not good at dancing or baseball or art. The problem begins when we believe that our lack of talent or accomplishment in one area or skill represents who we are in total. Sometimes this will happen when a peer, a classmate, or even a person in authority, for example a teacher, tells us we are not a good person because of a single failure or lack of skill. The truth may be that we are not a good dancer. But lacking talent in dancing means that we lack talent in dancing. It means nothing more.



Don’t fall into the “I’m a total failure” trap.

The person with high self-esteem knows she has other talents and skills. She knows she is not perfect and never will be. She knows that no person or no single experience can turn one failure into a full description of who she is. In addition, the person with high self-esteem has the will and confidence to make herself into a better dancer. She knows she can improve on just about any skill.

The Pressure from Peer Groups and Cliques

As we grow older, our circle grows to include more than just our families and caretakers. It begins to include other children, or peers. Children tend to form **cliques** or groups with other children. A clique is a peer group that demands devotion from its members. Boys and girls in cliques demand **conformity**. They expect members to dress and act in certain ways. They judge harshly those who do not conform.



Cliques judge harshly those who do not conform.



Most of us have belonged or will belong to a clique at some time in our life. Cliques provide us with support. In a clique, we find a ready-made set of guidelines for our behavior. And we find others who praise us for following those *rules* and guidelines. We have a need to belong to peer groups, and joining a clique is one way to **satisfy** that need.

Cliques, however, can lessen our self-esteem. At first we may feel good about our acceptance in a group. But in exchange for acceptance, we are asked to give up our independence. If our values and beliefs do not fit those of the clique, then we will feel pressure to become someone we are not—and to give up values that are part of who we are. In time we will feel that the real *us* is beginning to disappear.

Cliques push us further away from knowing ourselves. The more we let others decide what we should believe and how we should act, the less self-respect we will have.

The Confusing Messages We Hear from the Media

Not only can family and peers give us harmful messages, we may also be subjected to harmful messages from the media. The media includes songs we hear; movies and television programs we see; and books, magazines, and newspapers we read. These messages are often contradictory. One movie will tell us that real men use violence to settle disagreements. Another movie will tell us that real men don't need to use violence; instead, they use their brains to solve conflicts. One book tells us that a girl's value is not in her looks. And then a television show will tell us that only beautiful girls are happy with their lives. Many times we will even find *mixed messages* in the same television show or movie.



The messages from television are often contradictory.



Getting Caught in a Vicious Cycle: Food, Drugs, and Unhealthy Relationships

When we feel something essential is missing from our lives, we may use something else to fill the void, or hole. If, for example, we feel unloved or unpopular, we may use food, drugs, or unhealthy sexual contact to make ourselves feel better. After a parent yells at us, a boyfriend or girlfriend hurts our feelings, or we do poorly on an exam, we may stuff ourselves with food. Even more potentially dangerous, we may use drugs to ease the hurt or engage in unprotected sexual activity.

And then the vicious cycle begins. We feel bad about ourselves because we've overeaten and put on weight. We feel guilt because we have put drugs in our bodies. We feel guilt over the sexual activity. Then, because we feel bad about ourselves, we indulge again in food or drugs or alcohol or whatever habit we use to block out pain. In an attempt to make ourselves feel better, we only feel worse. On and on it goes, wearing away our self-esteem.

Building Self-Esteem

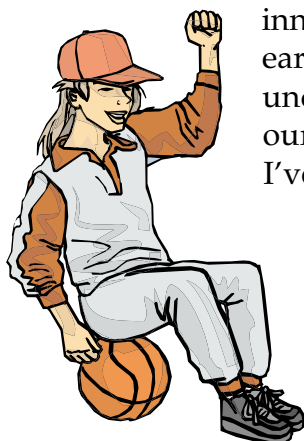
Sometimes it can seem impossible to develop high self-esteem, especially for teenagers. During our teen years, most of us are insecure. The cliques around us put pressure on us to conform and be a certain way. We are trying to figure out who we are and what we want to be. We're exploring our independence as we begin to try out new roles and take responsibility for ourselves. In the midst of all this confusion, we still need to develop a positive attitude towards ourselves.



During our teen years, most of us are insecure.

Turn Off the Negative Inner Voice

First, learn to turn off the negative inner voice. The inner voice can haunt us. It seems to come out of nowhere, to stand behind us like a dark shadow. The inner voice often speaks to us when we're most vulnerable. We've just experienced a setback or failure. We weren't invited to a party. We flunked an algebra exam. Our girlfriend or boyfriend just broke up with us. Something hurtful happens, and the inner voice starts to tell us that we're not worthy or we're a failure.



Learn to turn off the negative inner voice.

Each of us can develop ways to silence the negative inner voice. Some of us may find we can just turn a deaf ear to it. Some of us can silence the voice by understanding where it comes from. We can tell ourselves: “Those are other people’s voices and words I’ve let become my own. But no more—I won’t listen!”

Still others of us will be helped by humor. That’s right, just laugh at the voice when it creeps into your mind and starts spilling negatives.

Learn to use **positive self-talk**, which is talking to yourself in a positive way about your characteristics and abilities. Focus on the good aspects in your life while working on your weaknesses.

Accept the Warts ... and All

All of us have imperfections. Imperfections make the world a more interesting place. Imagine if everyone were perfect—what a bore that would be! Accepting our imperfections will help put us in touch with who we are. To help you see yourself in a true light, take a sheet of paper and begin making a list. On the left side of the page, list all the activities and skills you’re good at. Put down everything you can think of—from babysitting to listening to a friend. Keep the list with you for a day or two. You’ll be amazed at the length of the list. When you’re done, absorb the list. In other words, study it and note just how many skills you have.

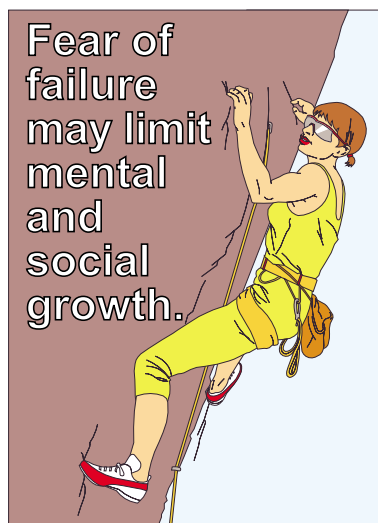
And what about warts? On the right side of the page, list those skills you’ve tried but haven’t had much success with. When you’re done, put a check next to those skills you haven’t given much effort to. After all, why should you be good at those things you’ve had little or no training in?

And remember this: Most successful people never let their failures stop them. In fact, most successful people say that failure was an important part of their success. They learned from their failures. They knew that success would not come easily.



Failure and Risk-taking

When we're willing to fail, our world expands. We become willing to try new activities, because we know that all we have to risk is failure—which really isn't much. Yet what we have to gain is a sense of accomplishment and satisfaction. The more times we risk failure, the more times we will experience success. And success will help us build self-esteem.



Improve Our Body Language

Although we should accept who we are, improving our body language can help improve our self-image. When we see someone shuffling down the hall with his shoulders slumped, his eyes pinned to the ground, we think he has low self-esteem. His body *reflects* the way he feels about himself. He needs to reverse this reflection. By developing good posture—straightening his shoulders, walking smoothly, and looking straight ahead—he can begin to feel better about his body and himself.

Changing our body language will also change the way others respond to us. They will have more respect for us—because they will see we have respect for ourselves. It's a cliché, but it's true: It's hard for others to like us if we don't like ourselves.

Respect in Action: Battling Peer Pressure

Cliques and peer groups often pressure us into certain behaviors. We begin to drink or do drugs to be accepted. We decide to dislike and shun certain classmates because the group does. The group labels these behaviors *cool*. But what could be less cool than letting others make our decisions? Have we forgotten that our heroes are those who remain committed to their beliefs instead of conforming to the beliefs of those around them?



The Best Kind of Revenge

Few of us are so lucky as to be surrounded by people who are always supportive. Sometimes parents or siblings take out their frustrations on us. Or maybe it's a teacher. Almost certainly some of our peers will be cruel at times. And no one can escape the media and its sometimes twisted messages that confuse us and make us believe that we're missing something—beauty, talent, likability. All of these influences can wear on our self-esteem and make us feel bad about ourselves. What should we do?



Work hard at your interests and be as successful as you can be.

To get even with someone who has done you harm, do not attempt to harm them or yourself. Do not get even with an unsupportive or unloving parent by committing crimes or doing drugs. Do not get even with cruel classmates by fighting or starting rumors. The best kind of *revenge* against people who have harmed us is to live a *worthy* life. A life *you* know is deserving of respect and valuable or honorable.

Work hard at your interests and be as successful as you can be. If you let others influence you to live an unworthy life, then you are letting them hurt you forever. If, instead, you succeed and raise your self-esteem, then you end the hurt others have done and you take control of your own life.

Summary

Self-esteem is pride in and acceptance of ourselves. If we have high self-esteem, we see our life as *worthy* and productive. We like ourselves for who we are, and we do not *condemn* ourselves for our *imperfections*. If we have low self-esteem, we do not appreciate our efforts and work. We have trouble liking ourselves and may not be able to tolerate our imperfections. Almost all people who feel good about themselves have high self-esteem.

Our self-esteem often is influenced first by our families. Supportive families make us feel good about ourselves. Unsupportive families may condemn our imperfections and mock our efforts. This can lead to a *distorted* image of ourselves. As we grow older, we become able to shape and raise our self-esteem.



Enemies of high self-esteem include an unsupportive family, an *undemanding* self, pressure from peer groups and *cliques*, and confusing messages conveyed by the media. If our self-esteem is low, we may use food or drugs as a way to make ourselves feel better. Unfortunately, these addictions will, in the long run, only make us feel worse.



Our self-esteem often is influenced first by our families.

We can build self-esteem by examining ourselves and noting just how many skills and talents we have. We can accept ourselves for who we are—imperfections and all. We can learn to fail without condemning ourselves. And we can risk failure so we can succeed and feel good about ourselves. When those around us hurt us, we can answer with the best kind of revenge: living a worthy life and taking control of our future.



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. If we fail at one thing, we are failures at everything.
- _____ 2. People with loads of money are always happy with their lives.
- _____ 3. Our families are the first to influence our self-esteem.
- _____ 4. If we have a positive attitude toward ourselves, we will most likely have high self-esteem.
- _____ 5. People with high self-esteem usually do *not* respect others.
- _____ 6. When we see someone shuffling down the hall with his shoulders slumped, his eyes pinned to the ground, we think he has low self-esteem.
- _____ 7. If we have low self-esteem, we have trouble liking ourselves and may *not* be able to tolerate our imperfections.
- _____ 8. The more times we risk failure, the more times we will experience success.
- _____ 9. To be verbally abused means your parents have beaten you as a child.
- _____ 10. Success will help us build self-esteem.
- _____ 11. When we internalize something, we may begin to hear these comments running through our heads, and believe the comments—whether they are true or false.
- _____ 12. Supportive families make us feel good about ourselves.
- _____ 13. As we grow older, we become able to shape and raise our self-esteem.
- _____ 14. All of us have imperfections.



- _____ 15. Cliques and peer groups often pressure us into certain behavior.
- _____ 16. Cliques judge harshly those who do *not* conform.
- _____ 17. If we feel unloved or unpopular, we may use food, drugs or unhealthy sexual contact to make ourselves feel better.
- _____ 18. Only people who have abused alcohol or drugs have imperfections.
- _____ 19. Improving our body language can help improve our self-image.
- _____ 20. A person *cannot* change his or her body language.
- _____ 21. The best kind of revenge against people who have harmed us is to live a worthy life.



Practice

Read each **situation** described in the paragraphs below. Write a brief answer to **describe** how you would respond.

1. You work hard at school, but your grades have not always reflected your efforts. Two years ago you earned all Cs. Last year you earned an equal mix of Bs and Cs. And this year you are earning all Bs. You have started to get down on yourself because you still aren't earning As. You often say that you are just not good at school, no matter how hard you try. You wonder if you just shouldn't give up. What can you tell yourself to help you raise your *self-esteem*?

2. Your friend Rod is often angry. His parents sometimes criticize him for his failures. His anger often distracts him from his schoolwork, and then his teachers lose patience with him. He's really a good person inside who would do well if he were happier. You want to have a heart-to-heart session with Rod—to talk to him about his anger and how it's affecting his daily life. What could you say that might help Rod change his attitude?



3. A friend invited you to begin playing soccer with her and her friends. They've been playing twice a week for six months. You found that you enjoyed playing with them but that you were the worst player. You had trouble not tripping over the ball and keeping up with the other players. By the end of the game, you were frustrated. As you walked home, you told yourself how bad you were at soccer. You told yourself: You're just a failure! What would have been a more realistic response to this experience and your lack of success?



Practice

Match each **effect** with the correct **cause**. Write the letter on the line provided.

effect	cause
_____ 1. high self-esteem	A. undemanding self; negative inner voice
_____ 2. poor body language	B. joining a clique and letting it direct your behavior and thinking
_____ 3. low self-esteem	C. supportive family and caretakers; ability to accept yourself
_____ 4. conformity	D. taking risks and being willing to fail
_____ 5. world expands and experience more success	E. low self-esteem that is reflected in your posture



Practice

Use the list below to complete the following statements.

abusive	culture	revenge
clique	internalize	satisfy
conformity	know thyself	undemanding
criticism	positive self-talk	worthy

1. People in cliques often try to create _____ so members of their group will behave alike.
2. To be verbally _____ is to hurt or belittle someone with words.
3. A _____ is a group of people who try to look and act similarly.
4. When someone finds fault with you, they are using _____ .
5. A person who doesn't ask much of himself is said to be _____ .
6. To really believe something someone has told you is to _____ it.
7. Some social scientists argue that our national _____ encourages us not to take responsibility for ourselves.



8. Learn to use _____ , which is talking to yourself in a positive way about your characteristics and abilities.
9. We have a need to belong to peer groups, and joining a clique is one way to _____ that need.
10. A Greek philosopher claimed that the first rule to good health was to _____ .
11. The best kind of _____ against people who have harmed us is to live a _____ life.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|---|----------------------|
| _____ 1. something that is made up; not a true story | A. condemn |
| _____ 2. satisfaction | B. contentment |
| _____ 3. deserving of respect; valuable or honorable | C. criticize |
| _____ 4. to find fault with; to judge harshly | D. distorted |
| _____ 5. unprotected; open to attack or hurt | E. fiction |
| _____ 6. twisted or misshaped; inaccurate or false | F. imperfections |
| _____ 7. skills and traits that are not ideal | G. self-concept |
| _____ 8. the current mental image you have of yourself | H. self-esteem |
| _____ 9. pleasure or happiness gained through your accomplishments or efforts | I. self-ideal |
| _____ 10. your mental image of what you would like to be | J. self-satisfaction |
| _____ 11. pride in and acceptance of yourself | K. vulnerable |
| _____ 12. to strongly disapprove; to judge harshly | L. worthy |

Unit 2: Connections: Living Well with Others

This unit explores what healthy relationships are and how to maintain them with different types of communication. The unit also covers ways to resolve conflict, how someone can identify abuse, and what steps can be taken to end abusive cycles.

Unit Focus

- why we need positive relationships
- establishing and developing healthy relationships
- effective verbal and nonverbal communication skills
- identifying the different levels of communication
- describing the characteristics of a healthy friendship
- resolving conflicts and mending differences in relationships
- identifying abusive relationships and what to do about them





Vocabulary

Study the vocabulary words and definitions below.

- acknowledge** to show someone you recognize him or her
- acquaintance** someone you know but with whom you would not share your feelings or private thoughts
- aggressive** to speak and behave in an angry and insulting way towards others
- assertive** to express your honest thoughts and feelings while respecting the thoughts and feelings of others
- body language** messages sent to others through expressions of the face and movements and postures of the body
- communication** the sending and receiving of messages
- conflict** a struggle between people whose wants, ideas, or goals interfere with each others'
- confrontation** a meeting in which people express differences or complaints to one another



- context** a situation; the circumstances in which a particular event occurs
- engage** to participate; to interact
- genuine** real, sincere, honest; not fake or artificial
- give up the floor** to stop talking and permit another person to speak in a conversation
- intimate** very close and familiar
- isolation** apart from a group or from anyone else; being alone; solitude
- mixed message** a message in which one's words do not match the expression on one's face or the movements of one's body
- nonverbal communication** messages sent through behavior and the body; messages sent without the use of words
- passive** to hold back one's thoughts and feelings; to remain silent
- rapport** a feeling of trust and being at ease with another person
- role** a part you play or assume in a relationship with others; can be real or fake



sarcasm	a bitter remark intended to mock or make fun of someone or something
self-disclosure	the act of making yourself open and known to someone; letting someone see your inner self
self-image	the picture you have of yourself; how you see yourself
solitude	the state of being alone or apart from others; isolation
trust	to have confidence in someone or something; to feel certain of someone's character and honesty
values	ideas or beliefs that someone thinks are important; rules for behavior
verbal communication	messages sent through words; messages spoken or written

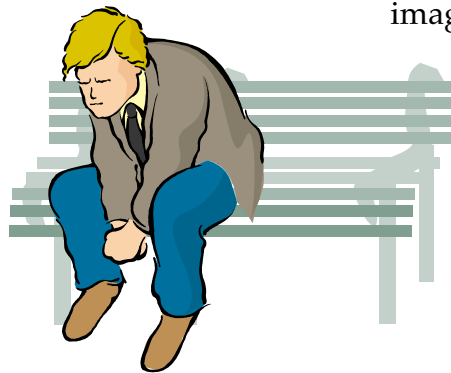


Unit 2: Connections: Living Well with Others

Introduction

“I wouldn’t be your friend if you were the last person on Earth!”

We are all familiar with this statement. It tells someone that a relationship with no one would be better than a relationship with him or her. Think of someone to whom you might say this statement. Then



Imagine being alone day after day.

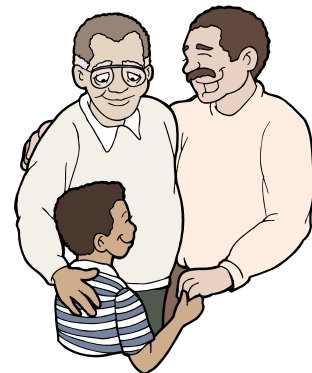
imagine a world in which there is only you and that person. Imagine being alone day after day. You eat alone. You go for walks alone. When you play a game, you must take on the **role** of all the players. The only conversations you have are with yourself. There’s no one else with whom to agree or disagree. The only thoughts and feelings you ever hear are your own.

After a few days, perhaps a few weeks or even months, you probably would find yourself approaching that other person and saying: “Well, you are the last person on Earth, and I’d like to be your friend!” But even though that other person is the only friend you can have, you will not necessarily develop a strong and healthy relationship. Healthy relationships are created by people who communicate honestly and openly. In healthy relationships, people listen closely to one another. People create healthy relationships by showing respect for others—even when they disagree with them.

Why We Need Relationships

Most of us enjoy periods of **solitude**, or spending time alone. We enjoy some privacy during which we can reflect on our life, daydream, or just turn off the part of us we share with the outside world.

However, almost all of us are also “social creatures.” We like to live in families and communities, and we like to interact with other people. We like companionship—we like talking, doing things, and being with others.



We like to live in families and communities.



We fulfill many of our needs through our relationships. Family members and close friends fulfill our need to be loved. As those around us fill us with love, we develop our capacity to love others. Love can come in different forms. The healthy love a parent feels for a child is total and *unconditional*. A parent will feel love for a child no matter what that child does or who the child becomes. Love between serious dating partners is often electrically charged and can deliver intense joy or devastating hurt. Love between friends mixes the lasting quality of family love with the strong attachment felt between dating partners.

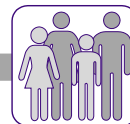


The healthy love a parent feels for a child is total and unconditional.

Through relationships, we also enjoy a sense of acceptance. Most of the people we meet do not reject us. Close friends and family try to understand our needs and wants, and they lend support even when we fail or stumble. Even casual friends fulfill our need to be accepted. Though we may not share **intimate** secrets or spend our leisure time with them, they **acknowledge** our existence and accept us as worthwhile.

Relationships also enrich and broaden our lives. We learn about other people's experiences in the world. We find out about their feelings, ideas, and beliefs. We discuss and argue ideas and notions. We learn how to express ourselves effectively as we watch the way others respond to us. Without the give-and-take we share with others, our world would contain only our single voice and view. With others, our world becomes dynamic, like a stereo system that delivers many voices and sounds.

Some of us may need many close and casual friends, and a tightknit family to fulfill our social needs. Others of us may only need a few close friends to feel emotional satisfaction. Discover what kind of social person you are. Your health begins with knowing yourself. As the famous Greek philosopher Socrates once claimed, self-knowledge is the starting point: *know thyself*.



Establishing Relationships: Connecting

Fortunately, we will never have to live in a world that includes only one other person. On the other hand, many of us are surrounded by hundreds, even thousands, of people, yet we still may feel a sense of loneliness and **isolation**. People may be only a few feet away, yet they might as well be in another state.

Our Self-Image: How We See Ourselves Is How Others Will See Us

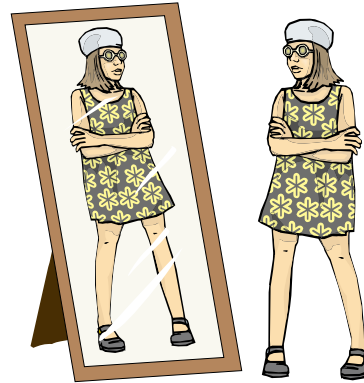
What keeps us from reaching out and making contact with people? Often the answer is the fear of rejection. Few things in life make us feel worse than having someone reject us. And yet, people will rarely reject us unless we reject ourselves. This point is so important in any kind of social relationship that it deserves rephrasing: People are less likely to reject us if we have a good **self-image**. Our self-image is the picture we have of ourselves.

Handling Rejection	
Wait it out.	Storm clouds may blow over quickly—no one holds the spotlight forever.
Try a direct approach.	Ask if you have done or said anything to earn the rejection you are getting—the head-on approach can clear the air.
Take the hint.	Some efforts are useless—to be different or unaccepted by any one group does not mean that you are worth any less.
Settle for less.	Some people get left out of close friendships but get included in informal group activities—you can enjoy group companionship.
Catch up later.	Some teens are late bloomers—personalities and talents develop later in life.



Part of our picture of people includes the way they see themselves. We are apt to view a person who likes himself or herself as a likable and worthy person. Similarly, we are apt to view a person who doesn't like himself or herself as less likable.

Consequently, an important key to establishing relationships is to have a good self-image. And we should carry that good self-image when we meet and **engage** with people.



Our self-image is the picture we have of ourselves.

Going beyond a Person's Self-Image: Reaching Out

Some people we meet will have a poor self-image, or they may just be shy. In either case, they may tend to be quiet and unenthusiastic. It would be easy for us to read their quiet ways as a sign that they do not have an interest in us or do not like us. But just as we would like others to reach out to us, we should reach out to others. The person with a poor self-image or who is shy may only need someone to extend a hand and offer an enthusiastic "hello" to help him or her begin to feel good and make contact with us. Sure, that person may reject us, but if that happens we can walk away knowing we made a generous effort.

Presenting the Genuine Self: Sticking to Our Values

When we meet a stranger or spend time with someone we do not know well, some of us may want to present ourselves as having no faults or as perfect. We want to be someone that this stranger will like. Of course, that is a natural desire.

Because we meet people in different **contexts**, or situations, we do need to select the side of ourselves that we show. For example, in a job interview, we wouldn't want to show our very playful side or the side of us that likes to sing and dance. On a first date, we probably do not want to reveal our innermost secrets. There is a time and a place for everything.



On a first date, we probably do not want to reveal our innermost secrets.

But we will put ourselves in a difficult position if we present a false side of ourselves. Imagine that you meet someone you find attractive. You notice he or she is quiet and doesn't talk much. Although you are out-going and talkative, you present yourself as quiet and a person of few words. You may make friends with him or her, but do you want to continue the relationship as someone you are not?

Once we present a false self, we may find it difficult to ever present our true self. We may feel that we've promised to be a certain kind of person and now we have to stay that person. If we present our **genuine** self, or our *real* self, we won't have to play a role.

One of the most important characteristics people look for when establishing relationships is **trust**. When we feel that a person is not showing us a true self, we are not likely to trust that person. And we are not likely, therefore, to pursue a friendship.

A good way to make sure of presenting our genuine self to others is to stick to our **values**. Values are the rules for behavior in which we believe. Values are the ideas and beliefs we hold dear. We violate ourselves when we lie about our values so others will like us.

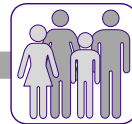
When we show a true side of ourselves to a stranger, he or she may decide not to pursue a deeper relationship with us. Don't be offended—don't take it personally. That person just has different needs than we can fulfill.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | | |
|-------|---|----------------|
| _____ | 1. a part you play or assume in a relationship with others; can be real or fake | A. acknowledge |
| _____ | 2. a situation; the circumstances in which a particular event occurs | B. context |
| _____ | 3. apart from a group or from anyone else; being alone; solitude | C. engage |
| _____ | 4. to participate; to interact | D. genuine |
| _____ | 5. ideas or beliefs that someone thinks are important; rules for behavior | E. intimate |
| _____ | 6. real, sincere, honest; not fake or artificial | F. isolation |
| _____ | 7. the picture you have of yourself; how you see yourself | G. role |
| _____ | 8. the state of being alone or apart from others; isolation | H. self-image |
| _____ | 9. to have confidence in someone or something; to feel certain of someone's character and honesty | I. solitude |
| _____ | 10. to show someone you recognize him or her | J. trust |
| _____ | 11. very close and familiar | K. values |



Communication: The Way We Connect to Others

We connect with others through **communication**. Communication is any behavior that sends a message to another person. Many of us take communication skills for granted. We view them in the same way we view walking or riding a bicycle. Once we've learned how to walk or bike, we don't spend much time learning to do it better.

Similarly, we may assume that the way we communicate is just fine and doesn't need to be examined or improved. But how we communicate with



If you talk on the phone or write a letter, you are verbally communicating.

others will determine the kind of connection we make with them. If we communicate poorly, we may have a difficult time making and maintaining good friendships. If, however, we learn to communicate well, our friendships and our day-to-day interactions are likely to go smoothly and bring us contentment.

When we think about communication, we may only think about **verbal communication**. Verbal communication uses written or spoken words. If you talk on the phone or write a letter, you are verbally communicating.

Communication also includes **nonverbal communication**. Two friends may not talk for many minutes while sitting across from one another during lunch. But they communicate nonverbally through the relaxed look on their faces and the constant eye contact they make with one another. They are communicating to one another without actually talking. Silently, they are saying to one another, "I like you," and "I can be myself when I'm with you."

Verbal Communication: Building Bridges with Words

Think of the words we say and write to others as some of the building material for a bridge that connects us to the world. Some words and groups of words will help build stable and healthy bridges. Other words and groups of words will build weak or unhealthy bridges between us and others.

The most important rule to remember when speaking is this: We talk to be understood, not to hear the sound of our voices. So when we meet



If you are speaking with a child, use words the child can understand.

someone or talk with a friend, consider who that person is. If you are speaking with a child, use words the child can understand. Even if you are speaking with a friend or peer, do not use words that are unnecessarily difficult or unfamiliar.

Don't choose *extreme* words just to be showy. Extreme words include *hate, love, incredible, fantastic, worst, and best*. Do we really mean "I hate mustard on my sandwich," or do we mean "I don't like the way this sandwich tastes with mustard on it"? Do we *hate* that person or just dislike him or her? Do we *love* the girl or boy we've dated for two weeks, or do we like him or her? If we choose the wrong words or use extreme words to describe all of our emotions and experiences, then what words can we use when we *really* hate or love someone or something? How can others take our communication seriously when we don't carefully consider our own communication?

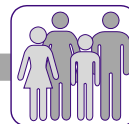
Be unique when you speak. Most of us want to be known as unique individuals. But listen carefully to your own conversation and ask yourself: Whose words are these? Do you often use the popular expressions that everyone uses? An expression that was popular such as *awesome* has little meaning. "Awesome" can be used to describe almost everything. Always relying on popular expressions is a careless way to speak.

Listen to the volume and tone of your voice. Do you mean to speak so loudly or so softly? Do you mean to speak with **sarcasm** or a negative tone? Some people always have a sharp edge in their voice. It has become a habit they may not even be aware of. Remain aware of the tone and volume you use.

Nonverbal Communication: Communicating without Words

Some social scientists believe that only about a third of all communication is done with words. The other two-thirds is nonverbal. Nonverbal communication is done with the body, often called **body language**.

Body Language. Our eyes are often the most important part of our body language. When others keep eye contact with us as we speak, we feel that they are listening with interest. On the other hand, we will not believe we



What we look at indicates what we are paying attention to.

have someone's attention if his eyes wander about the room. What we look at indicates what we are paying attention to.

Other parts of our face also play an important part in nonverbal communication. A raised eyebrow can make someone feel that we are judging her comments even before she finishes talking. A sneer or pursed lips tells someone we disagree.



A sneer or pursed lips tells someone we disagree.

In a casual conversation, you can show your interest by keeping your face relaxed. If the subject is not overly serious, a slight smile tells the speaker you are listening and accepting what he is saying. Listen carefully to what someone says.



A slight smile tells the speaker you are listening and accepting what he is saying.

Standing tall and using good posture tells someone that you are interested in what she is saying. When we slouch, we convey a lack of energy and an uninterested attitude.

Don't cross your arms or legs. Either position tells the speaker we are not open to his comments. Hold them in an open and relaxed way. Hold back any judgment until you're sure you understand the speaker's point. There's always time to disagree when the speaker is finished.

Verbal and nonverbal messages should match. If we say to someone, "Sure, I'd love to come," while our eyes are cast down and our lips are pursed, we are sending a **mixed message**. Our speech has said one thing, and our body has said another. Mixed messages are not honest. They often indicate a lack of confidence—we are afraid to say what we really mean.

Body Space. Each of us has a distance we like to keep between ourselves and others. Often this distance is determined by our culture. For example, most Americans keep about 19 inches, or just about arm's length, between themselves and family members or very close friends. When Americans speak to friends, they keep from two to three feet between themselves. When Americans speak to a boss or a teacher, they keep a distance of about 3 ½ feet or more.



In Latin American countries, people often stand much closer when they speak. They also touch one another during conversations much more than Americans do. The English, on the other hand, keep farther apart than Americans when they talk.

When we speak to others, we can put them at ease by respecting their body space. Don't crowd someone. Recognize when you've gotten too close and entered someone's body space. Standing too far away can also make someone uncomfortable. Imagine your best friend's reaction if you were to stand five feet away during a long and intimate talk.



Standing too far away can also make someone uncomfortable.

Listening: The Most Difficult Communication Skill

Listening is the most difficult of all the communication skills. When others speak, it is easy for us to become distracted and not really hear the words they are saying. Sometimes we begin to think about what we are going to say before the other person finishes. Sometimes we judge what the other person is saying, rather than listening.



These phrases show our interest and willingness to listen.

There are two ways to listen effectively. When we practice *passive listening*, we use phrases such as *Really?* or *Tell me more*, or *No kidding?* These phrases show our interest and willingness to listen.

When we use *active listening*, we interact with the speaker. We may repeat what we've heard to be sure we're receiving the right message. We may ask questions about something the speaker has said.

Whether we're listening passively or actively, the most important practice is to concentrate on what is being said. We not only listen to the words, but we also listen to the feelings behind the words. Is the speaker talking about her trip with joy or sadness in her voice? Is the speaker criticizing school policy with heartfelt emotion in his voice and on his face?



To listen well, we should follow three guidelines.

1. We should listen carefully to the words being said.
2. We should listen to the emotions behind the words.
3. We should hold back our own agreement or disagreement until we are sure we understand the speaker fully and the speaker is ready to **give up the floor**, or has finished talking.

Tips for Effective Communication: Be Interested and Be Fair

We've all been in conversations in which the other person constantly interrupted us. Each time he interrupted us, he changed the subject to something of his interest. He was unwilling to give up the floor and let us or anyone else speak. He hogged the conversation. When he did comment on our subject, he was sarcastic and negative. This conversation was not satisfying. In fact it was just frustrating. The following are some tips for effective communication. A good conversationalist is the person others are glad to see ... and talk to!

- Don't interrupt the person speaking; wait your turn to speak.
- When you do speak, use the names of the other people. They will feel included in your conversation, and they will pay attention.
- Keep your focus on the subject. Don't change the subject until you are sure everyone is through commenting on it.
- Find a common interest by listening to the speaker.
- Ask questions! You can show your interest and learn from others by asking questions.
- Don't hog the floor. Ask your question or make your point and then give up the floor to another speaker.



Practice

Use the list below to write the correct term for each definition on the line provided.

body language
communication
give up the floor
mixed message

nonverbal communication
sarcasm
verbal communication

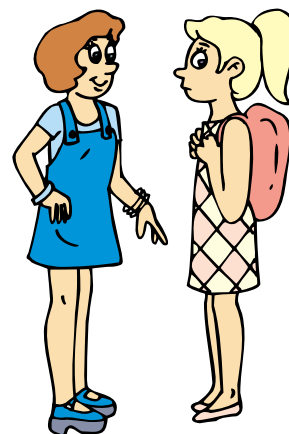
- _____ 1. a message in which one's words do not match the expression on one's face or the movements of one's body
- _____ 2. a bitter remark intended to mock or make fun of someone or something
- _____ 3. messages sent through behavior and the body; messages sent without the use of words
- _____ 4. messages sent through words; messages spoken or written
- _____ 5. messages sent to others through expressions of the face and movements and postures of the body
- _____ 6. the sending and receiving of messages
- _____ 7. to stop talking and permit another person to speak in a conversation



Levels of Communication: Showing More and More of Ourselves to Others

To communicate effectively, we need to choose our words thoughtfully, use body language that matches our words, and listen carefully. But communication not only involves how we communicate, but how deeply we communicate.

When we meet a classmate for the first time, we probably will not tell him our innermost secrets. If we don't feel at ease with that classmate, we will not share very many of our ideas or feelings. However, if we grow more comfortable with that classmate, the relationship will develop. The deeper their relationship grows, the more each person will reveal to the other. The more each person trusts the other, the more each person will make herself vulnerable, or open to rejection.



We probably will not reveal our innermost secrets when we first meet.

People can communicate on five different levels.

1. acknowledging
2. reporting
3. sharing
4. revealing
5. communing

The deeper the level of communication, the more **self-disclosure**, or telling about ourselves, takes place.

1. Acknowledging: Small Talk

Acknowledging is the shallowest level of communication. We disclose very little or none of ourselves during acknowledging. Acknowledging is made up of small talk and pleasantries. We've all heard the expressions,



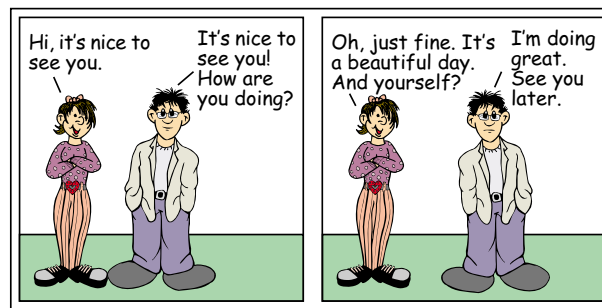
questions, and answers used in small talk. In the following example, Jill and Rueben's exchange is a typical example of small talk.

Jill: "Hi, it's nice to see you."

Rueben: "It's nice to see you! How are you doing?"

Jill: "Oh, just fine. It's a beautiful day. And yourself?"

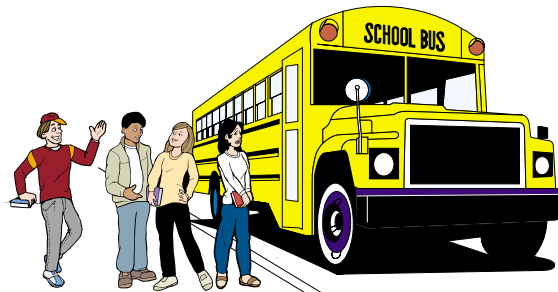
Rueben: "I'm doing great. See you later."



Neither Jill nor Rueben have revealed anything about themselves. They have, however, made each other's day just a little more pleasant. Rather than ignore each other, they have acknowledged each other's existence.

Acknowledging is used by even close friends as they pass quickly in the school halls. They haven't time to talk, or they haven't anything to say, but they want to make contact with one another.

Acknowledging may be the only level on which **acquaintances** speak. Acquaintances include those people we have met but with whom we have not established a friendship. We may like these people, but for one reason or another, we have not spent much time with them. Acquaintances can include the people we chat with at the bus stop a few mornings a week. They can include classmates we see but do not really know. We may have good feelings towards our acquaintances, but we would not call on an acquaintance to help us fix a car or to take a weekend trip.



Acquaintances can include the people we chat with at the bus stop a few mornings a week.



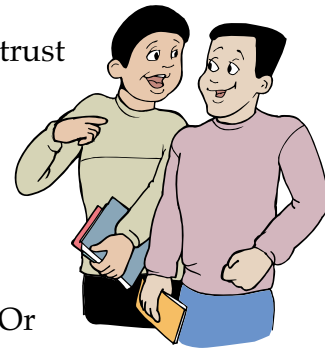
2. Reporting: Just the Facts

During reporting, two people report something to each other. They may report a fact, such as “There is a big concert in town next month.” Or they may report something they heard: “I heard the test is super hard!” Similar to acknowledging, during reporting, neither person reveals anything personal.

If they feel comfortable enough with one another, acquaintances may talk on the reporting level. Acquaintances, however, usually don’t move beyond this level.

3. Sharing: Talk between Friends

When two people enjoy a good **rappor**t, they feel a trust and a connection between them. When people feel rapport, they are willing to communicate on the sharing level. During sharing, friends talk about their ideas and judgments. They may comment on events that occurred in school or in the world, as in the following examples: “I think the teacher was right to say that to James in front of the class.” Or “I do (or don’t) think the United States should get involved in a foreign problem.”



When people feel rapport, they are willing to communicate.

When friends share something they think, they risk rejection—their idea may be put down. If so, they may not share anything further. If a friend agrees with our idea, or if she disagrees in a respectful way, then we will be comfortable sharing more of our ideas. We will also feel comfortable moving to the next level of communication.

4. Revealing: Expressing Emotion

During the level of communication called *revealing*, we tell our feelings to a friend. Having our ideas rejected is not as painful as having our feelings rejected. Therefore, friends will not move from the sharing level to the revealing level unless they trust one another. “I’m really afraid of graduating and losing my friends” is an example of revealing. Or “I feel so left out when you don’t invite me to the movies.”



5. Communing: The Ultimate Experience between Friends

Communing, or *intimate sharing*, occurs only between the closest friends. When we walk with a close friend in the woods and feel serene and confident, we are communing. When we feel good just to have a friend sit in the same room as we read a book, we are communing.

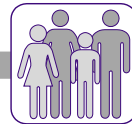
Moving between Levels of Communication

Many of our relationships are like the waters in a river—they rise and fall. We may reach the sharing level with a friend for a few years and then drop back to the level of reporting. Or we may stay at the revealing level for a long time before moving to the communing level.

Sometimes we may meet someone and move through the levels of communication quickly. But most healthy relationships that last a long time move slowly. A deep trust between people does not develop easily. Sometimes we reveal ourselves to others only to soon discover that we've been too anxious to develop a deep friendship. Patience is almost always the best strategy in developing deep friendships.



Intimate sharing occurs only between the closest friends.



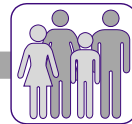
Practice

Circle the letter of the correct answer.

1. The healthy love a parent feels for a child is total and _____.
 - a. unforgiving
 - b. unconditional
 - c. selfish
 - d. limited
2. Most human beings are _____ creatures who enjoy interactions with other people.
 - a. nonverbal
 - b. accepting
 - c. social
 - d. passive
3. People are not likely to reject us if we have a good _____.
 - a. self-image
 - b. family
 - c. car
 - d. connection
4. We fulfill many of our _____ through our relationships.
 - a. dreams
 - b. goals
 - c. obligations
 - d. needs
5. We connect with others through _____.
 - a. communication
 - b. self-esteem
 - c. isolation
 - d. sarcasm



6. When speaking, the rule to remember is that we talk to be _____ .
- a. friendly
 - b. nonverbal
 - c. understood
 - d. impressive
7. Don't choose _____ words just to be showy. How can others take our communication seriously when we don't consider carefully our own communication?
- a. difficult
 - b. extreme
 - c. too many
 - d. unusual
8. Nonverbal communication is done with the body and is called body _____ .
- a. style
 - b. talk
 - c. wordless
 - d. language
9. The five different levels of communication in order are _____ .
- a. acknowledging, reporting, sharing, revealing, communing
 - b. sharing, revealing, communing, acknowledging, reporting
 - c. acknowledging, revealing, communing, reporting, sharing
 - d. acknowledging, sharing, reporting, communing, revealing
10. One of the most important characteristics people look for when establishing relationships is _____ .
- a. sarcasm
 - b. sharing
 - c. trust
 - d. confidence



Practice

Match each **level of communication** with the correct **description of communication**. Write the letter on the line provided.

	level of communication	description of communication
_____	1. reporting	A. small talk with acquaintances
_____	2. communing	B. talking about ideas between friends
_____	3. acknowledging	C. expressing emotions and telling our feelings to a friend
_____	4. sharing	D. reporting just the facts to an acquaintance
_____	5. revealing	E. intimate sharing with closest friend



Characteristics of Friendship and Healthy Relationships: Sharing Trust, Affection, Respect, and Disagreements

Trust: The #1 Ingredient in a Friendship

Some people believe that having similar interests is the key to a friendship. In fact, most social scientists claim that trust is the most important feature of a friendship. We need to believe that a person will not betray our confidences. We need to believe that a person will not tell others our innermost thoughts and that a person will not take advantage of us when we reveal ourselves. When a friend violates our trust, the friendship is hurt and may even end.

Affection: Sharing Joy and Sorrow

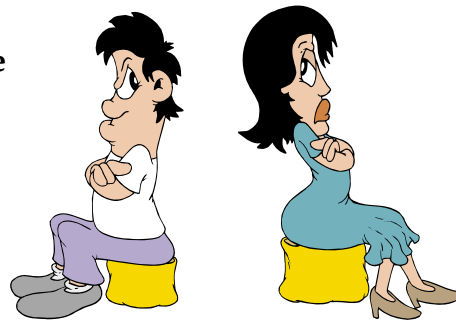
Affection is another important characteristic of a friendship. Friends share each other's joys and sorrows. They show a caring attitude towards each other. Affection can be shown in different ways. Some people feel comfortable hugging one another or being in close contact. Other people show affection through words or even gifts.

Respect: Friends Make Friends Feel Important

Friends make one another feel important. In other words, they bolster each other's self-image and *self-esteem*. When Eric lost the election, Yolanda pointed out how many people had supported him. While Carol described her problems, Fiona listened attentively. And when Juan made the varsity basketball team, his friends told him how hard he had worked and how much he deserved his success. As these examples illustrate, friends are a support system.

Disagreements: Friends Agree to Disagree

Friends let each other have their own ideas. In most friendships, people will sometimes disagree with one another. Friendships can survive disagreements. However, friendships probably will not survive if one of the persons cannot let the other have a different opinion or different belief.



Some types of disagreements may mean that two people cannot be close friends.



Some types of disagreements may mean that two people cannot be close friends. Each of us has deep-rooted values and shallow-rooted values. When plants or trees are deep-rooted, they are difficult to pull out. When our values are deep-rooted, they are very important to us. They may be an essential part of who we are.

Marie and Jackie liked each other when they met. They differed, however, about the importance of who they chose to hang around with at school. Marie believed they should not hang around with people who use drugs. Jackie believed they could be friends with them since neither Marie nor she was interested in using drugs. Each girl felt strongly about her position. In spite of their differences, the two girls continued to respect one another and became friends. However, because their different values, opinions, and beliefs concerning this were too opposing and deep-rooted, the two girls never became close friends. Other people may become good friends or even close friends in spite of their different values or deep-rooted beliefs.

Communicating through Behavior: Passive, Aggressive, and Assertive

Certain kinds of behavior help to make a relationship healthy and grow. Behavior that is an expression of what someone feels and thinks strengthens the bond between two people. This kind of behavior is called **assertive**.

On the other hand, **passive** behavior masks what a person feels or thinks. **Aggressive** behavior threatens or hurts others. Both of these behaviors are destructive to a relationship.

Passive Behavior: Holding Back

When we behave passively, we are having trouble communicating. We lack self-confidence, and we fear the other person's responses to us. Instead of saying what we mean, we say nothing. We use passive nonverbal behavior when we are with another person. We look away from the person; we may giggle or laugh at a serious topic; we tighten our facial muscles and look meek.

The person who behaves passively often shows it in the following ways. He criticizes himself often and easily. He makes unnecessary apologies, even when he is clearly not to blame. He makes constant excuses for things he does, even when he does things well.



Aggressive Behavior: Striking Out at the World

When we behave aggressively, we are also having trouble communicating. Rather than not expressing our thoughts and feelings, we express them in hurtful ways. We use words to be disrespectful of others. We use name-calling to put others down. We interrupt others and do not follow the tips for effective conversation. We use a loud voice and make sarcastic comments about others. "You're stupid and crazy!" the aggressive person says when he disagrees with someone.

We also use our bodies aggressively. We glare at others and use threatening hand gestures. We stand in a rigid and threatening posture.



When we behave aggressively, we are also having trouble communicating.

Assertive Behavior: The Comfortable Person Making Others Comfortable

When we behave assertively, we tell others how we think and feel. We express ourselves honestly but in a way that considers the other person's feelings. "I see your point, but I see it in a different way," the assertive person may say when she disagrees. Her confidence does not make others feel threatened. When we behave assertively, we use our bodies in a relaxed way. Our posture is straight but not stiff. Our face is relaxed, and we make soft eye contact. Our hands are open. Our words and our bodies encourage others to be honest and open with us.

Resolving Conflicts: Mending Differences

No matter how well we communicate and behave with others, we will still have **conflicts**. A conflict is a struggle or a disagreement between people. A conflict can exist over ideas or values. You believe the government should ban the sale of most handguns. Your friend believes the government should not limit the sale of guns. A conflict can be about the gap between what you want from someone and what someone gives you. You've asked your little sister to keep the bathroom you share clean. She has rarely done this. A conflict can even arise over something as simple as which restaurant you and your dating partner will go to after a movie.



Some people believe that good relationships have no conflicts. This is rarely the case. More often, people just avoid talking about the differences and gaps between them. They are afraid that talking about a conflict will just create tension and hard feelings. But learning how to address conflicts can make a relationship much healthier than ignoring conflicts. How healthy is a relationship in which both people are afraid of their differences? Having to be in agreement, or pretend to be in agreement, can be a heavy weight for any of us to carry.

Strategies to Avoid When a Conflict Arises

People use different kinds of strategies to deal with conflicts. Unfortunately, many of them only create more problems.

Withdrawal and the *silent treatment* are two passive ways of responding to a conflict.

During withdrawal, the person just walks away and refuses to face the problem. During the *silent treatment* a person just stops speaking. She may remain silent or may say just enough to answer a question. She does not, however, really communicate.



Withdrawal and the silent treatment are two passive ways of responding to a conflict.



The assertive person is not afraid to raise and talk about differences.

On the other hand, some people use the aggressive approach: They yell and scream. They do not want to resolve, or fix, the conflict. Instead, the person who blows up wants to bully the other person into giving in.

The assertive approach is always the best way to resolve conflicts. The assertive person is not afraid to raise and talk about differences. He knows conflict can be discussed in a mature way. Even if his emotions run hot, he will not use hurtful words or threatening body language.

A **confrontation** is a meeting in which people express their differences or complaints to one another. They try to resolve a conflict.



The following are some tips for being assertive during confrontations:

Use I messages. Phrase your conflict or emotion as something you believe or feel. Say “I was hurt and angry when you didn’t keep our date,” rather than “You hurt me when you didn’t call.” Say “I think we should go to a movie,” rather than “Your choice to go to a restaurant is not a good one.”

“I” messages help you take responsibility for your thoughts and feelings. Try to avoid statements that begin with “you.” Those types of statements do *not* take responsibility.

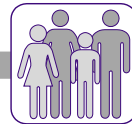
Focus on the conflict. At the beginning of the discussion, both people need to agree on what the conflict is. If the disagreement is about the way one of you behaved at a party, focus on that. Do not use this discussion to raise other issues or disagreements. Too often people use an argument to raise many other problems. This only confuses the issue.

Be specific and be direct. Know what you want to say and say it in plain language.

Look to solve the conflict. An assertive person looks to find an answer that will satisfy both people. Perhaps each person needs to suggest possible solutions.

Remember: the goal is to solve the conflict, not win the argument. Both people may need to compromise or be willing to give in a little. Perhaps you could let your friend choose this week’s movie and you choose next week’s movie. Perhaps you can begin to see how both of you caused hurt feelings.

Be willing to end the conflict. Don’t stop discussing the conflict until both of you are satisfied. But once the conflict is ended, do not raise it again. It is over.



Practice

Answer the following using short answers.

1. What kinds of needs are fulfilled through relationships?

2. What fear may keep us from reaching out and making contact with other people?

3. What difficult position do we put ourselves in when we don't present our genuine self to others?

4. How do we send messages in verbal communication?



5. What are the different ways we can use our body to show someone we are listening?

6. What are two of the three guidelines for listening effectively?

7. What are two of the five tips for effective communication?

8. What are two of the five ways to be assertive in a conflict?



Practice

Use the list below to write the correct term for each definition on the line provided.

acquaintance	confrontation
aggressive	passive
assertive	rapprochement
conflict	self-disclose

- _____ 1. a feeling of trust and being at ease with another person
- _____ 2. a meeting in which people express differences or complaints to one another
- _____ 3. a struggle between people whose wants, ideas, or goals interfere with each others'
- _____ 4. to express your honest thoughts and feelings while respecting the thoughts and feelings of others
- _____ 5. to hold back one's thoughts and feelings; remaining silent
- _____ 6. someone you know but with whom you would not share your feelings or private thoughts
- _____ 7. to speak and behave in an angry and insulting way towards others
- _____ 8. the act of making yourself open and known to someone; letting someone see your inner self



When Relationships Hurt

Sometimes we will find ourselves in a relationship that hurts. The other person may be abusing us in one of many ways. We may be a victim of physical abuse, sexual abuse, or even emotional abuse. Each of us is protected by law and we can take steps to protect ourselves.

Child Abuse: The Illegal Treatment of Children or Adolescents

Child abuse is the illegal treatment of children or adolescents. The statistics on child abuse are staggering. According to the United States Department of Health and Human Services, each day in the United States, more than three children die as a result of child abuse in the home. More children, ages four and younger, die from child abuse and neglect than any other single, leading cause of death. About three million possible maltreatment reports are made to child protective service agencies each year. Actual abuse and neglect is estimated to be three times greater than reported.

In most cases, the person who commits the abuse is the parent, step-parent, sibling, or immediate family member. The law protects children and adolescents from four different kinds of maltreatment: physical abuse, sexual abuse, neglect, and emotional abuse.

Physical abuse. People who cannot handle their frustrations or anger may resort to physically abusing others. Some parents beat their children to relieve their anger. Some parents beat their children because they do not know how to discipline them in appropriate ways.

Child abuse does not include all kinds of physical force a parent uses on a child. Some parents use mild force such as spanking or even light slapping to discipline a child. However, when a parent harms a child or an adolescent, then the parent is committing child abuse. Bruising or burning a child is child abuse. Knocking out teeth or breaking a bone is child abuse. Using dangerous objects with which to beat a child is also child abuse.

Sexual abuse. Sexual abuse describes any sexual relations between an adult and a child or an adolescent. The sexual relations can be anything from fondling to sexual intercourse. Even if a child agrees to sexual relations with an adult, the adult is still committing a crime, and the child is still suffering.



Neglect. Another form of child abuse is called *neglect*. Neglect occurs when parents do not adequately care for a child's or an adolescent's physical or emotional needs. (Physical needs include adequate food, clothing, shelter, and medical care.) They may not feed or clothe the child well. They may even tie the child up or lock the child in a room for a long period of time. Leaving a young child alone or unsupervised is another form of neglect. Emotional neglect may include indifference or refusing to listen when a child has a problem.

Emotional abuse. Emotional abuse is a pattern of behavior that attacks a child's or an adolescent's emotional development and self-worth. Emotional abuse does not leave scars or marks, but it can be as harmful as any other kind of child abuse. When parents relate to children in harmful ways, they are committing emotional abuse. Emotional abuse includes withholding love from a child, providing little or no emotional support for a child, and constantly ridiculing a child.

Even though the effects of emotional abuse are not as visible as those of physical abuse, emotional abuse can be just as damaging. One of the worst effects of emotional abuse is low self-esteem.

Abuse: Person to Person

Abuse can happen in all kinds of relationships. Husbands beat wives, and in some cases wives beat husbands. Almost half of the women murdered in this country are killed by their husband or boyfriend. Anyone can be the victim of physical abuse, emotional abuse, or sexual abuse from a dating partner, an acquaintance, a stranger, or even someone who is considered a friend. Abuse is abuse—no matter who is committing the abuse!

Who Is Likely to Commit Abuse?

Certain people are more likely to commit abuse than others. Abuse can be a learned behavior. Persons who came from abusive families are more likely to abuse their children and spouses than persons who came from healthy and loving families. A child who was physically or sexually abused may become a parent who abuses his or her children. A child who grew up watching his father beat his mother is likely to beat his own wife. Abuse is a disease, and it can be passed on from parent to child.

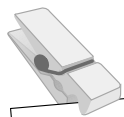


People who commit abuse are likely to have low self-esteem. They do not value themselves highly. They are easily frustrated and can't handle stress. They abuse others as a way to feel powerful and in control. They are also likely to be an alcoholic or have another drug problem.

Who Is Likely to Accept Abuse?

Anyone can be abused. But some people believe that they deserve to be abused. If they are adults, they most likely were abused as children. They see the present abuse they are experiencing as just a continuation of their childhood abuse. Abused children or adults usually have low self-esteem. Because they see themselves as lacking value, they may believe they deserve to be abused.

Responding to Abuse: Stopping the Cycle



National Child Abuse
Hotline
24 Hours a Day
Toll Free
1-800-4-A-CHILD
(1-800-422-4453)

National Coalition Against
Domestic Violence
1-800-799-SAFE
(1-800-799-7233)

If you are abused, you need to end the cycle right now! Begin by notifying a hotline that will help you stop the abuse. If you are a victim of child abuse, or if you suspect a friend of being abused, talk to your teacher or guidance counselor, or call the National Child Abuse Hotline at 1-800-4-A-CHILD (1-800-422-4453). If one of your parents is abusing the other, or if a friend is being abused by a dating partner, call the National Coalition Against Domestic Violence at 1-800-799-SAFE (1-800-799-7233), or use the TDD number for the hearing impaired (1-800-787-3224). You should also contact your school

counselor and visit your local health center. If you would rather not call a hotline or talk to a counselor, then reach out and talk to a friend or a close relative. For immediate help, call 911 directly.

These hotlines, counselors, and health centers will help you take action to stop the abuse. They will also help you begin your recovery. Remember: Anyone who has been abused is likely to abuse someone in the future or to be a victim of abuse in the future. Victims need to learn how to avoid abuse in the future.



If you find someone attempting to abuse you—in the home, at school, on a date, or anywhere—assert yourself. Say “No!” to the person who is attempting to abuse you. Many people who attempt to abuse others look for victims who will not or cannot stand up for themselves. So be assertive! Think of your body and your feelings as worthy and as deserving of respect from others. Try to avoid being alone with people you have seen being abusive or you suspect are capable of abusive behavior. But, if you are abused, it’s a crime and you are a victim. Get help!

Summary

As social creatures, we enjoy and need relationships. Relationships fulfill our need to love and be loved, and to feel accepted by others. Our relationships also enrich our lives as we discover how others see the world and we hear about their experiences and knowledge.

Establishing relationships can be difficult. Many of us fear being rejected by others if we attempt to make friends. If we develop a healthy *self-image*, we are less likely to be rejected. Others tend to see us as we see ourselves. When we establish relationships, we may try to present the self we think the other person will like and accept. However, we should show others a *genuine*, or real and honest, self. If we present a fake or perfect self, we may feel the need to play that *role* in the future.



Relationships fulfill our need to love and be loved, and to feel accepted by others.

To establish and develop healthy relationships, we need to communicate well. We often take our ability to communicate for granted, but we shouldn’t. *Communication* is a learned skill. There are two different types of communication: *verbal* and *nonverbal*. Verbal communication describes messages sent by the written or spoken word. Nonverbal communication messages are sent by facial expressions or body movements. Verbal and nonverbal messages should match or we will send *mixed messages* to others.

Listening is probably the most difficult communication skill to learn and practice. As we listen to others, we should have a clear mind focused on what is being said. We should let the speaker know that we are listening. And we should wait until the speaker is done before we respond.

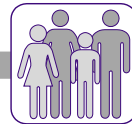


Acknowledging, reporting, sharing, revealing, and communing are the five levels of communication. Acknowledging, or showing others you recognize them, and reporting, or telling others facts, are the shallowest levels of communication. Acquaintances usually speak on these levels. Friends, however, will also share ideas, reveal feelings, and commune, or feel totally at ease and deeply connected to one another.

Friends can *disclose* themselves to one another because they *trust* one another. They also show affection and respect for one another. They let each other have different opinions and ideas. Because they can be *assertive* with one another, they are able to resolve *conflicts* in ways that are agreeable to both persons.

Some relationships are not healthy and cause hurt. Child abuse occurs when an adult hurts a child or an adolescent. Child abuse includes physical abuse, sexual abuse, neglect, and emotional abuse. The law protects children and adolescents from these abuses.

Physical, sexual, and emotional abuse can also occur in relationships between one child and another, and between one adult and another. No one should permit another person to abuse him or her. There are hotlines which any person who is abused or who commits abuse can call for help.



Practice

Write a brief **example** or **description** for each of the following terms. The first one is done for you.

1. passive behavior: In a conversation with others, Christie often giggles uncontrollably. She looks away from others when they look at her.
2. aggressive behavior: _____

3. assertive: _____

4. trust: _____

5. affection: _____



6. respect: _____

7. conflict: _____

8. child abuse: _____

9. neglect: _____

10. self-esteem: _____



Practice

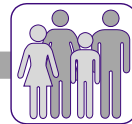
Answer the following using complete sentences.

1. Trust is usually the #1 ingredient in a close friendship. Violate a friend's trust and you may lose a friend. But trust is important in all different kinds of relationships. Name three of the relationships you have with acquaintances in which trust is important. (Describe the roles each of you plays in this relationship; for example, a car owner and her mechanic.) Why is trust an important part of each of these relationships?

2. After dating someone for three months, you've begun to assume that both of you have agreed to date no one else. The other night you saw your dating partner leaving the library with someone else. They were laughing and teasing one another. You feel angry, and you think your dating partner has violated your trust. How should you speak to your dating partner? What specific kinds of language—both verbal and nonverbal— should you use?



3. One day when you pick your best friend up for school, you notice she has bruises on her face. You ask her what happened, and she says she walked into a door. A week or so later, you notice bruises on her arms, and she's walking with a slight limp. She says she fell down some stairs. What should you do?



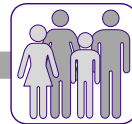
Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. Florida law does not protect children from physical or sexual abuse.
- _____ 2. Most of us are “social creatures” and enjoy the company of others.
- _____ 3. Relationships will always fulfill our need to be loved and accepted.
- _____ 4. Some people need many friends, whereas others may need only a few.
- _____ 5. Someone with a poor self-image can make friends easily.
- _____ 6. Establishing healthy relationships is very easy.
- _____ 7. Experiencing rejection by another person is easily overcome.
- _____ 8. People are less likely to reject us if we have a good self-image.
- _____ 9. We may behave differently in different situations.
- _____ 10. Presenting a false self is one way to establish trust in a relationship.
- _____ 11. When a stranger doesn’t like us, we should feel bad.
- _____ 12. *Body language* is a form of verbal communication.
- _____ 13. To send a message to someone is to communicate.
- _____ 14. Talking on the phone and writing a letter are examples of nonverbal communication.
- _____ 15. The volume and tone of your voice is part of the message you send when you speak.



- _____ 16. Choosing to use popular words and phrases when we talk shows that we are unique.
- _____ 17. A raised eyebrow tells someone you agree with what is being said.
- _____ 18. *Body space* refers to the distance we like to keep between ourselves and others.
- _____ 19. Listening is the easiest part of communication.
- _____ 20. Acknowledging another person is the deepest level of communication.
- _____ 21. A true friend will always agree with your ideas.
- _____ 22. Trust is the most important ingredient in a friendship.
- _____ 23. Assertive people tell others what they think and feel.
- _____ 24. A passive person will communicate openly.
- _____ 25. A conflict is a disagreement between people.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|---|----------------------------|
| _____ 1. messages sent to others through expressions of the face and movements and postures of the body | A. assertive |
| _____ 2. messages sent through words; messages spoken or written | B. body language |
| _____ 3. real, sincere, honest; not fake or artificial | C. communication |
| _____ 4. very close and familiar | D. conflict |
| _____ 5. to have confidence in someone or something; to feel certain of someone's character and honesty | E. genuine |
| _____ 6. to express your honest thoughts and feelings while respecting the thoughts and feelings of others | F. intimate |
| _____ 7. the sending and receiving of messages | G. mixed message |
| _____ 8. messages sent through behavior and the body; messages sent without the use of words | H. nonverbal communication |
| _____ 9. the picture you have of yourself; how you see yourself | I. self-image |
| _____ 10. a message in which one's words do not match the expression on one's face or the movements of one's body | J. trust |
| _____ 11. a struggle between people whose wants, ideas, or goals interfere with each others' | K. verbal communication |

Unit 3: Stress: Finding the Balance

This unit discusses what stress is, what can cause stress, and ways to manage stress in our daily lives. The unit also touches on types of depression and suicidal behavior.

Unit Focus

- what stress is
- what can cause stress
- difference between healthy and unhealthy stress
- techniques to help us manage stress
- the difference between short-term and long-term depression
- signs suicidal people may give





Vocabulary

Study the vocabulary words and definitions below.

- adrenaline** a hormone the body releases that increases strength and alertness
- anticipate** to expect something to happen or to look forward to something
- anxiety** worry; fear or tension
- assertive** to express your honest thoughts and feelings while respecting the thoughts and feelings of others
- consequences** the results of a particular action or choice
- depression** a disorder that includes feeling unhappy and hopeless
- environment** surroundings
- frustrate** to cause a lack of confidence or hope
- immune system** system in the body that helps fight disease and infection
- psychological** refers to the mind or emotions



regulate to control or to adjust

stress the body's response to any situation that makes a demand on it

stressors events, situations, or surroundings that make a demand on the body

suicide the intentional taking of one's own life

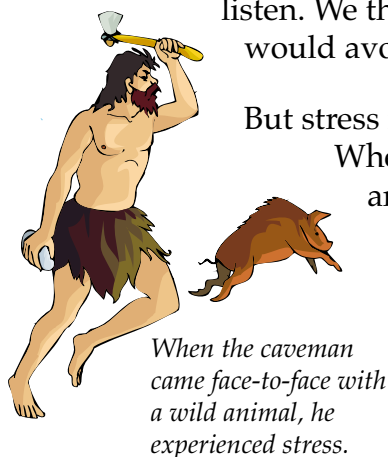
techniques the skills used to accomplish a task or reach a goal



Unit 3: Stress: Finding the Balance

Introduction

Few of us would identify **stress** as a condition or feeling we enjoy. We wouldn't say, "Stress really makes me feel good!" or "I can't wait to be stressed out!" Often when we do feel something we call *stress*, we try to get rid of it. We try to relax it away by listening to music. We try to sweat it away by playing a sport. Or we try to talk it away by getting a friend to listen. We think of stress as something to avoid—as we would avoid a disease or discomfort.



But stress is not all bad. In fact, stress can save our lives. When the caveman came face-to-face with a wild animal, he experienced stress. His body responded to the life-threatening situation by becoming ready to fight. His muscles gained energy, and his vision and hearing became sharp. If he chose to run from the animal, the energy he gained from stress helped him run faster and farther.

When we face difficult or even life-threatening situations, we experience stress. *Stress* is our response to any situation that makes a demand on us. When we feel stress, our bodies go on alert. When we noticed that car barreling down the road at us, our bodies were stressed and went on alert. We gained a little extra energy to help us make our way from danger. The mother who was able to lift a car off her child responded to the stressful situation with incredible strength.

We do not face as many life-threatening situations as the caveman did. However, stress still helps us in our everyday lives. Stress can help us achieve success in any challenging situation. When we take an exam, stress can help us think clearly. When we play a sport, stress can help us play our best. When we act in a play or give a speech, stress can help us perform better than we ever have. Stress can even help us show our cleverness and our funny sense of humor on a first date.



Stress can help us play our best.



Stress, however, becomes harmful when it overwhelms us. Stress can make us go blank as we look at the questions on an exam. Stress can cause us to lose our focus as we play a sport or game. Stress can leave us speechless on a first date with someone we want to impress. In more extreme cases, stress can make us sick and even cause death.



Stress becomes harmful when it overwhelms us.

Stress can be helpful, and stress can be harmful. All of us can learn what situations in our lives cause good stress and use them to our advantage. We can learn how to avoid those situations that cause bad stress in our lives. And we can learn **techniques** and strategies to lessen stress when it becomes too much.

Stressors: Demands Made on the Body

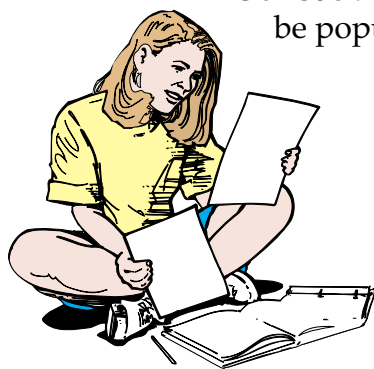
Stressors are events, situations, or surroundings that cause us stress. Each of us has particular events that are stressors. We can recognize events that are stressors in our lives by how our bodies respond. Our palms get sweaty. We can feel our hearts beat faster. The muscles in our body grow tense. Some of us feel stress when we take an important exam. Some of us feel stress as we warm up before a game. Almost all of us will feel stress if we feel threatened by someone or by a group. As we wait for our best friend to step off an airplane from a long trip, we may feel stress. Even accepting an award before a large crowd or waiting for our favorite group to come on stage for a concert can cause us stress.

For most of us, pointing to events and situations that cause us stress is easy. But recognizing the **environments**, or surroundings, that cause us stress can be much harder. Our home, for example, can be an environment that causes stress. Disagreements and fights between our parents may cause us **anxiety**, or worry and fear about the future. Constant fighting with brothers or sisters can cause stress. If we feel unloved by our parents, our self-esteem may suffer and we may feel unworthy. Feelings of unworthiness will cause stress.

Even our cities and neighborhoods can cause us daily stress. Living in violent and dangerous cities can cause stress. The constant noise in crowded cities or neighborhoods can make our nerves feel like drums that are constantly being pounded. Even places without much sunshine can be stressful environments.



School can also be a stressor. We may feel pressure if we have difficulty learning. Reading school textbooks without understanding them can **frustrate** us and be a daily stressor.



We may feel pressure if we have difficulty learning.

Our social lives can cause stress. We may feel the need to be popular and push ourselves to go to every party.

Breaking up with a girlfriend or boyfriend can be one of the most stressful experiences in our social lives.

Most people, at some time, will feel stressed by their work. Bosses can pressure us to work harder and harder. Some bosses may take out their own anger on workers and treat them poorly. Some jobs demand difficult decision-making. A person who fights fires feels stress as he puts his life at risk. A surgeon is

responsible for a patient's health and must always be careful and accurate in her work.

Stressors can be fearful or uncomfortable events or environments. Stressors also can be happy events or comfortable surroundings. A stressor is any situation—happy or sad—that speeds up our bodies and puts them on alert.

The Body's Response to Stress: Readiness and Recovery

Once the body sees a place, a person or people, or an event as a stressor, it begins preparing itself to respond. The body readies itself for what is called a *fight-or-flight response*. The fight-or-flight response prepares us to stay and defend ourselves against danger or to run away from it.

Thousands of years ago, human beings mostly faced *physical* stressors. The caveman found himself facing a charging beast or a raging forest fire. Unlike the caveman, we feel the fight-or-flight response when we face any kind of stress—even one that is not going to eat us, such as a difficult homework assignment or a nerve-wracking interview for a job.

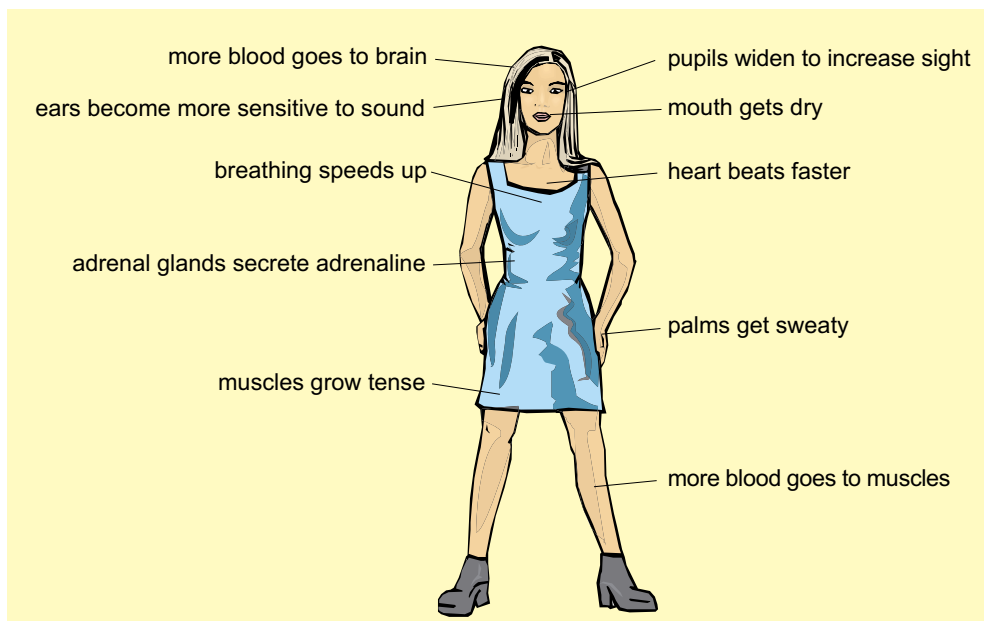
Our bodies go through three stages when facing a stressor: the alarm stage, the resistance stage, and the exhaustion stage.



The Alarm Stage: Getting Ready

You look at the exam the teacher has just handed you. You know that your grade for the class will depend on how you do on this exam. You feel a current of electricity running across your skin. After school, you join your soccer team for the biggest soccer game of the year. You pace back and forth, adjusting your shin guards. You feel as if you are about to jump out of your skin.

You recognize both of these situations as stressors. To prepare you, your body releases a hormone called **adrenaline**. Adrenaline increases your strength and alertness. You feel adrenaline as a rush of energy and excitement. Your body is preparing itself to fight or flee. Of course, you will neither fight nor run from the exam. However, the body still responds to *mental* challenges in the same way as it responds to *physical* challenges or danger.



Physical changes occur when you experience stress.

During the *alarm stage*, you become ready for quick movements and deep concentration. You begin to breathe more rapidly because you need more oxygen to fuel your body's increased rate. Your heart speeds up to send more and more blood to your muscles, brain, and lungs. Your muscles tense as they prepare to be used. Your senses heighten—your pupils widen to sharpen your sight, and your ears become more sensitive to sound.



Sometimes these changes in the body can lead to good results, and sometimes they can lead to bad results. The alarm stage may make you play better football than ever before. You gain increased energy and stamina from your adrenaline. You see the receiver move into position, and you throw the football as if it were attached to a string reaching the receiver. Or the alarm stage may overwhelm you, and you lose your ability to react. You seem to forget how to throw the ball, and you move stiffly and slowly.

You can also have different responses to taking important exams. You may respond to this stressor by becoming more alert. You remember everything you studied and you move through the questions easily. On the other hand, you may go blank. You remember studying, but the information seems blocked and hidden inside your mind.

Signs of Stress	
Emotional and Mental Signs of Stress	Physical Signs of Stress
depression anxiety irritability mood swings nightmares worrying forgetfulness poor concentration loneliness trouble relaxing	pounding heart headaches dry mouth shortness of breath weight change fatigue insomnia diarrhea constipation exhaustion

The Resistance Stage: Returning to Normal

After the alarm stage ends, the *resistance stage* begins. Your body now attempts to return to its normal state. It tries to reduce its heart rate to normal. It works to relax its muscles and remove the tension. It tries to return the eyes and ears to their everyday level of awareness. Your body is trying to relax.

However, if you have trouble relaxing, the body changes you experienced during the alarm stage will remain. You will continue to feel *keyed up*. You may have difficulty eating or sleeping after a big game. It may take you a day, or even longer, to return to your normal state.



The same response can happen after a mental demand, such as an exam or job interview. You may find that within an hour after an exam, your mind is clear and ready to concentrate again. Or you may find your mind filled with thoughts and too cluttered to concentrate.

The Exhaustion Stage: Wearing Down

If your body does not return to a relaxed state, it will continue to be on alert. Although your body may be sitting still, inside it is sprinting and fidgeting. It will begin to wear down and exhaust itself as it uses up its energy at a quick rate.



Practice

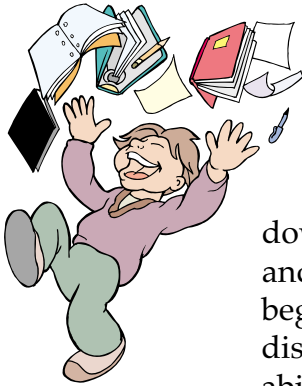
Match each definition with the correct term. Write the letter on the line provided.

- | | | |
|-------|---|----------------|
| _____ | 1. to cause a lack of confidence or hope | A. adrenaline |
| _____ | 2. events, situations, or surroundings that make a demand on the body | B. anxiety |
| _____ | 3. worry; fear or tension | C. environment |
| _____ | 4. the skills used to accomplish a task or reach a goal | D. frustrate |
| _____ | 5. surroundings | E. stress |
| _____ | 6. a hormone the body releases that increases strength and alertness | F. stressors |
| _____ | 7. the body's response to any situation that makes a demand on it | G. techniques |



When Stress Becomes Too Much: The Negative Effects of Stress

We may think we would like *stress-free lives*. But, in fact, we need *some* stress in our lives. Stress is a kind of exercise for our systems. If we never feel stress, we will never be able to face difficult situations and do well. We will never develop our stress “muscles” and be fit against stress.

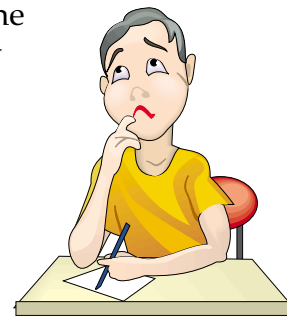


We may think we would like stress-free lives.

Although mild stress and even high stress can be helpful for a brief time, the body will break down if stressed for too long a time. The body tires and becomes exhausted. The body’s **immune system** begins to fail, and the body loses its ability to fight disease. We become sick and tired, and we lose our ability to do things well. Because too much stress reduces our concentration and alertness, we are more likely to have an accident.

Long periods of stress can cause stomachaches, muscle aches, and headaches. They can cause high blood pressure, heart disease, and even heart attacks. Many doctors and scientists claim that most of our sicknesses are caused by stress. We may be in the hospital because of a heart attack or cancer, but it may have been stress that caused those sicknesses.

Not only do long periods of stress cause physical problems, they also cause **psychological** problems. We may spend our days feeling worried and frightened. We may feel frustrated and sad, and even begin to feel a sense of hopelessness about our futures. Eventually, these feelings can lead to **depression**. *Depression* is a disorder that includes feeling unhappy and hopeless.



Stress can cause you to worry and be frightened.

Living with Stress: Learning to Cope

Too much stress can make us unable to cope with daily life. Fortunately, anyone can learn and use the three steps for avoiding and reducing stress. First, know your body’s early *warning signals* that you are experiencing



stress. Second, become aware of the *stressors* in your life. And third, learn strategies to *avoid and reduce* stress.

Living with Stress



1. Know your body's early warning signals of stress.
2. Become aware of the stressors in your life.
3. Learn strategies to avoid and reduce stress.

The First Step: Know Your Body

Begin to notice how your body responds to stressful situations. Do your hands and feet grow cold? Do you begin to shake and tremble? Does your heart race and pound? Do you have trouble talking and making sense? What about your throat—is it dry? Do you experience light-headedness or dizziness? Do you begin to sweat and blush? Do you lose your appetite, or do you experience indigestion? Most of us experience one or more of these physical warnings when we are feeling stress.

In addition, we may also experience psychological changes. Do you feel like hiding? Do you suddenly feel very alone? Do you lose your ability to concentrate? Do you suddenly feel tired, as if you need to sleep?

Physical and Psychological Changes Caused by Stress



- Do you suddenly feel very alone?
- Do you lose your ability to concentrate?
- Do you suddenly feel tired, as if you need to sleep?
- Do you have a weight change?
- Do you have headaches?
- Do you feel exhausted?
- Do you feel like hiding?

When you experience any of these physical and psychological responses, you know you are responding to a stressor. Stay aware of your body and mind. If you continue to experience any of these responses for more than a week or two, you may need help. See your counselor at school or a doctor or nurse. Talk to a parent or call the local health department. Respond to long periods of stress as you would to any illness—seek help!



The Second Step: Become Aware of Hidden Stressors in Your Life

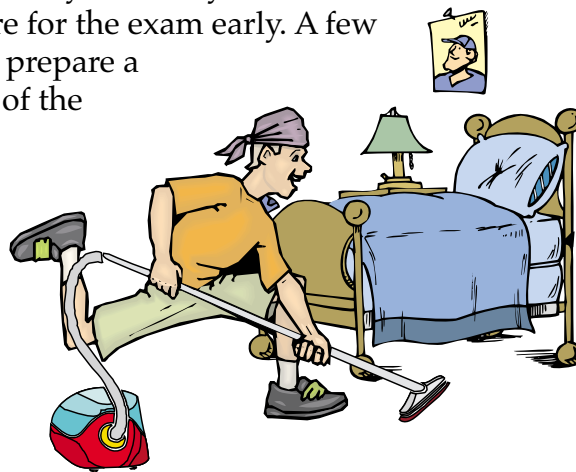
Some of us can stand before a large audience and deliver a speech without a bit of nervousness. Some of us can barely get our lips to move and sound to come out of our throats. Some of us get excited before we play a sport. Some of us play sports but don't care much how we play or whether we win or lose. A key to managing stress in our lives is to know which events, situations, and environments cause us stress.

Some events are bound to cause stress for all of us. The death of a close friend or family member can be a deeply stressful event. Major life events such as moving or going to a new school will cause stress. Situations that ask us to choose between our beliefs and our friends will stress us. For example, if we must choose between doing drugs or losing a friend, we likely will feel *stressed out*.

Sometimes stressors can be very difficult to recognize. Have you ever yelled at a friend or a pet and then wondered why? Have you ever felt angry but been unsure why you were angry? Have you ever felt lonely, hurt, afraid, sad, or worthless and been unsure why you felt this way? All of us have feelings that seem to come from nowhere. But these feelings are caused by stressors in our lives. We need to think about these feelings and look into our lives. We need to discover what is causing them so we can begin to get relief from them.

Once you can pinpoint the stressors in your life, you can take action. If you know that exams are stressors for you, then you can reduce that stress. Begin to prepare for the exam early. A few weeks or a week before the exam, prepare a schedule. Work through a section of the material each night. You will gain confidence by preparing early and entering the exam feeling good about your hard work. Whatever the stressor might be, preparation will reduce stress.

Some stressors can be **anticipated** and removed before they happen. This is called *stress intervention*. Take a constant criticism you might hear from a parent. Each time you hear your



If you feel stress each time you hear your parent criticize your messy room, clean up your room before your parent comes home from work and remove the stressor before it happens.



parent criticize your messy room, you feel stress. Perhaps each time your parent criticizes your lengthy phone conversations, you feel stress. Work to eliminate these criticisms. Clean up your room *before* your parent comes home from work. End your phone conversations *before* your parent complains.

Some stressors can be eliminated by a change in your attitude. You and your little brother pick on each other and eventually fight. These fights always leave you feeling raw and your parents angry. Try to reverse your attitude towards your brother—rather than criticizing him, try *complimenting* him. Or consider a friend with whom you always disagree. The next time you talk, try to see his or her point of view. See what makes sense about his or her comments, rather than why they are wrong.

Once you've identified stressors in your life, you can begin to manage them.

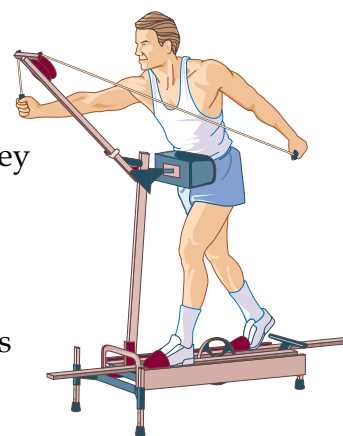
The Third Step: Learn Strategies to Avoid and Reduce Stress

Strategies for avoiding and lowering stress can be divided into two types. Some strategies help us *strengthen* our ability to fight and avoid stress. And some strategies help us to *reduce* the stress caused by a specific problem.

Strengthening Our Ability to Fight and Avoid Stress: The Fit and Relaxed Body

Be fit. Exercising regularly is one of the best ways to fight and **regulate** stress. Anytime we experience stress, the body's muscles—and *particularly the heart muscle*—must work harder. The more fit our muscles are, the better they can work when stressed.

We produce adrenaline when stressed. As long as adrenaline remains in our system, our bodies will continue in a fight-or-flight response. Our muscles tense up and will remain tense until the adrenaline is used. Exercise helps remove unneeded adrenaline from our systems. Our bodies can then return to their normal state.



Exercising regularly is one of the best ways to fight and regulate stress.



When we exercise for 30 minutes three times a week, our bodies release beta-endorphins. *Beta-endorphins* help relieve pain, relax the body, and create a sense of well being. In short, beta-endorphins can help us maintain a positive attitude, and a positive attitude helps us resist and manage stress.

Our diet, or the foods we eat, also has a sharp effect on how well we resist and manage stress. An overweight body, or a body filled with fatty foods, alcohol, and caffeine, stresses the heart and other muscles.

Adequate sleep is also essential for a fit body. During sleep our bodies heal and repair. Without adequate sleep, the body is not ready or able to manage and resist stress.

Assertiveness. When we are not honest with others and hold back our thoughts and needs, we tend to walk around angry and frustrated. We become a sealed bottle filling with steam—we begin to experience stress! So make it a practice to speak honestly with others rather than being silent. Most of us have found ourselves frustrated and angry because we didn't speak up about something when we had the chance. Learning to be **assertive** will keep the body from filling with anger and will keep us from feeling isolated and unconnected to others.

Relaxation. The opposite of stress is relaxation. When we relax, we release tension from our muscles. Our blood pressure lowers. Our bodies begin healing and repairing. Many forms of relaxation include a quiet place where we can sit or lie in a comfortable position. You can learn many different kinds of relaxation techniques from a counselor. The following are two easy and useful techniques.

1. *Meditation* has been an effective relaxation technique for thousands of years. Sit in a comfortable position but don't slouch. Close your eyes and begin breathing through your nose. Keep your attention on your breath as it passes out of the tip of your nose. Begin silently counting each time you exhale. Continue counting until you reach five. Then return to one and begin counting again. Do this for 10 minutes. You may want to work up to a maximum of 20 minutes. Do not judge how well you are able to do this relaxation technique. If you lose your count or if your mind drifts off, just gently begin counting again. This is a relaxation technique, not a contest.





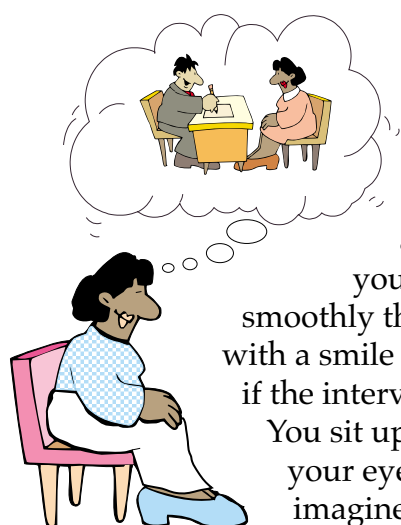
2. *Progressive muscle relaxation* helps you relax your body one muscle at a time. Begin by laying flat on your back. Squeeze tightly all the muscles in your face for five seconds. Then release. Repeat this five-second squeeze and release. Move to your shoulder muscles and squeeze and release, squeeze and release.

Then do your arms, your hands, your buttocks, your upper legs, your lower legs, and finally your feet. Many of us do not realize we go through our day with some muscles in our bodies tensed. This technique helps us identify those muscles and relax them.

Learning Techniques to Reduce Stress: Visualization; Problem-Solving; and Goal-Setting

Once you've identified a situation or problem that is causing you stress, you can begin to take action. Sometimes an upcoming event will cause stress. Sometimes a decision you must make will cause stress. In either case, there are techniques that can help you reduce the stress and make decisions with which you can live.

Visualization. You have an interview next week for a job you really want. Like most of us, this kind of event makes you nervous. You know you are capable of doing this job well—if you can only get through the interview. Each time you think about the interview, however, you imagine yourself stumbling on your words. Your mind goes blank when the interviewer asks why you are the best person for the job. How can you relax and change your image of how this interview will go?



You can begin to see the interview going well through *visualization*, or forming a picture or movie of the interview in your mind. Sit quietly and close your eyes. Imagine yourself walking into the building where you will be interviewed. You are feeling good about yourself—you are nicely dressed and your posture shows confidence. You walk smoothly through the building and introduce yourself with a smile to the receptionist. You use a firm handshake if the interviewer offers you her hand. You smile easily. You sit up straight in the interviewer's office. You keep your eyes on hers and you listen to her questions. You imagine the questions she will ask and you answer



each one with confidence. You are relaxed and being yourself. You go through each step of the interview in your mind and imagine only a positive outcome.

Visualization will work for any situation or event. Whether you are facing a job interview or a big game, an important exam or a first date, close your eyes and imagine yourself succeeding.

Problem-Solving. Let's say, for example, that your friends are pressuring you to do drugs. You are feeling stress because you might lose your friends unless you join them in doing drugs. You could make a decision quickly: "Oh, why not? It won't kill me, and it'll make my friends happy." Or you could take a thoughtful approach: "I need to carefully consider this problem. After all, doing drugs can hurt many people—myself and others!"



To begin problem-solving, break the process into steps. Small steps are easier to manage and can help you see and study the options.

1. Turn the problem into a question. Write it down so you can look at it: "Should I do drugs to make my friend happy? Will doing drugs make me happy?" By forming and writing down the question, you can begin to understand what is at stake. In this example, you learned that the real question is, "Will doing drugs make *me* happy?"
2. Gather information and ideas to help you make a decision. Go to the library, talk to counselors or experts. Talk to people you trust and ask for advice.

Find out what drugs can do *for* you and what drugs can do *to* you. What will they do to my body and mind? What will happen if I break the law? Write down the pros and cons of doing drugs.

3. Write out all the possible choices and their **consequences**. Be honest. For example, you might write: "I could do drugs and keep my friends." But that is an incomplete answer. A more complete answer might read: "I could do drugs and keep my friends, but my body and mind will suffer, and so would my





self-respect.” Another choice would say: “I could decide not to do drugs. I will probably have to find new friends, but there may be no other choice.” Or, you might consider doing drugs occasionally, but you would have to drop this possibility if your research has shown that most people cannot do drugs occasionally. People often let drugs become an everyday part of their lives.

4. Make a decision. Remember that anyone can make a decision.

However, the mature person makes a *responsible* decision.

The mature person understands her values. She is not willing to make a decision that violates values to which she is committed. She is self-confident enough not to give up her values to please someone else. The mature person makes a decision that will not hurt herself or others. She knows that some decisions will not make everyone happy, and she is strong enough to make a responsible decision regardless.



5. Evaluate your decision. Sometimes the right decision will not relieve stress immediately. If you decide not to do drugs, you will experience some stress from your friends’ disapproval. But you will know that in the long run, being drug-free is a much less stressful way to live.

Sometimes we make wrong decisions. If we can change them, we should. If we can’t change them, we need to be mature enough to take responsibility for them. You may decide you’d rather go out this weekend than paint your neighbor’s porch. But you committed yourself to the job—it was a decision you made and therefore need to honor.

Stress-causing problems come in a variety of forms. They can be about friends and your social life. They can be about whether to buy a car or which kind of car to buy. They can be about which vocational school or college to attend. They can be about which part-time job to accept. They can even be about whether to study or go to a party this weekend!

Goal-Setting. We can describe goals as either *short-term goals* or *long-term goals*. Short-term goals include those things we want to accomplish or acquire soon. If we want to raise our grades in school this semester or make the swim team next year, we are striving toward a short-term goal.



However, if we want to be a doctor who helps people in war-torn countries, we are striving for a long-term goal. Setting and working toward goals give us direction. Without goals, we may lose our motivation and find ourselves just drifting through life. But goals can often cause us stress when we don't know how to reach a goal or when a goal seems too far away to ever reach. Fortunately, we can use a strategy to help us set and reach our goals.

1. Make your goals specific and reasonable. All of us want to be *happy*. Many of us want to be *wealthy*. And most of us want to have *loving families*. But these goals are stated in general terms. They need to be broken down so you can develop a plan to reach them. What do you consider a loving family? What would make you happy? Would improving the lives of others make you happy? If so, what, in particular, could you do to improve the lives of others? Let's say that a job in the medical field would fit this goal. You could be a doctor, a nurse, an emergency medical technician (EMT), or a physical therapist, to name just a few.

As you read about the possibilities, look for goals you think you could reach. Becoming a doctor takes many years of schooling. You don't think you are patient enough to spend all that time in school. However, becoming an EMT takes less time. Like a doctor, an EMT gives care in emergency situations that can save lives! Becoming an EMT is a specific and long-range goal you think you can reach.

2. Break your goal into steps. Write down a list of steps you must climb to reach the goal of being an EMT. Your first step is to take a wide range of science courses in high school to prepare yourself. Your second step is to go to a community college that offers training to be an EMT. Your second step will also include becoming very physically fit to handle the physical and mental stress of emergency situations. Your third step is to pass the EMT licensing exam. Your fourth step is to find a job as an EMT.



Becoming an EMT is a specific and long-range goal you think you can reach.

These steps can further be broken down into smaller steps. Look back at the first step: You must take a wide range of science courses. You



know, for example, that to do well in a high school advanced biology class will take discipline. So you develop a schedule for studying the material in this class. On the schedule, each school night represents a step you will accomplish towards your goal. Each night you will spend an hour studying biology. Two weeks before each exam, you add an extra half-hour to your study time in preparation.

You can even break down each study session into steps: 15 minutes reviewing the material learned in previous chapters, 15 minutes reviewing class notes, and 30 minutes studying material to be discussed in the next class.

When we focus on the smaller steps of a large goal, we can reduce stress. We feel good about ourselves as we see the goal coming nearer. And we can take satisfaction each time we complete a step—no matter how small that step is. After studying each night for your biology class, you can check off the step you've completed.

3. Recognize when you won't be able to reach a goal. Sometimes we try to reach a goal but can't reach it. We will feel some disappointment. But not all is lost. Remember, you have the satisfaction of knowing that you tried. Many people never pursue their dreams—they just dream them.

When we can't reach a goal, we can always change our goals. As long as we have goals and work towards them, we will remain challenged and productive.



Practice

Use the list below to write the correct term for each definition on the line provided.

anticipate assertive consequences depression	immune system psychological regulate
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- _____ 1. to control or to adjust
- _____ 2. the results of a particular action or choice
- _____ 3. a disorder that includes feeling unhappy and hopeless
- _____ 4. refers to the mind or emotions
- _____ 5. to expect something to happen or to look forward to something
- _____ 6. system in the body that helps fight disease and infection
- _____ 7. to express your honest thoughts and feelings while respecting the thoughts and feelings of others



Practice

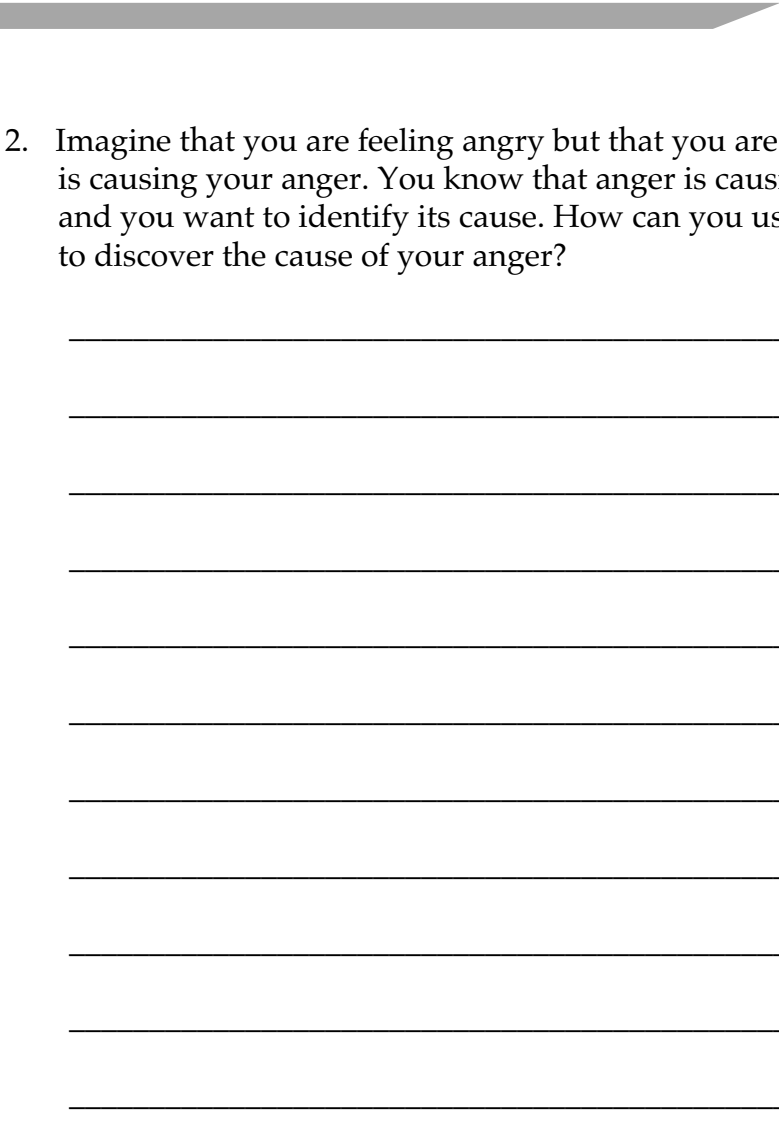
Answer the following using short answers.

- Setting goals and moving toward them are important ways for us to produce healthy stress and reduce unhealthy stress. Pick one short-term goal you have and one long-term goal you have. Remember to describe each goal in specific terms, not in general and vague terms. Then break each goal into at least five steps. Take at least two of these steps for each goal and break it down into at least three steps. You may use the diagram below.

Goals	
Long Term	Short Term
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Step 1	Step 1
<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div>	<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div>
Step 2	Step 2
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Step 3	Step 3
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Step 4	Step 4
<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div>	<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div>
Step 5	Step 5

Use this section to take at least two of the steps above for each goal and break them down into three or more steps.

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- [illegible]



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. Stress is a condition that people should always avoid.
- _____ 2. Even cavemen experienced stress when facing a wild animal.
- _____ 3. Stress can help us achieve success in any challenging situation.
- _____ 4. Events that cause stress are called *stressors*.
- _____ 5. Stress can make us perform better, and stress can make us perform worse.
- _____ 6. Sweaty palms, faster heartbeats, and tense muscles may be signs that we are stressed.
- _____ 7. Happy and sad situations may cause us stress.
- _____ 8. The *fight-or-flight response* prepares us to stay and fight or to run away from a danger.
- _____ 9. The body responds differently to mental challenges than it does to physical danger.
- _____ 10. Adrenaline is a hormone that calms you down after danger has passed.
- _____ 11. Someone stressed for a long period of time may become sick because of the effect of stress on the immune system.
- _____ 12. We need *some* stress in our lives.
- _____ 13. Psychological problems such as depression may follow stressful events.
- _____ 14. Techniques to reduce stress cannot be learned.



- _____ 15. Knowing how your own body reacts to stressful events can be helpful in learning how to cope with stress.
- _____ 16. Preparation for challenging events is important, but it cannot reduce stress.
- _____ 17. Identifying stressors in your life will only increase their effect on your body.
- _____ 18. Each of us experiences particular events as stressors.
- _____ 19. Beta-endorphins trigger the fight-or-flight response.
- _____ 20. Diet, rest, and exercise are important for a fit body but have little or no affect on our stress.
- _____ 21. Relaxation techniques actually make you more tense.
- _____ 22. Visualization, or seeing yourself doing well in an upcoming event, is a waste of time.



When Stress Takes Over: Depression

Nearly all of us have had a few days or even a week during which we felt unhappy. We may not have liked ourselves during this period. We may even have lost hope that things would change and we would regain our old selves. We probably described ourselves as having a *case of the blues*, or feeling *in the dumps*, or feeling the *weight of the world*. But for most of us, things did change. We talked with friends, listened to music, exercised, and played sports to get ourselves back on track. We may have taken a



vacation or have begun a new hobby to take our minds off our worries. We soon began to have fun again.

Although a particular worry or concern continued to sneak into our thoughts, we could still enjoy life. We had suffered from what is called *short-term depression*.

But sometimes the painful feelings don't go away. Even after a few weeks, we still find ourselves unhappy and living in a bubble of gloom. When we feel stressed by emotional pain and worry for more than two weeks, we may be suffering from *long-term depression*.

The Causes of Long-Term Depression: Traumatic Stressors

Long-term depression can be caused by a stressor, or particular event. The death of a close friend or family member, for example, is a common cause of depression. Failing at something we wanted to achieve can be a stressor that causes depression. The athlete who injures herself and can no longer compete may suffer from depression. The student who wanted to be a doctor but was not accepted at a medical school may fall victim to depression.

Depression can be caused by low self-esteem or a poor self-image. If we feel unloved by our families or rejected by schoolmates, we may suffer from depression.

Depression can also be caused by a chemical imbalance in the brain. Such a chemical imbalance may be a natural condition, or it may be caused by drugs such as alcohol.



About one in five American teenagers will suffer from long-term depression.



About one in five American teenagers will suffer from long-term depression. Fortunately, depression can be cured or controlled. But first we must learn to recognize the common signs of depression.

The Signs of Depression: Drastic Change

When a person becomes depressed, he or she will usually show some signs. These signs are important for us to recognize in others *and in ourselves*.

- eating much less or much more
- suddenly losing interest in school and activities that were once enjoyed
- withdrawing from friends and family
- feeling constantly tired
- losing the ability to think clearly
- suddenly behaving in a different way or like a different person
- suddenly losing interest in appearance
- feeling helpless or worthless
- increasing the use of a chemical substance (such as alcohol)

Anyone who recognizes these signs in herself or in someone else needs to get help. Talk to a parent, a school counselor, or a doctor or nurse. It is difficult for a person suffering from depression to cure himself.

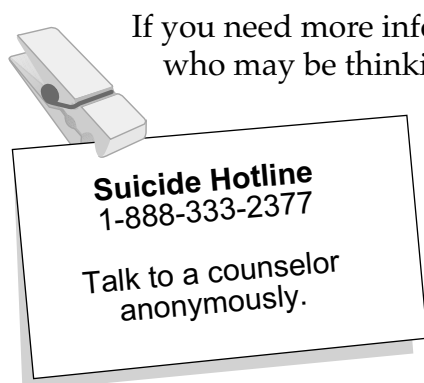
Beyond Depression: Suicide

Some persons who suffer from severe depression feel so much emotional stress that they want to die. Each year, about 50,000 teenagers and young adults attempt **suicide**, the intentional taking of one's own life. And each year, about 10 percent or 5,000 teenagers succeed in taking their own life. *Suicide is the second leading cause of death among teenagers.*



Most people who attempt suicide do not really want to die. Their suicide attempt is really a call for help. All of us need to respond to the signals our friends and family may send that they may attempt suicide. These signals include all the ones listed above describing depression. However, a person who may attempt suicide often sends additional signals.

- talking about suicide (three out of four persons who attempt suicide tell someone first)
- talking about getting even with family members or others
- giving away things of value or importance



If you need more information about helping yourself or a friend who may be thinking about suicide, call the Suicide Hotline at 1-888-333-2377. You can talk to a counselor anonymously. This person will talk to you in a nonjudgmental way.

When someone talks to you about committing suicide, or when you recognize any of the signs of suicide or depression, listen and respond. Do not assume the

person is just joking or trying to get attention. Encourage the person to talk about his or her feelings. Talking about our feelings can be a great relief. Listening to someone in emotional pain shows that you really care. Help the person find a counselor or doctor who can help. Also, do not promise to “keep it a secret,” go and talk to an adult immediately.

If you believe a person is about to attempt suicide, *do not leave the person alone!* Take the person to an emergency room at a hospital or call 911 for an ambulance. It may turn out that the person was only talking about suicide but would not have attempted it. But if ever you want to be very safe rather than terribly sorry, it is when you believe someone may commit suicide.



If you have a friend who may be thinking about suicide, call the Suicide Hotline at 1-888-333-2377.



Summary

The body experiences *stress* when a situation makes a demand on it. Any situation or event that causes the body stress is called a *stressor*. Each of us has our own particular stressors. One person may feel stress while speaking before a class. Another speaker may feel the opposite of stress—relaxed. Stressors can be physical events, such as a soccer game, or they can be mental events, such as an exam. Stressors can even be the *environments* in which we live, such as our homes or neighborhoods.

When we experience stress, our bodies go on alert. They produce *adrenaline*, a hormone that increases our strength and alertness.

Some stress is healthy, while other stress is unhealthy. When we experience stress for a short time or if it helps us to accomplish a task, it is healthy. When we experience stress for a long time or if it overwhelms us, it is unhealthy. Many doctors and scientists claim that stress is the major cause of sickness. Long-term stress weakens our *immune systems*. And long periods of stress can cause heart disease, cancer, and many other life-threatening illnesses.

We can take steps to resist and fight stress. We can discover the hidden causes of our stress. We can learn to be *assertive* and express our thoughts and feelings. Being assertive will help us avoid or lessen our anger and *frustration*. We can eat a healthy diet and get plenty of exercise to resist and reduce stress. We can learn relaxation *techniques* such as meditation and progressive muscle relaxation. Visualization can help reduce the *anxiety* of upcoming events. Problem-solving can help us solve stressful problems. Techniques for setting and reaching goals can make our lives energetic and productive.

When stress becomes overwhelming, we may experience *depression*. Almost everyone experiences short-term depression, or feeling sad for a few days or even a week. Long-term depression lasts for two weeks or more. During a long-term depression a person feels hopeless and unworthy. Most people with depression show signs of the illness.

Sometimes depression can lead someone to attempt or commit *suicide*. Someone who attempts suicide is really asking for help. Anytime a person talks about suicide, we should take her very seriously. Always contact a parent, counselor, or doctor if you or anyone else shows signs of attempting suicide.



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. All stress is bad or unhealthy.
- _____ 2. Taking drugs is a positive step toward reducing stress.
- _____ 3. Some persons who suffer from severe depression feel so much emotional stress that they want to die.
- _____ 4. Long-term depression can be caused by a stressor, or particular event.
- _____ 5. If someone is about to attempt suicide, leave him or her immediately to go get some help.
- _____ 6. Exercising, assertiveness, and relaxation are strategies for handling stress.
- _____ 7. Stress cannot be caused by mental challenges, such as exams.
- _____ 8. Stress cannot be caused by our environment, such as our homes or neighborhoods.
- _____ 9. Long-term stress can reduce the ability of the immune system to fight disease.
- _____ 10. Cold hands, shaking and trembling, and a racing heart are all possible responses to stressful situations.



Practice

Use the list below to complete the following statements.

adrenaline
depression
fight-or-flight

heart
relaxation
resistance

stress
stressors
suicide

1. _____ is our response to any situation that makes a demand on us.
2. _____ are events, situations, or surroundings that cause us stress.
3. The _____ response prepares us to stay and defend ourselves against danger or to run away from it.
4. The hormone _____ increases your strength and alertness.
5. Anytime we experience stress, the body's muscles, and particularly the _____ muscle, must work harder.
6. Meditation and progressive muscle relaxation are effective methods of _____ that release tension and reduce stress.
7. _____ can be caused by a chemical imbalance in the brain.



8. Severe depression may cause the intentional taking of one's own life, or _____ .
9. Our bodies go through three stages when facing a stressor: the alarm stage, the _____ stage, and the exhaustion stage.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|------------------|
| _____ 1. surroundings | A. anxiety |
| _____ 2. system in the body that helps fight disease and infection | B. assertive |
| _____ 3. worry; fear or tension | C. environment |
| _____ 4. intentional taking of one's own life | D. immune system |
| _____ 5. to express your honest thoughts and feelings while respecting the thoughts and feelings of others | E. psychological |
| _____ 6. to control or to adjust | F. regulate |
| _____ 7. refers to the mind or emotions | G. suicide |

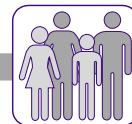
Unit 4: Nutrition: Food for Life

This unit explains how nutrients affect our bodies, how to make responsible food choices, and how to balance food and exercise for a healthy lifestyle.

Unit Focus

- nutrients our bodies need for growth, repair, and fuel
- food pyramid and its guidelines for a balanced diet
- why body composition is more important than body weight
- program for improving body composition
- healthy habits that help us control our weight
- eating disorders that affect teenagers





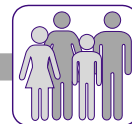
Vocabulary

Study the vocabulary words and definitions below.

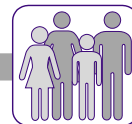
anorexia nervosa	an eating disorder in which a person refuses to eat and suffers severe weight loss; also called <i>starvation sickness</i>
balanced diet	the right number of servings from each of the five food groups, eaten daily
body composition	the percentage of body weight that is fat compared to lean body tissue such as muscle, bone, and other tissues and organs; one of the measurements of your physical fitness
bulimia	an eating disorder in which a person over-eats and then vomits, or uses diuretics or laxatives to get rid of food before it is digested
calorie	a unit of heat that measures the energy available in food; about 3500 extra calories equal one pound of fat
carbohydrate	a nutrient in food that is the main source of energy for your body
diet	the foods we eat each day or most of the time
fallacy	a mistaken idea



- fat** a nutrient in food that provides energy and can be stored in the body; flabby and untuned tissue
- fiber** the part of a carbohydrate food that is not digested and helps the body form soft and bulky stools
- glucose** a sugar the body gets from carbohydrates and uses as energy
- minerals** inorganic substances that do not supply energy but that the body needs to function
- nutrients** substances in food that the body must have to function properly; provide energy and materials for growth and repair of body tissues
- nutritionist** a person who studies the way food affects our health, and who recommends diets for our well-being
- obesity** the condition of having an excessive amount of body fat
- overfat** having more than a recommended percentage of body fat
- protein** a nutrient in food that helps build and repair body tissues and provides energy



- RDA** stands for *Recommended Daily Allowance*; the amounts of specific nutrients that should be part of our daily diets
- underfat** having less than a recommended percentage of body fat
- vitamins** organic substances that do not supply energy but that the body needs to grow and function



Unit 4: Nutrition: Food for Life

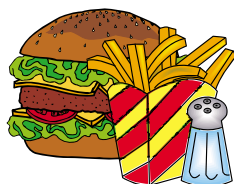
Introduction

Thousands of years ago, human beings had very little choice in their **diets**, or the foods they ate each day. They ate whatever foods they could find or catch. Even today, many people throughout the world cannot choose their diets.

Most Americans, however, can choose the foods they eat. Unfortunately, many of us do not choose healthy diets. A *healthy diet* includes foods that provide us with enough *energy* to perform well throughout the day—in school, in sports, while studying, and on the job. A healthy diet will help us look our best. We will not carry too much or too little fat. Our hair will shine and our eyes will be clear and bright. When we eat a healthy diet, we provide our bodies with the substances they need to grow and repair themselves. Healthy food gives our bodies a chance to resist infections and diseases. A diet of healthy food will even help us *feel* better about ourselves and others.



A healthy diet provides our bodies with the substances they need to grow and repair themselves.



We sometimes make unhealthy food choices from a lack of knowledge.

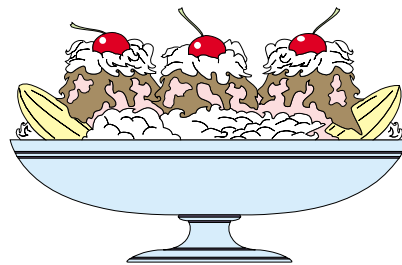
If eating a healthy diet is so important to how we perform and feel, why do so many Americans eat a diet of unhealthy food? One reason many of us make unhealthy choices is a lack of knowledge. Unless we have the knowledge to guide us in our food choices, we are apt to choose what is quick and *convenient*. We grab a greasy hamburger from a fast-food restaurant. We eat junk food from the convenience store on our way home from school. We sit down at a restaurant and stuff ourselves with fatty foods and sodas that



give us too many **calories** and too few of the healthy substances our bodies need to develop and perform well. Even when we prepare foods at home, we often create a meal that satisfies our hunger but does not satisfy our health needs.

Many of us have grown up finding satisfaction in fatty foods or in foods that have little nutritional value. Eating these foods has become a habit. Like any habit, this will take some effort to change. When we make a habit of eating pasta and rice and fruits and vegetables, we begin to enjoy the taste of these foods. And we begin to enjoy the way these foods make us feel.

Fortunately, a healthy diet does not exclude the rich taste of ice cream or the pleasure of eating a slice of chocolate cake. These kinds of foods can have a place in our diets. But in a healthy diet, these foods are eaten occasionally and in addition to more nutritious foods. Almost every food can have its time and place in our diets.



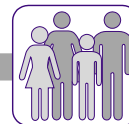
Almost every food can have its time and place in our diets.

Food: Much More Than Just Filling and Tasty

Food can do much more than satisfy our hunger and provide enjoyable taste. Food also provides us with **nutrients**. Nutrients are the substances found in food that the body must have to grow, repair itself, and use as fuel for energy.

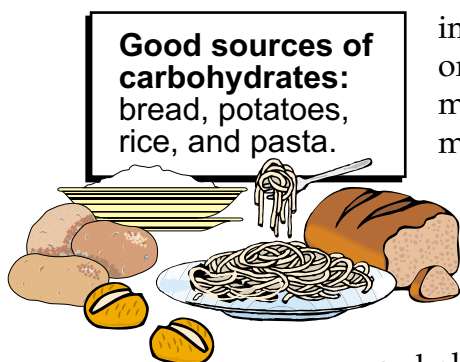
Food contains six different groups of nutrients: **carbohydrates**, **proteins**, **fats**, **vitamins**, **minerals**, and *water*. Carbohydrates, proteins, and fats provide the energy we need. They also produce heat so our bodies can maintain a normal temperature. Vitamins and minerals help the body release the energy in carbohydrates, fats, and proteins. Water is the body's most vital nutrient. Although we can survive for weeks without food, we will die in a few days without water.

Any food that you eat will provide you with some or all of these nutrients. However, a nutritious diet will provide the right amount of each of these nutrients to make you look and feel good.



Carbohydrates: The Main Source of Energy in a Healthy Diet

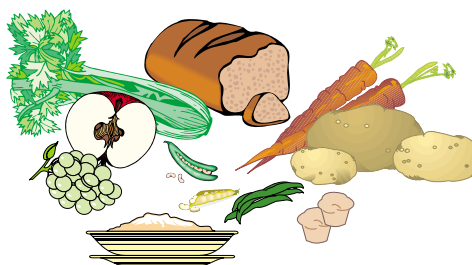
Carbohydrates are the body's *main* source of energy in a healthy diet. The body quickly digests carbohydrates in foods and converts them into a form of energy called **glucose**. Glucose is a sugar and one of the fuels our body uses. Whatever glucose is not needed immediately as fuel is turned into glycogen or fat. Glycogen is stored in our liver and muscles until the body sends out a call for more fuel. Glycogen is then turned back into glucose and used as the body's fuel.



Carbohydrate foods should make up most of our diets. There are two kinds of carbohydrates: starches and sugars. *Starches* come from vegetables and grains. Some of the more common foods that contain starches are potatoes, corn, rice, and wheat. Other good sources of starch include whole-grain bread such as whole-wheat bread, and whole-grain cereal such as oatmeal. Pasta like spaghetti and the beans in tacos and burritos are also starches and good sources of carbohydrates. Starches not only provide fuel for the body, but they also provide many necessary *vitamins* and *minerals*.

Many carbohydrates are also a good source of **fiber**. Fiber is also called *bulk* or *roughage*. Fiber is not digested by the body. Instead, it helps to make digested food in the intestines pass out of the body as stool. We need about 20-30 grams of fiber in our daily diets to keep our digestive tract healthy. Without enough fiber in our systems, we experience constipation, hemorrhoids, and other discomforts. However, too much fiber can cause diarrhea or even block our digestive tract.

How much fiber we get from foods containing fiber depends on the form in which we eat them. An apple is a good source of fiber. In comparison,

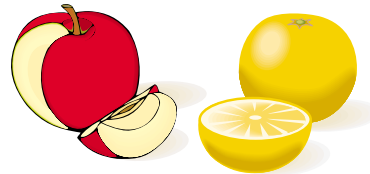


Good sources of fiber include fruits and potatoes with their skins, wheat bread, bran, celery, other stringy vegetables, and beans.



apple juice has no fiber. A potato with its skin is a good source of fiber. But potato chips have little or no fiber. The less a food is processed, the more fiber it will have. Other good sources of fiber include fruits with their skins, wheat bread, bran, celery, other stringy vegetables, and beans.

Unlike starches, some forms of sugar provide only fuel. Common table sugar that we sprinkle on our cereal or eat in “sweets,” such as candy bars, doughnuts, or muffins, does not provide us with many vitamins, minerals, or fiber. The sweetness we taste in an apple or orange is also a sugar. However, fruits also provide our bodies with some very important vitamins and minerals.

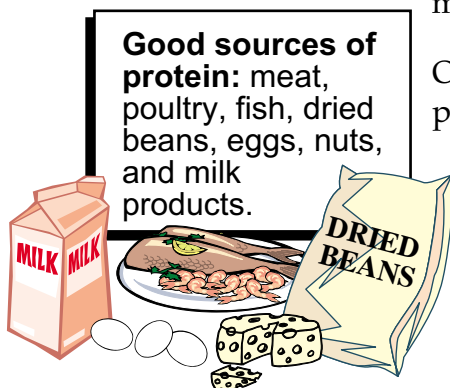


The sweetness we taste in an apple or orange is also a sugar.

Protein: The Nutrient That Helps Us Grow and Repair

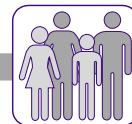
The body uses *proteins* to make and repair all of its tissues and many other body parts. Proteins are used by the body to build and repair muscle, blood, hair, skin, nails, and internal organs. If the body does not get enough protein, it will not grow. Muscles, hair, nails, skin, and many other parts of the body will weaken. Children who do not get enough protein can develop mental disabilities. Protein helps to provide energy. Anyone who suffers from a lack of protein may experience fatigue and a weakened immune system.

Because protein helps the body grow and develop, we need more protein during our growth periods. Children and teenagers, for example, need more protein than full-grown adults.



Good sources of protein: meat, poultry, fish, dried beans, eggs, nuts, and milk products.

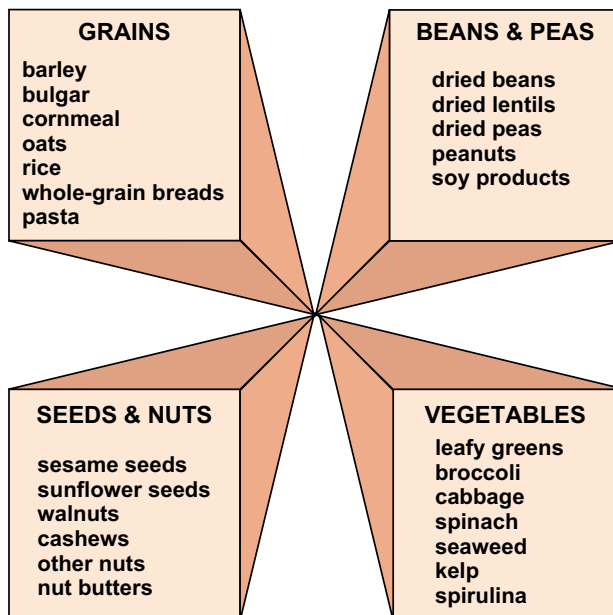
Our bodies are able to produce some of the proteins they need. However, the rest of the proteins we need must come from food. Animal products such as cheese, eggs, fish, meat, milk, or poultry provide us with *complete* protein. Any *one* of these foods supplies us with the right kind of protein.



Foods that are grown, such as grains, beans, nuts, seeds, and vegetables are *incomplete* proteins. Eating only one of these foods will not provide the body with the protein it needs. Each of these foods must be eaten in *combination* with another food to produce the right kind of protein. Eating rice and beans together, for example, will provide complete protein. Peanut butter and bread or macaroni and cheese are other combinations that provide complete protein. Vegetarians, in particular, need to be sure they eat the right combinations of foods to get adequate and *complete* protein.

Vegetarian Protein Combinations

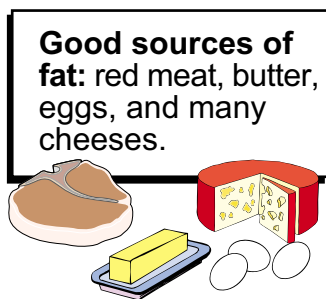
Eat one serving from two or more of these columns in one meal to obtain complete protein.



The body loses protein every day. Therefore, we need to eat a complete protein food or the right combination of foods every day to meet our protein needs. However, any extra protein we eat is stored as fat in the body. As is true of all nutrients, too much protein will have some unhealthy effects.

Fat: A Necessary Nutrient—In Moderation

Recently, *fat* has gotten a bad name. It is true that eating too much fat or carrying too much on the body is not healthy. But like every nutrient, fat is an important and *necessary* part of our diet.



Fat is a major source of fuel. Almost every part of the body can use fat as energy. Fat is an essential nutrient for the health of every cell in the body. Fat also insulates the body, much like a warm jacket. Without fat on our bodies, we

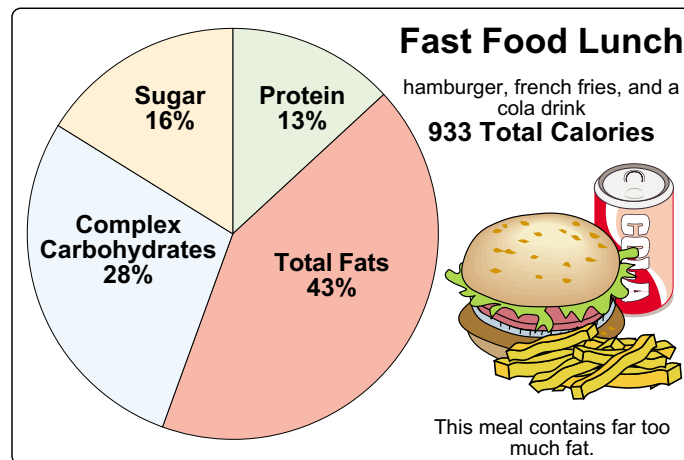


would have a difficult time keeping warm in cold weather. Fat also pads the body against injury in a fall. Without fat, we would suffer from far more bruises and breaks than we do. Fat also cushions our organs such as the liver and pancreas.

As you can see, we wouldn't perform very well if we didn't eat some fat. However, there are better and worse kinds of fats. *Saturated fats* come mainly from animal products. Foods that are high in saturated fats include dairy products (whole milk, butter, and cheese), bacon, sausage, lunch meats, hot dogs, hamburgers, steak, and

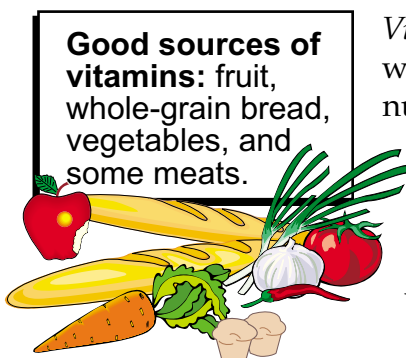
palm oil (used in many junk foods). The body uses saturated fats to make *cholesterol*. Although some cholesterol is necessary for good health, excess cholesterol will clog arteries and put a strain on the body. Too much cholesterol can lead to heart disease, artery disease, and strokes.

Unsaturated fats come from vegetables, nuts, and seeds, as well as from animals that swim or fly such as fish, chicken, turkey, and duck. A healthy diet includes foods with unsaturated fats rather than saturated fats.



typical fast food lunch

Vitamins and Minerals: The Helper Nutrients



Vitamins and *minerals* do not supply the body with energy. However, without these essential nutrients, the body could not carry out many of its necessary functions. These substances are *helper nutrients*—they *help* the body do its work. We can get enough vitamins and minerals in our diets simply by eating a variety of healthy foods.



The charts on pages 121-124 list the vitamins and minerals you need to keep your body operating efficiently and to keep you feeling healthy. The charts list which foods provide these nutrients. The charts also describe the function of each essential vitamin and mineral, as well as what happens to the body when it does not get enough of each one.

Water-Soluble Vitamins

Vitamin	Function*	Sources*	Deficiency*
B₁ thiamine	<ul style="list-style-type: none"> changes glucose into energy or fat assists with normal appetite and digestion promotes healthy nervous system and heart prevents nervous irritability 	lean pork, liver, whole grain or enriched breads, cereals, dried beans, legumes, nuts	<ul style="list-style-type: none"> beriberi—inflamed nerves muscle weakness heart problems leg cramps mental confusion
B₂ riboflavin	<ul style="list-style-type: none"> assists with nerve cell function aids in a healthy appetite aids in producing energy from carbohydrates, protein, and fats promotes healthy skin and eyes 	liver, eggs, milk, whole-grain products, enriched breads, cereals, pasta, green leafy vegetables, spinach, dried beans	<ul style="list-style-type: none"> cheilosis—skin sores on nose and lips, sensitive eyes visual disturbances sore, red tongue
B₃ niacin	<ul style="list-style-type: none"> aids in normal metabolism aids in normal digestion and appetite promotes healthy nervous system and skin helps in production of energy 	red meats, organ meats, poultry, fish, milk, enriched breads and cereals, peanut butter	<ul style="list-style-type: none"> pellagra—soreness on mouth diarrhea irritability depression
B₆ pyridoxine	<ul style="list-style-type: none"> aids in normal carbohydrate, protein and fat metabolism aids in formation of blood cells 	red meats, liver, fish, whole-grain products, green leafy vegetables, bananas	<ul style="list-style-type: none"> anemia—too few red blood cells dermatitis kidney stone formation nervous disturbances
B₁₂	<ul style="list-style-type: none"> aids in production of red blood cells and normal growth aids in normal cell function 	lean meats, liver, egg products, milk, cheese	<ul style="list-style-type: none"> pernicious anemia stunted growth
folacin or folic acid	<ul style="list-style-type: none"> aids in formation of hemoglobin in red blood cells aids in production of genetic material reduces risk of birth defects 	lean beef, liver, green vegetables, broccoli, whole-grain products, legumes, nuts	<ul style="list-style-type: none"> anemia diarrhea
pantothenic acid B-complex	<ul style="list-style-type: none"> assists with energy release from carbohydrates, protein, and fats assists in production of some hormones 	liver, poultry, eggs, milk, cheese, whole-grain cereals and breads, green vegetables, nuts	<ul style="list-style-type: none"> none noted
biotin B-complex	<ul style="list-style-type: none"> aids in normal metabolism of carbohydrates and some other B vitamins 	organ meats, egg yolks, green vegetables	<ul style="list-style-type: none"> hair loss skin disorders
C ascorbic acid	<ul style="list-style-type: none"> helps with formation of connective tissue protects against infection helps wounds heal promotes healthy teeth and gums aids in body's use of iron maintains elasticity and strength of blood vessels 	green vegetables, broccoli, cabbage, peppers, potatoes, tomatoes, citrus fruits, melons, strawberries	<ul style="list-style-type: none"> scurvy—slow wound healing loose teeth gum disease frequent bruising

*Not all functions, sources, or deficiencies are listed.



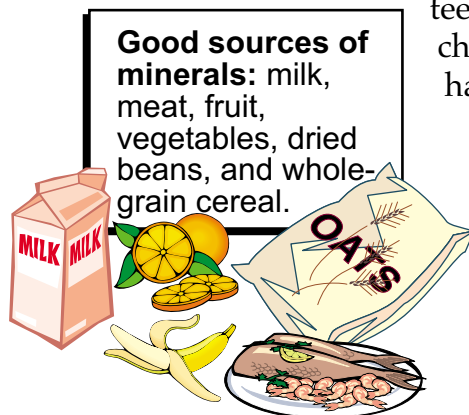
Without vitamins the body can suffer tragic effects. A lack of vitamin A, for example, can cause blindness. A lack of vitamin C can cause gum disease and loss of teeth. On the other hand, taking too much of a vitamin can also damage our health. Vitamins, like all nutrients, must be taken in the right amounts to achieve good health.

Fat-Soluble Vitamins

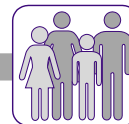
Vitamin	Function*	Sources*	Deficiency*
A	<ul style="list-style-type: none"> • maintains skin tissues • strengthens tooth enamel • aids in formation of bone and mucous membranes • keeps eyes moist • helps eyes adjust to darkness 	liver, milk and dairy products, yellow and dark leafy green vegetables, carrots, sweet potatoes, yams, and deep-orange fruits	<ul style="list-style-type: none"> • night blindness • failure of bone growth • rough skin and drying of mucous membranes
D	<ul style="list-style-type: none"> • promotes normal growth • aids use of calcium and phosphorus in building healthy bones and teeth 	liver, beef, salmon, sardines, tuna, fish-liver oils, fortified milk and cereals, egg yolk, exposure to sunlight	<ul style="list-style-type: none"> • rickets—inadequate growth of bones and teeth • bowed legs • soft bones in adults • poor teeth
E	<ul style="list-style-type: none"> • prevents destruction of red blood cells • helps certain enzymes to work • helps form red blood cells, muscles, and other tissues 	wheat germ, dark green vegetables, vegetable oils, legumes, nuts	<ul style="list-style-type: none"> • breakdown of red blood cells, causing anemia
K	<ul style="list-style-type: none"> • assists with blood clotting • assists in regulating blood calcium level 	liver, eggs, broccoli, spinach, cabbage, vegetable oils, potatoes, tomatoes	<ul style="list-style-type: none"> • slow clotting of blood • hemorrhage

**Not all functions, sources, or deficiencies are listed.*

Two of the most important minerals for growing teenagers are calcium and iron. Calcium helps the body grow and maintain strong bones and teeth. A shortage of calcium during childhood and adolescence can lead to having weak and fragile bones in later life.



Iron helps the body grow and resist diseases. Too little iron can lead to anemia, a disorder that leaves a person feeling weak. Iron deficiency can easily occur in girls and women, who lose iron when they menstruate.



Too much of a mineral can be harmful. For example, too much sodium, or salt, can lead to high blood pressure.

Nutritionists and scientists, on behalf of the United States government, have suggested the amounts we need of each vitamin and mineral. Their suggested amounts are known as the *Recommended Daily Allowance* or **RDA**.

Minerals

Mineral	Function*	Sources*	Deficiency*
calcium	<ul style="list-style-type: none"> maintains strong bones and teeth aids nervous system aids regular heartbeat aids in the transmission of nerve cell impulses aids in blood clotting 	sardines, salmon, milk and dairy products, dark leafy green vegetables, dried beans, peanuts	<ul style="list-style-type: none"> osteoporosis—thin bones rickets—inadequate growth of bones and teeth
chlorine	<ul style="list-style-type: none"> aids in maintenance of water balance helps liver function in waste removal 	table salt, high salt meats (ham), kelp, some cheese, crackers, olives	<ul style="list-style-type: none"> loss of teeth loss of hair
copper	<ul style="list-style-type: none"> enables normal production of hemoglobin enables normal production of bone enables normal production of melanin involved in skin color 	liver, shellfish, whole-grain products, vegetables, potatoes, kidney beans, legumes, nuts	<ul style="list-style-type: none"> anemia drop in HDL cholesterol (good cholesterol)
iodine	<ul style="list-style-type: none"> enables production of thyroid hormone improves mental alertness and energy promotes growth helps maintain proper water balance promotes healthy teeth, hair, skin, and nails 	iodized salt, seafood, kelp, vegetables grown in iron-rich soil	<ul style="list-style-type: none"> goiter hypothyroidism
iron	<ul style="list-style-type: none"> enables formation of red blood cells aids in growth gives you energy promotes resistance to disease enables red blood cells to carry oxygen to all parts of the body 	red meat, liver, shellfish, egg yolk, whole-grain products, dark green vegetables, legumes, peanuts, dried fruits, raisins	<ul style="list-style-type: none"> anemia—too few red blood cells fatigue
magnesium	<ul style="list-style-type: none"> enables chemical reactions during metabolism prevents calcium deposits and gallstones aids in bone growth and muscle contraction promotes healthy teeth 	milk, dairy products, dark green leafy vegetables, seeds, grapefruit, lemons, apples	<ul style="list-style-type: none"> depression nervousness sleeplessness sensitivity to noise
manganese	<ul style="list-style-type: none"> aids in enzymes for synthesis of cholesterol aids in formation of urea enables growth of cartilage and bone tissue aids in normal function of nervous tissue enables metabolism of carbohydrates, proteins, and fats 	liver, kidney, whole-grain products, leafy green vegetables, legumes, nuts, fruits	<ul style="list-style-type: none"> asthma carpal tunnel syndrome tendonitis nerve damage
*Not all functions, sources, or deficiencies are listed.			

Minerals chart continued on following page.



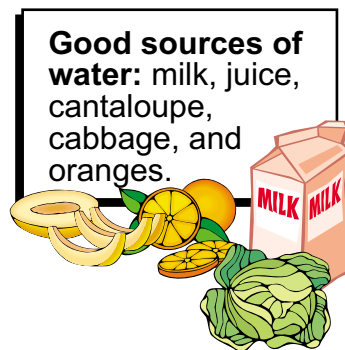
Minerals Continued

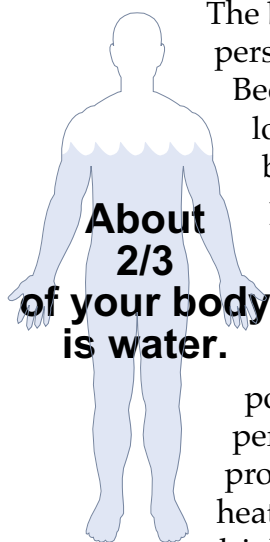
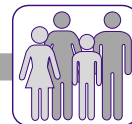
Mineral	Function*	Sources*	Deficiency*
phosphorus	<ul style="list-style-type: none"> enables normal structure of bones and teeth promotes growth and repair of cells plays a role in normal metabolism helps in maintaining regular heartbeat 	liver, meats, poultry, fish, eggs, milk, cheese, whole-grain products, broccoli, dried beans, legumes, nuts	<ul style="list-style-type: none"> rickets
potassium	<ul style="list-style-type: none"> helps maintain normal metabolism helps maintain normal nerve and muscle function regulates body's water balance and heartbeat sends oxygen to brain to aid in clear thinking helps regulate blood pressure 	meats, poultry, fish, eggs, milk, vegetables, dried beans, legumes, peanut butter, potatoes, bananas, citrus fruits, dried fruits	<ul style="list-style-type: none"> low blood sugar edema—retaining water
sodium	<ul style="list-style-type: none"> enables proper water balance in cells and tissues prevents heat prostration aids in proper nerve cell and muscle function 	table salt, soy sauce, high salt meats (ham), kidney, shellfish, cheeses, carrots, beets, crackers	<ul style="list-style-type: none"> difficulty digesting carbohydrates
sulfur	<ul style="list-style-type: none"> fights bacterial infections aids in healthy hair, skin, and nails works with B vitamins in metabolism 	lean beef, fish, milk, cheese, eggs, barley, oatmeal, cabbage, beans, legumes, nuts, dried fruits	<ul style="list-style-type: none"> not known
zinc	<ul style="list-style-type: none"> enables several digestive enzymes plays a role in respiration, and bone and liver metabolism aids healing of wounds promotes growth and mental alertness aids in decrease of cholesterol promotes cell reproduction and repair 	meats, poultry, shellfish, milk, eggs, wheat germ	<ul style="list-style-type: none"> hardening of the arteries

**Not all functions, sources, or deficiencies are listed.*

Water: Drink to Your Health

Water is not considered a food. It is, however, an essential nutrient. Water is necessary for all body processes. Water is part of our blood. It helps deliver nutrients to all parts of the body. We wouldn't be able to digest food without water. We also wouldn't be able to get rid of waste in our body without water. By perspiring, or sweating, we are able to maintain our body temperature.





The body loses water every day. We lose water through perspiration and urine, and, when we exhale, our breath. Because water is so important to the health of the body, lost water must be replaced. A loss of 10 percent of your body's total water can cause health problems. A 20 percent loss can cause death. To replace the water your body loses, drink at least eight to 10 eight-ounce glasses of water a day. Those of us who perspire heavily or who exercise often in the hot Florida sun need to drink even more water. The *electrolytes* sodium, potassium, and chloride can be lost through heavy perspiration. The proper balance of electrolytes prevents problems resulting from dehydration, such as cramping, heat exhaustion, and heat stroke. It is a good practice to drink before, during, and after exercise. **Remember:** Do not let thirst be your guide. By the time you feel thirsty, your body is already low on water.

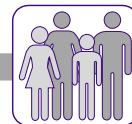


Practice

Use the list below to write the correct term for each definition on the line provided

calorie	glucose
carbohydrate	nutritionist
fat	vitamins

- _____ 1. organic substances that do not supply energy but that the body needs to grow and function
- _____ 2. a unit of heat that measures the energy available in food
- _____ 3. a person who studies the way food affects our health, and who recommends diets for our well-being
- _____ 4. a nutrient in food that provides energy and can be stored in the body; flabby and untoned tissue
- _____ 5. a sugar the body gets from carbohydrates and uses as energy
- _____ 6. a nutrient in food that is the main source of energy for your body



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|--------------|
| _____ 1. stands for <i>Recommended Daily Allowance</i> ; the amounts of specific nutrients that should be a part of our daily diets | A. diet |
| _____ 2. the part of a carbohydrate food that is not digested and helps the body form soft and bulky stools | B. fiber |
| _____ 3. a nutrient in food that helps build and repair body tissues and provides energy | C. minerals |
| _____ 4. inorganic substances that do not supply energy but that the body needs to function | D. nutrients |
| _____ 5. the foods we eat each day or most of the time | E. protein |
| _____ 6. substances in food that the body must have to function properly; provide energy and materials for growth and repair of body tissues | F. RDA |

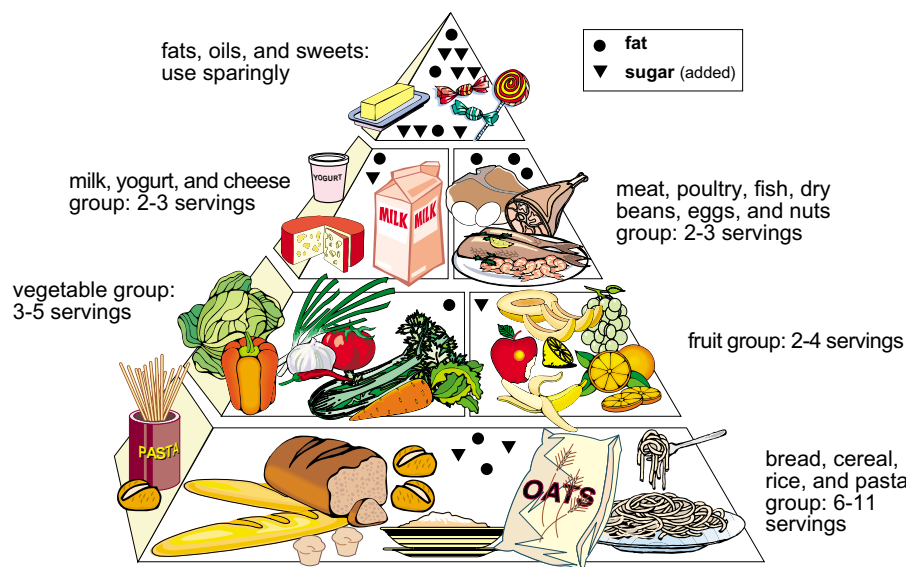


Developing a Nutritious Diet: The Food Guide Pyramid

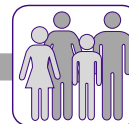
Although the body is much more complex than a machine, it does have some similarities. The body must be taken care of to work well. Many Americans are very choosy about what kind of oil they put in their cars. They use a high-octane gas because they want their cars to have that extra zip as they roll down the highways. Unfortunately, some of those same Americans are not as choosy about the food they put in their bodies. Eating food that provides the right nutrients is one of the most important ways to keep our bodies running smoothly.

The Food Pyramid: A Guide to a Healthy Diet

The United States Department of Agriculture (USDA) and the United States Department of Health and Human Services have developed guidelines to help Americans choose a **balanced diet**. The Food Guide Pyramid was developed as a general guide of what to eat each day. The Food Guide Pyramid is an easy-to-follow guideline that shows how many servings from each of the five food groups we should eat every day. The pyramid recommends that whole grains such as bread, cereal, rice, and pasta make up the largest part of our diets. A healthy diet should include 6-11 servings of whole grains each day. The pyramid also recommends 3-5 servings of vegetables and 2-4 servings of fruits to help increase our carbohydrate and fiber intake. The pyramid recommends eating only 2-3 servings of dairy products and lean meat, fish, poultry, or nuts. Fats, oils, and sweets are not part of a food group. They should be eaten sparingly.

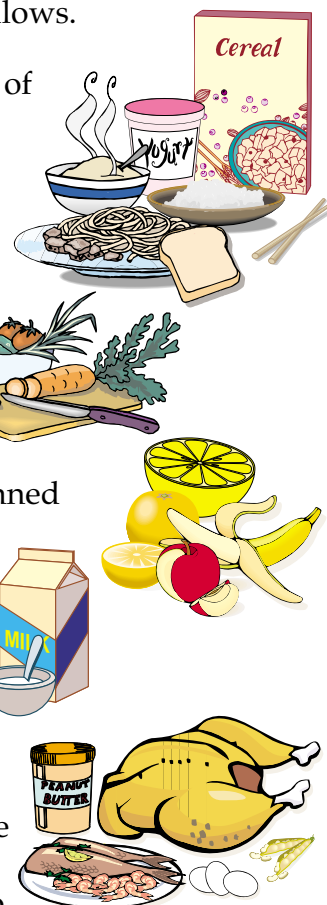


The Food Guide Pyramid



A *serving size* for food from each food group is as follows.

- Bread, cereal, rice, and pasta group: one slice of bread; $\frac{1}{2}$ cup of cooked cereal, rice, or pasta; one ounce of ready-to-eat cereal; $\frac{1}{2}$ of a bagel or English muffin
- Vegetable group: one cup of raw, leafy vegetables; $\frac{1}{2}$ cup of other vegetables, cooked or chopped raw; $\frac{3}{4}$ cup of vegetable juice
- Fruit group: one medium apple, banana, orange, or $\frac{1}{2}$ grapefruit; $\frac{1}{2}$ cup of canned fruit; $\frac{3}{4}$ cup of juice
- Milk, yogurt, and cheese group: one cup milk or yogurt; $1\frac{1}{2}$ ounces of natural cheese; 2 ounces of processed cheese
- Meat, beans, eggs, or nuts group: two to three ounces of cooked lean meat, poultry, or fish; one egg, $\frac{1}{2}$ cup of cooked dried beans, or two tablespoons of peanut butter



By following this chart, we will also get the right percentages of carbohydrates, proteins, and fats. Most nutritionists recommend that 50-60 percent of our total daily calories come from carbohydrates, no more than 30 percent from fat, and 10 percent from protein. **Remember:** A gram of fat contains more than twice the number of calories as does a gram of carbohydrate. We often reach our recommended fat intake much sooner than we think.

Calories: The Measure of Energy

Most of us think of calories as something in food that makes us fat. When we eat foods with too many calories, we gain weight. When we eat foods with fewer calories, we gain less weight or lose weight. In a sense, this is true.



Most of us think of calories as something in food that makes us fat.

But another way of thinking about calories is to see them as units of energy. A calorie is a measure of the energy in foods. No matter what kind of food a calorie comes from, a calorie supplies your body with the same amount of energy.

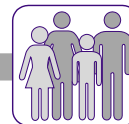
Think of the calories you eat as energy you take in. Think of the work (or play) your body does as energy you spend. Then see your body as reflecting the sum of this

energy equation. If you take in more calories than you expend, your body will gain weight. If you spend more calories than you take in, your body will lose weight. If you take in as many calories as you expend, your body will maintain its weight.

The average teenage girl needs about 2300 calories a day. The average teenage boy needs about 2700 calories a day. If you are very active and exercise strenuously, your body will need more calories to balance the energy equation. If you do not exercise and spend your time sitting or walking slowly, your body will need fewer calories to balance the energy equation.

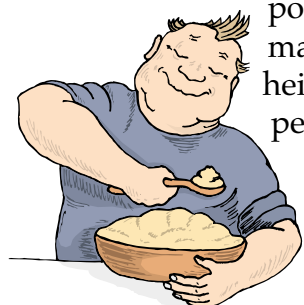
To figure the calorie content of a food, you first must know its weight. Most foods are measured in grams or ounces. (Twenty-eight grams equals one ounce.) One gram of fat supplies nine calories. One gram of carbohydrate or protein supplies four calories. You can eat twice as many grams of carbohydrates or proteins than of fats and still take in fewer calories.

The difference between eating fat or carbohydrates does not stop there. When we eat fat, the body uses very little of it before storing it in our body. In other words, the body does not use very much energy to turn the fat in foods into fat in our bodies. On the other hand, when we eat more carbohydrates than our bodies need, our bodies have to work hard to store the extra carbohydrates in our bodies. The body uses one-quarter of the calories in extra carbohydrates, turning them into glycogen or fat stores for later use. The math of fats and carbohydrates is easy. Eat nine calories too many of fat and you store almost nine calories in your body. Eat four calories too many of carbohydrates and you store only three calories in your body. **Remember:** You also gain fiber and other essential vitamins and minerals when you eat carbohydrates.



Focusing on Health: Body Weight and Body Composition

Look around: few people you see would claim that they are happy with their weight. Most Americans believe they are overweight. Most nutritionists and scientists would agree. The United States has a large population of overweight people. Many of us want to match the weight we find listed for our height on the height / weight chart at the doctor's office. But most people would be surprised to find out that they can weigh more than this chart suggests and still not be fat. In addition, they may weigh less than this chart suggests and still be fat.



The United States has a large population of overweight people.

Our weight according to a scale is not as important to our health as is our **body composition**. *Body weight* is the number of pounds we register when we step onto a scale. *Body composition* is the percentage of *body weight* that is fat compared to the percentage of *lean body tissue*. Lean body tissue is made up of our muscles, bones, and other tissues and organs. Fat is made up mostly of the flabby and untuned tissue we can pinch on our bodies.

Athletes and body builders often are overweight according to height-weight charts. However, they may have very low body fat. Some athletes have less than 10 percent or even five percent body fat. A fashion model, on the other hand, may be underweight according to a chart. But she may be storing too much body fat on her thin frame. She may have 30 percent or even 40 percent body fat.

Trying to weigh a certain number of pounds will not insure health or fitness. We should focus, instead, on the ratio of lean body tissue to fat on our bodies.

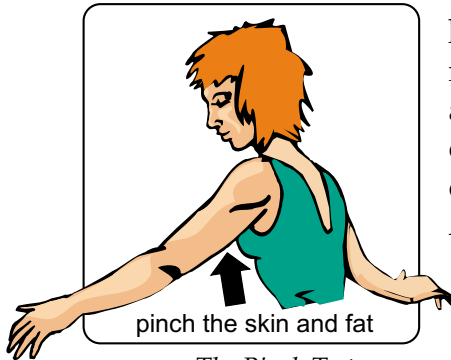
Acceptable Ranges for Percent Body Fat*		
Age	Male	Female
13	10-25%	17-32%
14	10-25%	17-32%
15	10-25%	17-32%
16	10-25%	17-32%
17	10-25%	17-32%
17+	10-25%	17-32%

* calculated from triceps and skinfold measurements



Your body fat can be measured by health-care professionals. Although they can only estimate your body fat, their measurements are close to exact. There are also some simple tests you can perform to see if you are carrying too much fat.

The Pinch Test. Pinch the skin and fat at the back of either arm with the thumb and forefinger of the other hand. (Or have a friend help you with this measurement.) As you remove your thumb and forefinger, be careful to maintain the distance between them. Then measure the distance between the thumb and forefinger. A measure of more than an inch means that you are **overfat**. That means you have more than the recommended percentage of body fat.



The Pinch Test

Overfat: A Health and Social Problem

When we are overfat, we stress our bodies. For every five pounds of extra weight you carry, your body needs four more miles of blood vessels. This makes the heart work too hard and can lead to heart disease. Extra fat can cause or make worse all of the following: high blood pressure, strokes, certain cancers, diabetes, breathing problems, and problems during pregnancy. It can also lead to a shortened life expectancy.

When we are overfat, we should reduce the fat in our diets and begin an exercise program to burn the fat on our bodies. A person who is extremely overfat is called *obese*. **Obesity** is considered a disease and kills 300,000 Americans each year. Six out of 10 American adults, or about 120 million people, are overweight or obese. For adolescents ages 12 to 19, the percentages are 30.4 overfat and 15.5 obese.

A person who suffers from obesity has an excessive amount of body fat and a *body mass index* (BMI) over 30 for his or her age, healthy weight, and height. The body mass index is a method used to estimate body fat by taking into account your age, sex, height, and weight.

Obese people often suffer from low self-esteem. They may find it difficult to make friends, to date, or to find proper-fitting clothes. They may even have trouble finding a job. Because their health is at risk, insurance companies may charge them higher premiums for insurance.



Underfat: Too Lean for Our Own Good

It is also possible that we may be **underfat**, or carry too little fat on our bodies. Fat is a necessary nutrient in our diets and a necessary part of our body composition. Too low a percentage of body fat on our bodies means we have a low store of energy. Should we be unable to eat, we would not survive for very long. Girls and women need a certain percentage of fat on their bodies to menstruate. People with too low a percentage of body fat should increase their fat intake.

Improving Body Composition: Dieting and Exercising

If you carry too much fat on your body, you should begin a common-sense program to lower your body fat and increase lean body mass. Any good program contains two components: dieting and exercising.

Many people who have lost weight have done so by reducing their food intake. Although it is true that eating less food will make you weigh less, you may end up losing lean tissue rather than fat

Burning Calories			
Activity	Calories Burned per Hour at Approximate Weight		
	75 lbs	100 lbs	150 lbs
Aerobic class	300	336	360
Bicycling, 6 mph	135	160	240
Bicycling, 12 mph	225	270	410
Inline skating	162	216	324
Jogging, 5.5 mph	365	440	660
Jogging, 7 mph	510	610	920
Jumping rope	415	500	750
Running in place	360	430	650
Running, 10 mph	710	850	1280
Swimming, 25 yds/min	155	185	275
Swimming, 50 yds/min	270	325	500
Tennis (singles)	220	265	400
Walking slowly, 2 mph	125	160	240
Walking moderately, 3 mph	175	210	320
Walking briskly, 4.5 mph	245	295	440
Weightlifting	225	300	450



When you drastically reduce your calorie intake, your body begins to think it is starving. To protect itself, your body will begin to burn its own muscle tissue. Muscle is what you want to save and increase, not lose!

A far more effective plan combines moderate diet with exercise. Set a reasonable goal. To lose a pound of fat you must burn 3500 calories more than you eat. If you burn an extra 500 calories a day for a week, you will have lost a pound of fat.

Choose an exercise that burns 200 or 300 calories. Exercise at least three or four times a week. Jogging, walking briskly, or bicycling are all good activities for burning calories. When you exercise, 50 percent to 60 percent of the energy you burn comes from body fat.

On the days you work out, eat 200 or 300 fewer calories than you would to maintain your present weight. On the two or three days a week that you don't work out, reduce your food intake by 500 calories. At the end of a week, you can say good-bye to a pound of weight.

See the chart below to figure out approximately how many calories a day you can eat to maintain your weight. Multiply the number of pounds you weigh by the number for the level of physical activity you maintain. This will give you an estimated calorie intake per day.

Calculating Caloric Needs the Easy Way

For **sedentary** people:

Weight x 14 = estimated calorie per day

For **moderately active*** people:

Weight x 17 = estimated calorie per day

For **active**** people:


Weight x 20 = estimated calorie per day

Example: Mary weighs 130 pounds. Her activity level is moderate. Mary needs 2210 calories to maintain her weight.

130 pounds

x 17

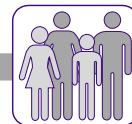
2210 total calories



Physical Activity		
Sedentary	Moderate	Active
Examples of Activity	Examples of Activity	Examples of Activity
reading sitting driving eating watching TV	walking playing piano bicycling (easy) cleaning your room	boxing rowing basketball running mountain climbing

* moderately active—3-4 aerobic sessions per week

** active—5-7 aerobic sessions per week



A simple diet and exercise plan such as the one described on the previous page has two benefits: (1) You will lose weight without making your life miserable; and (2) It's a plan you can continue for the rest of your life!

Many people who diet go for the quick fix. They starve themselves because they want to lose their excess weight *today*. Studies show that these dieters may lose weight, but they do not keep the weight off. They end up on yo-yo diets—they lose weight and then gain it back quickly.



Researchers have discovered that people on yo-yo diets actually make it difficult for their bodies to lose weight. Their bodies begin to hold on to calories rather than try to survive on so few calories. And remember: these people lose very little fat—the weight they lose is mostly muscle.

If you become desperate to lose weight quickly, there are plenty of other diet plans that people will sell you. You can buy diuretics, or pills that make you lose water weight. You may show a loss of weight on the scale, but you will have lost precious water from your body, and you will regain the water in time. You can also buy diet pills to lessen your appetite. You will experience stress and some other harmful effects from these pills. When you stop taking these pills, you still will have to change the only thing that will help you lose weight and fat and stay healthy: your behavior! Only by changing your behavior—eating less fat and exercising more—can you accomplish your weight and body composition goals.

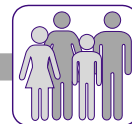
Controlling Weight: Tips on Making the Right Food Choices

If we are trying to reduce our fat and calorie intake, or even if we just want to maintain our present body composition and weight, we can develop some helpful habits.

- Avoid situations that trigger your need to overeat or to eat fatty foods.
- Do not completely eliminate foods you love, such as chocolate or cheesecake. Depriving yourself leads to diet failure and over-indulging. Instead, reduce the amount of your favorite fatty foods. Rather than eating them three times a week, eat them only twice in smaller portions.



- Reduce the size of your portions. Learn to enjoy every bite rather than gulping it down. Chew your favorite foods *slowly*—as if they were a rare treat.
- Eat plenty of carbohydrates and fiber, and drink lots of water. Don't ignore your nutritional needs by eating empty-calorie foods, or foods with few or no calories.
- Make changes in your diet gradually. Don't decide that you are going to remake your diet overnight. Gradual changes are the ones you will stick with.
- Choose whole grains, vegetables, and fruits rather than red meats and other fatty foods. The more fiber-rich foods you eat, the more satisfied you will feel. Learn to order foods without the fats that often accompany them. Eat potatoes plain or with just a touch of butter rather than smothered in gravy, butter, cheese, and sour cream.
- Avoid fried foods. Instead, eat foods that have been grilled, roasted, broiled, baked, or microwaved.
- Reduce or eliminate your red meat intake. Instead, eat tuna, chicken (but not fried chicken), turkey, and fish. Trim the fat from meat and pull the skin off poultry. Choose low-fat or nonfat milk, yogurt, and cheese.
- Eat meals regularly. If you can, eat four or five smaller meals throughout the day. Eating smaller meals more often will keep your energy level high. When you skip meals, hunger will eventually drive you to *binge*, or eat too many calories all at once.



Practice

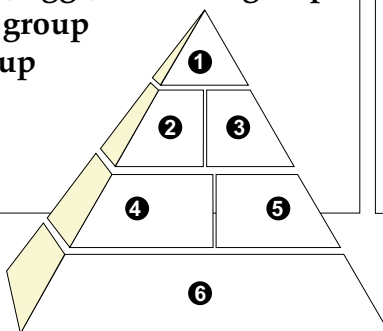
Use the list and the **Food Guide Pyramid** below to write the correct list of **foods** and **number of daily servings** on the lines provided. **One or more terms will be used more than once.**

Foods

meat, poultry, fish, dry beans, eggs, and nuts group
bread, cereal, rice, and pasta group
milk, yogurt, and cheese group
fats, oils, and sweets
vegetable group
fruit group

Servings

2-3
2-4
3-5
6-11
use sparingly



The Food Guide Pyramid

1. _____ ;
servings: _____
2. _____ ;
servings: _____
3. _____ ;
servings: _____
4. _____ ;
servings: _____
5. _____ ;
servings: _____
6. _____ ;
servings: _____



Practice

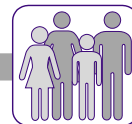
Use the list below to complete the following statements.

balanced diet
body composition
binge

calorie
exercise
obesity

overfat
underfat

1. Our _____ is the percentage of body weight that is fat compared to the percentage of lean body tissue.
2. To change our body composition and reduce our body fat, we should combine a reduced-calorie diet and _____.
3. When you skip meals, your hunger will eventually drive you to _____, or eat too many calories all at once.
4. A measure of more than an inch of skin and fat on the back of your arm during the Pinch Test, means that you are _____.
5. The United States Department of Agriculture (USDA) and the United States Department of Health and Human Services have developed guidelines to help Americans choose a _____.
6. A _____ is a unit of heat that measures the energy available in foods.
7. A person who suffers from _____ has an excessive amount of body fat, while a person who carries too little fat on their bodies is _____.



Understanding Food Labels: What's Inside This Package Anyway?

The United States government has passed laws to help consumers understand the contents of packaged foods. Labels on packaged or canned foods must clearly identify the product.

The back of most packages shows a list of ingredients. It lists ingredients in order of *decreasing* amounts. There is a greater amount of the *first* listed ingredient than of any other ingredient listed, and so on. So, for example, if sugar appears near the top of the list of ingredients, that particular food is probably high in sugar.

INGREDIENTS: **SUGAR** CORN SYRUP SOLIDS, PARTIALLY HYDROGENATED VEGETABLE OIL, COCONUT, CANOLA, DAIRY PRODUCT SOLIDS, COCOA PROCESSED WITH ALKALI, NONFAT MILK, CELLULOSE GUM, SALT, SODIUM CASEINATE, DIPOTASSIUM PHOSPHATE, SODIUM SILICOALUMINATE, MONO-AND DIGLYCERIDES, GUAR GUM, ARTIFICIAL VANILLA FLAVOR.

Sugar appears first on the list of ingredients.

Recently, special *diet foods* have flooded food stores. The government has restricted the use of certain terms on packaging. A food labeled *low calorie* cannot contain more than 0.4 calories per gram. A food labeled *reduced-calorie* must have at least one-third fewer calories than similar foods. Any food that is *artificially sweetened* must list those artificial sweeteners on the label.

The label must include any *additives* or *preservatives* in the food. An additive is a chemical that has been added to the food. These chemicals are used to improve taste, add color, or replace or add vitamins. Preservatives are used to keep food from spoiling.






A *fortified* food has had vitamins added to it. An *enriched* food has had vitamins added to it to replace those lost in processing.

Many labels also include the following nutritional information:

<i>Serving Size:</i>	the amount the manufacturer considers to be a normal portion; portions are often listed in ounces
<i>Servings per Can:</i>	the number of serving sizes, or portions, in the package or can



<i>Calories:</i>	the number of calories found in one serving size, or portion	
<i>Protein:</i>	the amount of protein in one serving size, or portion; this amount is usually listed in grams	
<i>Carbohydrate:</i>	the amount of carbohydrates in one serving size, or portion; this amount is usually listed in grams	
<i>Fat:</i>	the amount of fat in one serving size, or portion; this amount is usually listed in grams	
<i>Cholesterol:</i>	the amount of cholesterol in one serving size, or portion; this amount is usually listed in grams	
<i>Sodium:</i>	the amount of sodium, or salt, in one serving size, or portion; this amount is usually listed in grams	
<i>Dietary Fiber:</i>	the amount of fiber in one serving size, or portion; this amount is usually listed in grams.	

Labels often include the *percentage of United States Recommended Daily Allowance (USRDA)*. For example, if the label states *Thiamine ... 12%*, then one serving of the food will provide 12 percent of the thiamine recommended for your daily diet by the government.



Food Fallacies: Separating Mistaken Ideas from the Truth

It is both interesting and surprising to see just how many **fallacies**, or mistaken ideas, many of us have about food and weight control. In spite of how important food is to our health, we still may not be sure what to believe. Here are several of the most commonly believed *fallacies*, followed by the *facts*.

- | | |
|-----------------|---|
| Fallacy: | I can just go on a <i>fad diet</i> to lose weight. |
| Fact: | Fad diets are diets that promise fast weight loss. They may help you to lose weight temporarily, but the weight is usually gained back. Only a lifetime commitment to eating low-fat healthy foods and getting regular exercise can make you healthy and fit. |
| Fallacy: | Certain foods, diet pills, or <i>diuretics</i> can help burn fat calories and help me lose weight. |
| Fact: | No foods burn fat. Diuretics are drugs that increase the amount of fluid lost through urine. Diet pills or diuretics may help you to lose water weight. However, pounds lost from water weight are not body fat and will return quickly. |
| Fallacy: | <i>Sugary foods</i> are a good source of quick energy. |
| Fact: | Sugary foods may give you an immediate energy boost, but it is short-lived. The rise in blood sugar is followed by feelings of hunger, irritability, and sleepiness. |
| Fallacy: | Adding more <i>protein</i> to my diet will help build muscle. |
| Fact: | A balanced diet supplies plenty of protein for muscle growth. An excessive amount of protein is stressful to the kidneys. Like excess fat or carbohydrates in the diet, too much protein will be stored as fat. |



Fallacy: *Fasting*, or skipping meals, will help me to lose weight.

Fact: Abstaining from food, or fasting, will not help you to lose fat weight. When you skip meals, your body is forced into a starvation mode. It will use up important calorie-burning muscle tissue to survive. Your body will slow down and begin to store fat even more efficiently than before.

Fallacy: *Vitamins* will give me more energy.

Fact: Vitamins do not supply energy. They only help the body to use energy. Energy is supplied by food in the form of calories. Vitamin supplements may be helpful for individuals with special needs. However, for an average, healthy person, a well-balanced diet supplies enough vitamins.

Fallacy: Overfat people eat more than lean ones.

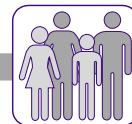
Fact: Not necessarily. Overfat people often eat less than lean individuals. Their bodies, however, have adjusted to a low-calorie intake. When they do overeat, they easily gain weight.

Fallacy: *Muscle cramps* indicate a lack of salt intake.

Fact: Muscle cramping is most often a result of severe water loss from sweating or over-exercising. Salt tablets can worsen this condition by drawing more water out of the muscles and into the stomach.

Fallacy: You only burn a lot of calories during *exercise*.

Fact: Exercise helps make your body a better fat-burning machine. Regular exercise helps you to burn a high rate of calories at all times of the day, not just during exercise.



- Fallacy:** *Exercise increases your appetite.*
- Fact:** Exercise actually lessens your appetite temporarily. Exercise helps regulate your calorie intake.
- Fallacy:** Breads, rice, pasta, and other *carbohydrates* are fattening.
- Fact:** Whole-grain carbohydrates such as bread, pasta, rice, and cereal have less than half the calories of fat. They are the best source of energy, especially during physical activity. These foods become fattening when we add fat to them.

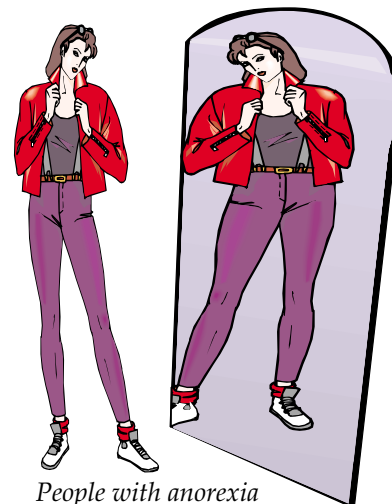
Eating Disorders: When Food Becomes an Enemy

Most Americans do not have a perfect relationship with food. On the one hand, we really enjoy food. We look forward to eating a tasty meal with good company. On the other hand, we know that sometimes we eat too much or we eat the wrong foods. Although it is an imperfect relationship, it isn't a distracting or dangerous problem in our everyday lives.

Unfortunately, more than a million Americans suffer from eating disorders. Their relationship with food is an everyday problem that is a danger to their health.

One type of eating disorder is **anorexia nervosa**. This disorder is also called *starvation sickness*. Its victims are usually teenage girls. They refuse to eat or eat too few calories and nutrients to maintain their health. They continue to lose weight because no matter how thin they are, they still see themselves as fat.

Some victims of anorexia nervosa have died from starvation. Many others suffer from constant health problems. The human body cannot achieve or maintain health on too few calories.



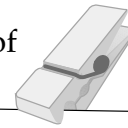
People with anorexia nervosa see themselves as fat.



Bulimia is another eating disorder that many people, especially teenage girls, suffer from. Victims of bulimia constantly think about food. They go on *eating binges*—sometimes every day or two. During an eating binge, they will eat thousands and thousands of calories very quickly, and usually in secret. The foods they eat are usually sweets—cookies, cakes, ice cream. After a binge, they force themselves to vomit or use laxatives to get rid of the food before it is digested. Sometimes they starve themselves following a binge.

Bulimia can cause serious health problems. Victims can suffer from kidney damage, abnormal heartbeat, and an imbalance in body fluids. They also irritate their throats from vomiting and may develop an infection of the throat and surrounding area. Severe tooth decay is also a result of repeated vomiting.

People who suffer from eating disorders need help. It is almost impossible to recover from an eating disorder without the help of a professional. Victims should see their doctor, nurse, or local health clinic. For more information on eating disorders, call the National Eating Disorders Association hotline at 1-800-931-2237.



**National Eating
Disorders Association
Hotline**

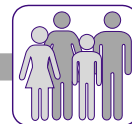
1-800-931-2237

Summary

Many Americans do not choose healthy *diets*. The food we eat often contains empty *calories* or too many calories. We should choose a diet that contains the right combination of *nutrients* to help the body grow, repair itself, and fuel itself.

Food contains six different groups of nutrients: *carbohydrates*, *proteins*, *fats*, *vitamins*, *minerals*, and *water*. Carbohydrates are the body's main source of energy in a healthy diet. Proteins are used by the body to build and repair muscle, blood, hair, skin, nails, and internal organs. Protein is especially important during growth periods such as adolescence. Although fat is often thought of as a bad or unhealthy nutrient, it is an important and necessary part of a healthy diet. Fat is a major source of fuel for energy and necessary for the health of every cell in the body. However, too much fat can cause the body to be *overfat*, or carry too much fat.

Vitamins and minerals do not supply the body with energy. These “helper nutrients” help the body carry out many of its necessary functions. Water is not a “food,” but it is an essential nutrient. Water is necessary for all body processes.



To help us select a healthy diet, the United States Department of Agriculture (USDA) has developed the Food Guide Pyramid. The Food Guide Pyramid is a chart that shows how much of the different types of foods we should eat for a *balanced diet*.

Most of us think of calories as something in foods that make us fat. Another way of thinking about calories is to see them as units of heat that measure the energy available in foods. A calorie supplies the body with a certain amount of energy.

Too many Americans are overweight. However, more important than weight is our *body composition*. Our “body weight” is the number of pounds we weigh on a scale. Our “body composition” is the percentage of *body weight* compared to the percentage of *lean body tissue*. Many athletes and other people with healthy bodies weigh more than a height/weight chart in a doctor’s office would recommend. But they have a low percentage of body fat. Some people are *underfat* and carry too little fat on their bodies. Not being overfat or underfat is more important to our health than how much we weigh.

To change our body composition and reduce our body fat, we should combine a reduced-calorie diet and exercise. We should not starve ourselves or go on a diet that gets rid of pounds very quickly. These diets are not healthy and will not help us maintain the right weight and body composition. Instead, develop a diet and exercise program you can continue for the rest of your life.

Food labels list the ingredients in packaged foods. Food labels also tell us how a food was prepared. The list shows the ingredients in order of *decreasing* amounts.



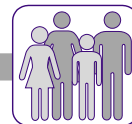
Some people suffer from eating disorders. *Anorexia nervosa* is an eating disorder in which victims starve themselves. They believe they are overweight—no matter how thin they become. *Bulimia* is an eating disorder in which victims eat many calories at a time, or “binge,” and then rid their body of the food before it is digested. Both of these eating disorders cause physical and psychological harm. Victims need professional help to overcome these diseases.



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. Vitamins will give you energy.
- _____ 2. If you have a muscle cramp, you should take a salt tablet.
- _____ 3. Regular exercise helps you to burn many calories at all times of the day, not just during exercise.
- _____ 4. Most of the people who go on fad diets and lose weight usually keep the weight off for a lifetime.
- _____ 5. If you want more muscle on your body, eat more protein.
- _____ 6. It is *not* possible to have too little fat on your body.
- _____ 7. Body composition measures the number of pounds you register when you step on a scale.
- _____ 8. You can eat empty calories without gaining weight.
- _____ 9. Fiber helps to make digested food in the intestines pass out of the body as stool.
- _____ 10. A person who suffers from obesity has a high percentage of body fat and a BMI over 30.



Practice

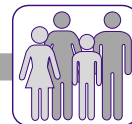
Read each **situation** described in the paragraphs below. Write a brief answer to **describe** how you would respond.

1. On many occasions you've decided to make your *diet* more healthy. You decide to stop eating *any* junk food or other food that is not nutritious. However, your plan always fails. You always get to a point where you can't stand such a strict diet. Then you eat some junk food—and then you *binge* and eat a lot of junk food. You have just about given up trying to eat a healthy diet. How can you change so you can maintain a healthy and *balanced diet*?

2. *Anorexia nervosa* and *bulimia* are diseases that most often are found in teenage girls. Why do you think these diseases most often affect teenage girls?



3. Take a close look at the foods that make up your own daily diet. Then give the reasons you choose to eat these foods rather than other foods. You may want to ask the following questions as a way to discover what influences your food choices. Have you been influenced by your family or your friends? Have you been influenced by advertising? Do you choose foods based on their taste, their nutritional value, or a combination of the two?



Practice

Use the list below to complete the following statements.

anorexia nervosa	Food Guide Pyramid	water
exercise	saturated fats	whole grains
fad diet	underfat	

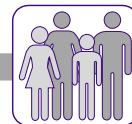
1. The _____ is an easy-to-follow guideline that show how many servings from each of the five food groups we should eat every day.
2. _____ come mainly from animal products.
3. It is possible that we may be _____ , or carry too little fat on our bodies.
4. A _____ promises fast weight loss.
5. Without _____ , we wouldn't be able to digest food, get rid of waste in our body, or maintain our temperature.
6. The Food Guide Pyramid recommends that _____ , such as bread, cereal, rice, and pasta make up the largest part of our diets.
7. The best way to lose weight and increase lean tissue is to combine a moderate diet with _____ .
8. No matter how thin people suffering from _____ become, they still sees themselves as fat.



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. *Empty calories* are good to eat because they won't make you fat.
- _____ 2. A gram of fat has the same number of calories as a gram of carbohydrates.
- _____ 3. The Food Guide Pyramid is a museum about food and nutrition in Washington, D.C.
- _____ 4. Vitamins and minerals provide the body with energy.
- _____ 5. Carbohydrates, proteins, and fats provide us with the energy we need.
- _____ 6. It is possible to be underfat, or have too little fat on your body.
- _____ 7. Carbohydrate foods should make up most of our diets.
- _____ 8. Fiber is not digested by the body, but it is an important part of our diet.
- _____ 9. Proteins are used by the body to grow and repair all of its tissues and many of its body parts.
- _____ 10. Teenagers need less protein than adults do.
- _____ 11. A person who suffers from bulimia refuses to eat.
- _____ 12. A healthy diet should include 6-11 servings of whole grains each day.
- _____ 13. You can't eat too much fiber because the body doesn't digest it.
- _____ 14. We should try to eliminate all fat from our diets.



- _____ 15. We can live without water for longer than we can live without food.
- _____ 16. Body composition refers to a person's weight.
- _____ 17. Our weight according to a scale is not as important to our health as our body composition.
- _____ 18. Having too much fat on our bodies can lead to heart disease, cancers, and problems during pregnancy.
- _____ 19. The best way to improve your body composition is to eat a healthy diet and exercise.
- _____ 20. Most people who lose weight quickly do not gain the weight back.
- _____ 21. Fried foods are less fattening than baked foods.
- _____ 22. Certain foods and diet pills can help burn fat calories and help you lose weight.
- _____ 23. Sugary foods are a good source of energy.
- _____ 24. Bread, rice, pasta, and other carbohydrates are fattening.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|---------------------|
| _____ 1. organic substances that do not supply energy but that the body needs to grow and function | A. balanced diet |
| _____ 2. an eating disorder in which a person over-eats and then vomits, or uses diuretics or laxatives to get rid of food before it is digested | B. body composition |
| _____ 3. the part of a carbohydrate food that is not digested and helps the body form soft and bulky stools | C. bulimia |
| _____ 4. the right number of servings from each of the five food groups, eaten daily | D. calorie |
| _____ 5. the percentage of body weight that is fat compared to lean body tissue | E. carbohydrate |
| _____ 6. having more than a recommended percentage of body fat | F. fallacy |
| _____ 7. a nutrient in food that provides energy and can be stored in the body | G. fat |
| _____ 8. substances in food that the body must have to function properly | H. fiber |
| _____ 9. a nutrient in food that is the main source of energy for your body | I. nutrients |
| _____ 10. a unit of heat that measures the energy available in food | J. overfat |
| _____ 11. a nutrient in food that helps build and repair body tissues and provides energy | K. protein |
| _____ 12. a mistaken idea | L. vitamins |

Unit 5: Drugs: Uses and Misuses

This unit explains the different drug classifications, how drugs affect the body, the consequences of drug use, and tolerance and addiction.

Unit Focus

- how drugs affect the body and the brain
- how drugs of abuse create an addiction in users
- health risks of drinking alcohol, smoking cigarettes, and using other drugs
- drug abuse and misuse
- withdrawal symptoms as a user attempts to quit drugs
- dangers of passive smoke
- what to do if you have a drug problem





Vocabulary

Study the vocabulary words and definitions below.

- addict** a person who has or has had a drug habit
- addiction** dependency on something such as a drug or behavior
- addictive** habit-forming
- alcohol** the drug found in beer, wine, and liquor; affects the nervous system
- allergic** having an unhealthy or life-threatening response to something
- amotivational syndrome** loss of ambition or long-term goals; disorder often associated with marijuana use
- blood alcohol level (BAL)** a measurement of how much alcohol is in a person's bloodstream
- cannabinoids** a group of drugs that produces euphoria and an altered sense of time; includes marijuana and hashish
- chemical dependence** a physical or emotional need for alcohol or other drugs
- depressants** a group of drugs that slows down the nervous system; includes alcohol, barbiturates, and tranquilizers



designer drugs	synthetic drugs that are similar in chemistry to certain illegal drugs
dosage	how much of a drug is taken and how often it is taken
drug abuse	the taking of any drug for other than its medical purpose
drugs	chemical substances that affect the body, the mind, or both
euphoria	a feeling of great happiness or pleasure
fetal alcohol syndrome (FAS)	a set of birth defects found in babies who are born to mothers who abuse alcohol during pregnancy
hallucination	an experience of seeing, hearing, or feeling things that aren't real
hallucinogens	drugs that cause a person to see, hear, or feel things that aren't real
inhalants	substances that produce fumes, which are inhaled for their effects
inhibition	a blocking or holding back of a behavior or action
intoxicated	drunk
look-alike drugs	drugs that are made to look like certain illegal drugs



- misuse** to use wrongly or incorrectly
- narcotics** habit-forming drugs that relieve pain and are derived from the opium poppy plant
- nervous system** the system in the body that sends and receives messages to control the body's activities; includes the brain, spinal cord, and nerves
- nicotine** the habit-forming drug in tobacco
- overdose** to take so much of a drug that it can cause unhealthy or life-threatening effects
- over-the-counter drugs** drugs that can be legally bought without a doctor's note in a grocery store, drugstore, or discount store; nonprescription drugs
- physical dependence** a person's bodily need for a drug; also called *physical addiction*
- prescription drugs** drugs that can only be bought with a doctor's note at a pharmacy
- psychoactive drugs** drugs that affect the brain, or mind; include alcohol, cannabinoids, hallucinogens, stimulants, depressants, and narcotics
- psychological dependence** a person's emotional need for a drug; also called *psychological addiction*



- side effects** the undesired ways a drug acts on the body
- stimulants** drugs that speed up the nervous system
- tar** cancer-causing substance in tobacco
- tobacco** leaves used in cigarettes, cigars, chewing tobacco, and snuff
- tolerance** the body's increasing resistance to the effect of a drug, creating a need for taking more and more of the drug over time to get the same results
- user** someone who uses something, such as drugs
- withdrawal** the symptoms experienced by a drug user when he or she stops using a drug



Unit 5: Drugs: Uses and Misuses

Introduction

Hardly a day goes by without a story in the news about **drugs**. Someone is killed in a drug deal. Someone dies of an **overdose** of drugs. Someone commits a crime to get money to buy drugs. Someone hurts or kills other people because he or she is out of control while on drugs.



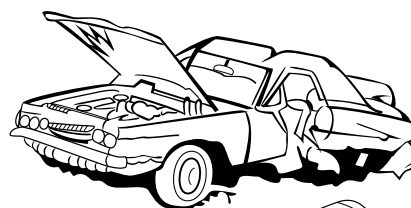
Drug overdoses cause many deaths.

One-half of all the people in our jails and prisons are serving time for selling, buying, or using illegal drugs. Some of the more common illegal drugs include *cocaine*, *marijuana*, and *heroin*.

However, illegal drugs make up only half the story. The use and misuse of *legal* drugs harms our families and communities as much, or even more, than the use of illegal drugs does. But because **alcohol** and **tobacco** are legal, we may be shocked by the cost we all pay when they are misused.

The number of deaths, injuries, and illnesses because of legal and illegal drugs is staggering. In more than one-half of all car crashes in which someone dies, one of the drivers has been drinking. Driving while under the influence of

alcohol or riding with someone under the influence is the leading cause of death among teenagers. Every year 40,000 teenagers are crippled or disfigured because of someone who drove after drinking. Misusing alcohol not only impairs our judgement and causes us to lose our ability to control a car, it also can make us violent and out of control. More than one-third of all murders, rapes, and assaults are committed by someone who was drinking.



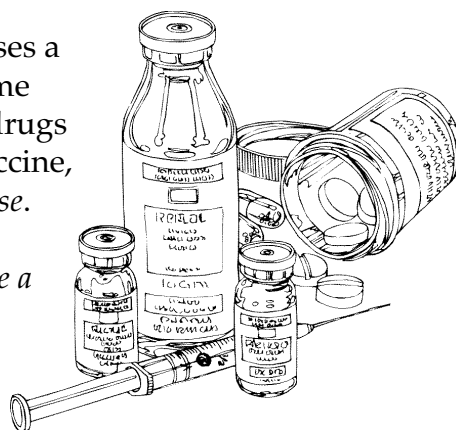
Driving while under the influence of alcohol or riding with someone under the influence is the leading cause of death among teenagers.



Cigarette smoking and inhaling the smoke from someone else's cigarette are among the leading causes of death in the United States. More Americans will die from tobacco this year than will die from all other drugs—including alcohol—combined! More Americans will die this year from tobacco than have died in World War I, World War II, and the Vietnam War—combined!

Drugs: Affecting the Body, the Mind, or Both

A *drug* is any chemical substance that causes a change in the body, the mind, or both. Some drugs are used to promote health. These drugs are called *medicines*. When we get a flu vaccine, we are taking a drug that can *prevent disease*. When we take an antibiotic to fight an infection, we are taking a drug to help *cure a disease*. When we take an aspirin for a headache, we are taking a drug to *relieve a symptom*—pain.



A drug is any chemical substance that causes a change in the body, the mind, or both.

Some drugs are taken to produce a desired feeling. These drugs are called *drugs of abuse*—they are not taken for medical purposes. When someone uses a drug such as marijuana, the **user** does so to *feel the effects* of the drug. Marijuana and other drugs of abuse can produce feelings of intense pleasure, or **euphoria**. Some drugs of abuse produce feelings of increased energy. Some produce a feeling of tranquillity. These drugs produce certain feelings or emotions by affecting the body's **nervous system**.

The *nervous system* includes the brain, the spinal cord, and the body's nerves. Chemical reactions in the brain enable us to think, feel, and move. When we lift an arm, a message from the brain travels down the spinal cord and through nerves to the muscles in the arm. When we touch scalding water, skin receptors in our fingers send a message to our brain, alerting us to danger. When we feel pleasure or pain from a sound, sight, or thought, we are experiencing a chemical reaction.

When drugs of abuse act on the nervous system to produce a desired feeling, they also cause abnormal chemical reactions in the brain. These abnormal effects on the nervous system often cause slowed reaction time, slurred speech, blurred vision, and impaired judgment.



Drugs: Clouding the Mind, Damaging the Body

Because drugs of abuse affect the way users see and think about their surroundings, users may do something that causes injury or death to themselves or to others. Everyone has heard of an accident caused by a teenager who drove while drunk and couldn't see the road or other cars clearly. Alcohol, cocaine, and other drugs of abuse can also cause users to do things they otherwise would not. They may jump



from a ledge—thinking the ground was much closer than it really was. They may believe they are indestructible and do something to defy death—and lose. Drug users can be seriously hurt doing even the simplest things. They misjudge stairs and tumble. They burn themselves because they cannot feel how hot something is. Whenever we alter the body's ability to judge the world around us, we risk injury and death.

Some drugs cripple or kill by attacking the body. Smoking tobacco may cause emphysema, a disease that destroys the lungs and suffocates the victim. Drinking may cause cirrhosis, a liver disease that is often fatal. When we take drugs for medical purposes, we can improve the health of the body. But when we take drugs for nonmedical purposes, we damage the body.

The Different Kinds of Drugs: Over-the-Counter, Prescription, and Illegal Drugs

Drugs are classified in three different ways: **over-the-counter drugs**, **prescription drugs**, and illegal drugs. These classifications describe how a drug can be obtained.

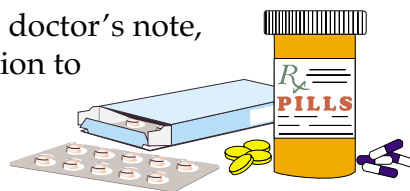


Over-the-counter drugs are available without a prescription.

Over-the-counter drugs are available without a prescription, or doctor's note. They can be found on the shelves of any drug store or pharmacy. These drugs include aspirin, cold remedies and cough syrups, laxatives, some antihistamines, and many others. These drugs have instructions that are easy to follow. Over-the-counter drugs are also called *nonprescription drugs*.



Prescription drugs can be obtained only with a doctor's note, or prescription. A patient presents a prescription to a pharmacist. The pharmacist fills the prescription and provides the patient with instructions on how to use the drug. Instructions include the **dosage**, or how much of the drug is to be taken, and how often it should be taken. Prescription drugs can do wonders. They can help a patient fight a life-threatening disease. They can ease a patient's pain. They can help a patient experience the world in a normal way.



Prescription drugs can be obtained only with a doctor's note, or prescription.

Sometimes drugs are called *illegal* because they were obtained without a prescription. For example, a tranquilizer is a drug that helps people relax. If a doctor prescribes a tranquilizer to a patient, the drug is legal. If, however, someone buys the drug without a prescription, the drug is illegal. Some drugs are always illegal because they cannot legally be sold or bought. Illegal drugs such as *heroin* or *LSD* are not used for medical purposes. A doctor cannot prescribe them to a patient.

Drugs are complex and mysterious substances. Doctors and scientists are always increasing their knowledge about how a drug works. Therefore, a drug may at first be put into one class and then later be changed to a different class. If an *over-the-counter* drug turns out to be easily misused, its classification may be changed to *prescription*. In some cases, as more is learned about a drug, its classification may even be changed to *illegal*. Regardless of whether a drug has been classified as over-the-counter, prescription, or illegal, any drug can be misused. Legally owning a drug does not give anyone the right to give the drug away, sell it, or use the drug in a way it was not intended. These are crimes.



Over-the-Counter Drugs: Treating Minor Medical Problems

Over-the-counter drugs are used to ease minor medical problems. Aspirins may help lessen the pain from headache. Cough syrup helps eliminate the urge to cough. Laxatives can help the occasional bout with constipation.

These drugs generally do not produce feelings or behaviors that people want. Therefore, they are generally not used for unintended purposes. However, if someone does not follow the instructions on these drugs or uses them in ways they are not intended, then the person is misusing

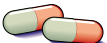


these drugs. Even these relatively safe drugs can cause harm. Too much aspirin can cause internal bleeding and other disorders. The constant use of cold remedies can harm a person's sinuses. And many of these drugs can cause sleepiness or an inability to sleep and relax.

 Effects and Hazards of Analgesics 		
Aspirin	<ul style="list-style-type: none">• relieves pain• reduces fever• reduces swelling	<ul style="list-style-type: none">• causes stomach irritation and bleeding• associated with Reye's syndrome in children and adolescents
Ibuprofen	<ul style="list-style-type: none">• relieves pain• reduces fever• reduces swelling	<ul style="list-style-type: none">• may cause liver damage in high doses
Acetaminophen	<ul style="list-style-type: none">• relieves pain• reduces fever	<ul style="list-style-type: none">• can cause stomach irritation and bleeding

Prescription Drugs: Legal but Dangerous

Prescription drugs are not available without a doctor's note because they can be dangerous. If taken without a doctor's guidance, these drugs can harm and even kill a person. All prescription drugs have **side effects**. In addition to acting on the body in a desired way, they also act on the body in an undesired way. The *dosage* of a prescription drug needs to be matched to a patient's weight, age, and other factors. A doctor needs to be sure a patient is not **allergic** to a drug. A doctor even needs to be sure that a prescription drug will not mix in a harmful way with another drug a patient is taking. When two or more drugs are taken at the same time, they can change the way each affects the body. One drug can make another stronger or weaker. One drug can mix with another drug to produce a chemical that acts like a poison in the body.

 Appropriate Use of Prescription Medication
Don't take a prescription medication unless it was prescribed for you.
Do tell the doctor if you have had an allergic reaction to any medication.
Don't mix medications without checking with your physician or pharmacist.
Do take the medication for the prescribed length of time and dosage the doctor prescribes.
Don't think that if a little bit of the drug makes you feel good, that more will make you feel better.
Do ask the pharmacist to tell you the prescription medication's purpose, side effects, and interaction with food and other medications.
Don't use a medicine prescribed for someone else even if you have the same symptoms.



Illegal Drugs: Street Drugs

Illegal drugs are often called *street drugs*. Some people use an illegal drug because they want to experience its effects. Some people use illegal drugs because they have developed a need for a drug.



You are breaking the law when you buy, sell, or use an illegal drug. In Florida, more than half of all prison cells are filled with drug offenders. The penalties are severe, and a drug record can follow you for the rest of your life.



Practice

Use the list below to write the correct term for each definition on the line provided.

alcohol	euphoria	prescription drugs
allergic	nervous system	side effects
dosage	overdose	tobacco
drugs	over-the-counter drugs	user

- _____ 1. a feeling of great happiness or pleasure
- _____ 2. having an unhealthy or life-threatening response to something
- _____ 3. the system in the body that sends and receives messages to control the body's activities; includes the brain, spinal cord, and nerves
- _____ 4. chemical substances that affect the body, the mind, or both
- _____ 5. drugs that can be legally bought without a doctor's note in a grocery store, drugstore, or discount store; nonprescription drugs
- _____ 6. the undesired ways a drug acts on the body
- _____ 7. drugs that can only be bought with a doctor's note at a pharmacy
- _____ 8. leaves used in cigarettes, cigars, chewing tobacco, and snuff
- _____ 9. someone who uses something, such as drugs



- _____ 10. how much of a drug is taken and how often it is taken
- _____ 11. the drug found in beer, wine, and liquor; affects the nervous system
- _____ 12. to take so much of a drug that it can cause unhealthy or life-threatening effects



The Misuse and Abuse of Drugs: Self-Abuse

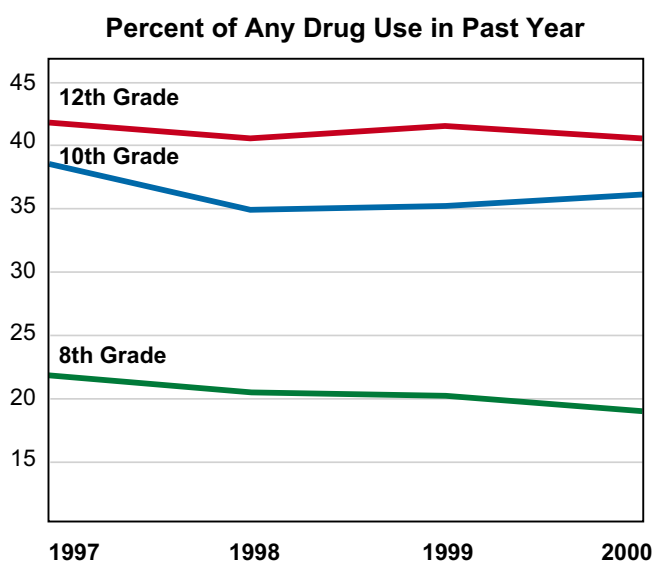
Drug misuse describes taking a drug for the correct purpose but not following the instructions written on the package or given by the doctor or pharmacist. If the package or prescription says to take a drug every six hours and someone takes the drug every four hours, that is called *drug misuse*. If the safe dosage for a drug is one pill or tablet and someone takes two pills or tablets, that is also called *drug misuse*.

Drug abuse describes the taking of a drug for something other than medical purposes. Using alcohol or cocaine to change the way we feel is an example of drug abuse. Taking a drug in a way that can hurt a person's health is also an example of drug abuse.

Drugs of Abuse: Altering the Mind and Causing Addiction

Unlike other drugs such as aspirin or antacids, drugs of abuse have certain effects that make them particularly dangerous to the person who uses them. Drugs of abuse change the user's mood or the way a user feels. They can change the way a user thinks or behaves. They can create drug **addiction**, or a need for the drug. Drug addiction is also called **chemical dependency**. The **addict** has become dependent on the chemical or drug.

Drugs of abuse include *alcohol*, *marijuana*, *LSD*, *mescaline*, *cocaine* (and *crack cocaine*), *amphetamines*, *barbiturates*, *tranquilizers*, *morphine*, *heroin*, *codeine*, and *ecstasy* (a **designer drug**).



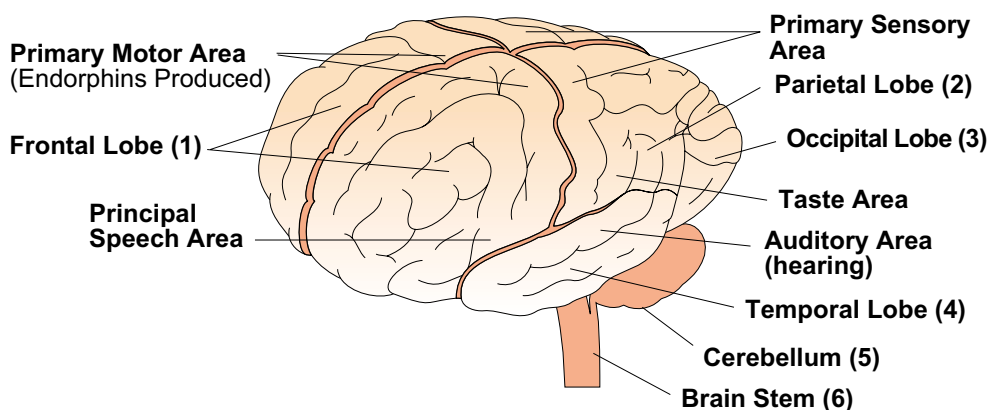


Although the drug in tobacco—**nicotine**—is not considered a drug of abuse, it is one of the most dangerous and damaging drugs in our society.

Altering the Mind: Producing a *High*

Drugs of abuse act on the brain to alter the mood or feelings of the user. Some drugs of abuse such as marijuana and morphine trigger the brain to produce *endorphins*. Endorphins are strong chemicals that eliminate pain and fear and produce euphoria.

View of the Brain



- (1) **Frontal Lobe** - used for reasoning, emotions, judgment, and voluntary movement
- (2) **Parietal Lobe** - contains important sensory centers
- (3) **Occipital Lobe** - contains the centers of vision and reading ability
- (4) **Temporal Lobe** - contains centers of hearing and memory
- (5) **Cerebellum** - regulates balance, posture, movement, and muscle coordination
- (6) **Brain Stem** - regulates circulation and respiration

Endorphins, which alleviate pain and fear and induce euphoria, are produced in the primary motor area of the brain. Morphine acts like endorphins, producing the same effects.

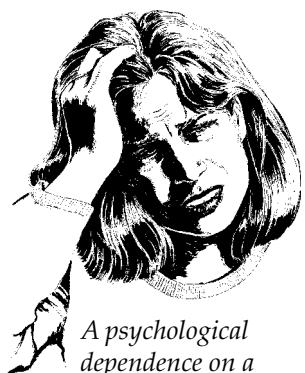
Tranquilizers or *barbiturates* produce a soothing and quieting feeling by turning off the excitable tissue in the brain or by depressing the nervous system. *Stimulants* excite the brain and stimulate the nervous system.

The feelings these drugs produce make the user want to use them again. When any of these drugs are taken without following doctor's instructions, they are being abused. Abuse can lead to addiction.



Addiction: The Hook

Drugs of abuse are **addictive**. When a person is addicted to a drug, he or she feels a need for the drug. Addiction to a drug can be physical and psychological. When a person has a **physical dependence**, or has a *physical addiction* to a drug, the body will not function normally without the drug. A person addicted to alcohol needs alcohol to do even easy and routine tasks. Without alcohol, the person will become ill and be unproductive. When a person has a **psychological dependence** on a drug, or has a *psychological addiction*, the drug user feels the emotional need for a drug. The user's mind will be distracted with thoughts of getting and using the drug. Some drugs, such as marijuana, can cause psychological addiction without causing physical addiction.



A psychological dependence on a drug causes an emotional need for it.

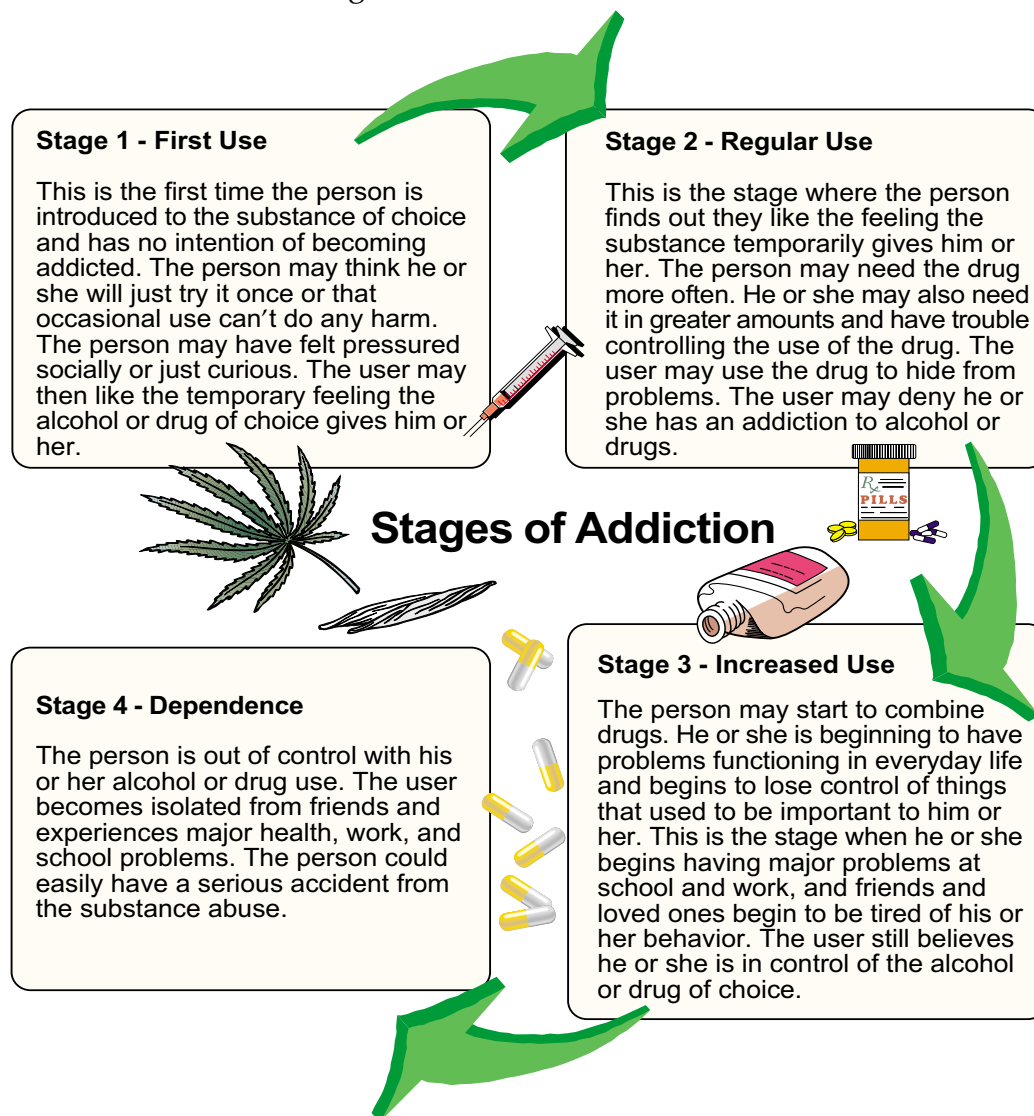
Drugs of abuse also cause the user to develop **tolerance** for a drug. The more a person uses a drug of abuse, the more of that drug is needed to get the effects desired. At first, an alcoholic may need six beers to satisfy an addiction. Later on the alcoholic may need eight beers, and then 10 beers, and so on and so on. All drugs of abuse damage the body. The greater the amount used, the greater the damage to the body. In some cases, drug abusers have developed such a high tolerance for a drug that they actually died from the increased dosage they needed.

Drugs of abuse make users not care about the damage the drug is doing to their health. Smokers know cigarettes will kill them, but the need for cigarettes has become greater than their fear of poor health and death. Amphetamine users—called *speed freaks*—may know that they are at risk of having a heart attack or stroke, but they will continue to *speed*.

In lab tests, rats have been given an endless supply of different addictive drugs, such as cocaine. Rats will become so addicted to cocaine that they will stop eating and doing anything else—except taking more and more cocaine. They will continue taking the drug until it kills them. We may be smarter than rats, but many people respond in a similar way to addictive drugs. Many people will continue taking a harmful drug until it damages their health or even kills them.



Drugs of abuse are very hard to quit. Addiction may be a slow process, taking years, or it may start with only *one* use. Once a person has struggled with addiction, that person will always have to fight the disease and work to remain drug free.



The Cycle of Drug Use: Use, Abuse, Addiction, and Withdrawal

The drug user often goes through four stages: drug use, drug abuse, drug addiction, and *withdrawal*. Although most drug addicts go through these stages, the adolescent is particularly vulnerable to drug addiction. Some scientists believe that the adolescent's brain, which is still developing, is affected more than an adult's brain by the chemicals in drugs.



Drug Use: Socializing with Drugs

Although people who take drugs of abuse may end up as drug addicts, they usually do not become addicted at first. Most drug addicts begin by smoking the occasional cigarette as an adolescent. They may also drink alcohol. They experiment with an illegal drug such as marijuana. These drugs were used at parties on weekends and perhaps occasionally on a weeknight. At this point, the adolescent could still control the use and could decide not to smoke, drink, or use marijuana.



Drug Abuse: The Move towards Addiction

Some adolescents who occasionally use drugs will begin to use them more frequently. They will begin to buy their own drugs and will use them when alone. They can still choose how much of a drug they will do and when they will do a drug. They do not show up at school or home **intoxicated**, or high.

Drug Addiction: The Drug Takes Over

Adolescent users now use the drug every day or nearly every day. They have developed a tolerance to the drug, so they increase how much they take. They would rather be by themselves than with friends or family. Or they only want to be with others who do drugs. Most or all of their activities now involve buying and doing drugs. Their family relationships and school work suffer. They may be arrested for driving while intoxicated or for buying or possessing a drug. The desire for the drug has taken over their life.

Withdrawal: One Price of Addiction

Addiction to a drug is also called *chemical dependence*. The body's *chemistry* has come to *depend* on a drug. Without the drug, the body experiences many problems. The drug addict's vision may become blurry. The addict may experience stomach cramps and diarrhea. Tremors, or the *shakes*, may occur. The addict may experience cold sweats—feeling both feverish and icy cold. The drug addict in withdrawal may even experience **hallucinations**: The addict may see, hear, and feel things that are not really there.



Addiction to a drug also causes *psychological dependence*, or a craving for the drug. The user may be willing to do anything to get the drug. The emotional need for drugs can cause a person to do things he or she would never do when *straight* and *sober*. People who would otherwise respect their body will sell it to others, even at the risk of contracting the deadly AIDS virus. Getting the drug becomes more important than life.

The physical and psychological symptoms experienced by drug users when they quit are part of **withdrawal**. Withdrawal can be so painful that many drug addicts continue to use drugs *not because they enjoy the drug but because they do not want to go through the pain of withdrawal*.



Practice

Use the list below to complete the following statements.

addiction	drug abuse	tolerance
chemical dependency	misuse	withdrawal
doctor's		

1. Prescription drugs can only be obtained with a _____ note.
2. The taking of a drug for something other than medical purposes is known as _____ .
3. Drug _____ describes taking a drug for the correct purpose, but not following the instructions written on the package or given by the doctor or pharmacist.
4. Drugs of abuse can also create drug _____ , or a need for the drug.
5. Drug addiction is also called _____ .
6. The drug user often goes through four stages: drug use, drug abuse, drug addiction, and drug _____ .
7. Drugs of abuse also cause the user to develop _____ for a drug.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | | |
|-------|---|-----------------------------|
| _____ | 1. an experience of seeing, hearing, or feeling things that aren't real | A. addict |
| _____ | 2. a person's emotional need for a drug | B. addictive |
| _____ | 3. habit-forming | C. hallucination |
| _____ | 4. a person's bodily need for a drug | D. intoxicated |
| _____ | 5. the habit-forming drug in tobacco | E. nicotine |
| _____ | 6. a person who has or has had a drug habit | F. physical dependence |
| _____ | 7. drunk | G. psychological dependence |



Why People Start Using Drugs

There is probably no single reason why people decide to start taking a drug. Some scientists argue that certain people have personality traits that lead them into drug taking. They may be curious and adventurous. Or they may be particularly vulnerable to peer pressure. When friends dare them or encourage them to take drugs, they are not strong enough to refuse.

The particular experience a person has with a drug can also affect his or her decision to experiment with the drug a few more times. One person may try marijuana and feel sick or feel nothing at all. Another person may experience euphoria. One person may drink and experience a terrible hangover. Another person may wake up after a night of drinking and feel fine.

How society responds to drug use is another factor in whether people will start to use drugs. Drinking alcohol and smoking cigarettes is tolerated in the United States. People who drive while intoxicated may not suffer severe penalties. Consequently, adolescents and young adults may not view drinking to get drunk as an inappropriate or irresponsible behavior.

The media—films, television, magazines, books, and music—sometimes show drug use as being sexy, glamorous, or exciting. The rugged cowboy who smokes is still a heroic figure in the media. The wealthy playboy who does cocaine can be an attractive model for some people. Of course, in real life, drugs do not make people sexy or attractive. Drugs make people sick. After a few years of doing drugs, the drug user's body will begin to show deterioration. The user's mind will not be as sharp.



Some people do drugs to numb themselves from the emotional pain they feel.

Unfortunately, when teenagers look at other teenagers who do drugs, they do not see the damage that will occur in the future. Most teenagers have not been using drugs long enough to begin showing the harmful effects.

Doing drugs may be a way to rebel. Young people do drugs to rebel against parents, school, and society's expectations of them. People do drugs to escape boredom, to experience something new, or to take a risk. Some people start to use drugs to stay awake, to sleep, or to relieve pain. Some people do drugs to numb themselves from the emotional pain they feel.



Adolescents who feel unloved by their parents, or spouses who feel unloved by their husbands or wives, may try to turn off their pain by turning off their feelings with drugs.

Why People Continue Using Drugs

The reasons why people start using drugs are often not the reasons why they *continue* to do drugs. Drugs of abuse create euphoria, or a feeling of being “high.” People become addicted to those feelings. Drug addicts who use heroin would use milk powder if it would give them the same feelings. When the drug wears off, drug users feel depressed. They then need more of the drug to relieve and escape their depression. Drug users fall into a vicious cycle. They take a drug to feel high. But after feeling good, they crash into painful and lonely feelings. They then need the drug to escape the bad feelings with which the drug has left them.

People often continue to use drugs because they *cannot stop*. Alcoholics, cigarette smokers, crack cocaine addicts—most people who recognize their addiction to a drug do not want to continue their drug use. Just ask them! But drug addicts believe that they will die if they do not get the drug. They believe that the drug is what makes their life worth living. Once the cycle of abuse is established, it is hard to break.

How to Say “No” to Alcohol and Other Drugs

Saying “No” to alcohol and other drugs is not easy for teenagers or adults. Imagine you are at a party where it seems everyone is drinking. Someone offers you a drink and you say, “No thank you.” The person begins to pressure you: “Come on, have a drink, it won’t kill you!” You say again, “No thanks, I really don’t want one.”



Saying “No” to alcohol and other drugs is not easy for teenagers or adults.

The person starts to tease you, even insult you. “Why not, are you chicken? Can’t you handle a beer?” At this point, you will want to put an end to this lack of respect for nondrinkers. So simply say: “I don’t drink because I don’t want to drink.” You don’t owe anyone more of an explanation. It’s your choice and you’ve made it!

If that person continues to pressure you, simply walk away. No one should pressure you to drink. Only people who have a drinking problem themselves pressure other people to drink (or do drugs).



Alcohol: The Most Commonly Abused Drug

Alcohol is the drug in *beer*, *wine*, and *liquor*. Liquor includes whiskey, gin, and vodka. It is the only legal drug that produces euphoria and can be bought without a prescription. Perhaps that is why alcohol is the most commonly abused drug among teenagers and adults. In the United States, there are an estimated 10 to 16 million alcoholics, or people who are addicted to alcohol.



Alcohol is the most commonly abused drug among teenagers.

Many millions more abuse alcohol occasionally. One such pattern is called *binge drinking*. Binge drinking is periodic excessive drinking. A danger associated more with binge drinking than any other pattern of abuse is *alcohol poisoning*. Alcohol poisoning is a dangerous toxic condition that occurs when a person drinks a large amount of alcohol in a short period of time. The brain's ability to control breathing can be interrupted and death can result.

Of all drugs, alcohol can be the easiest to become addicted to and the hardest to quit. We see alcohol from the time we are a child. It's advertised on television. We see people using it to celebrate special occasions, such as weddings or birthdays. Alcohol is even a part of some religious customs. We watch as our parents or characters in movies use alcohol to unwind and relax in the evening. And alcohol has even become a symbol of growing up. When we reach legal age, we go to a bar and have a drink to show we're *legal*.

Unlike other drugs of abuse, alcohol can be legally used. If people are trying to stop taking an illegal drug, they can stay away from sellers and other people who use them. It is nearly impossible, however, to stay away from alcohol. We see it in supermarkets and even drug stores. We see people drinking it at restaurants and on television programs. No wonder alcohol has become such a problem in our society.

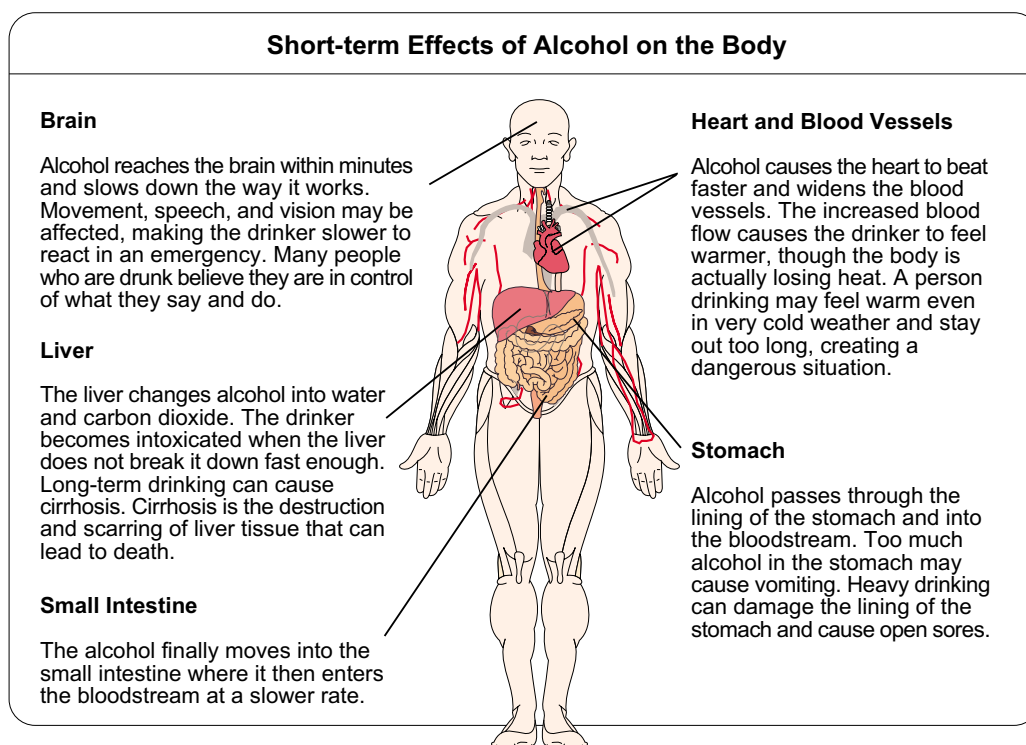
How Alcohol Affects the Body: Attacking the Central Nervous System

A few minutes after alcohol is drunk, it enters the body's bloodstream. Once in the bloodstream, alcohol travels to every part of body. Drinkers feel the effects of alcohol as it deadens the nervous system. The brain loses some or all of its ability to control behavior. When drinking alcohol,



people lose their **inhibitions**. Without inhibitions, they may do many things they will regret. Some people on alcohol are willing to engage in risky sex. Sex without protection can lead to a sexually transmitted disease (STD) such as the deadly AIDS virus.

Loss of inhibitions may make some people talk more or become loud and aggressive. Some people may become violent. Although alcohol makes some people more active and aggressive, it is not a stimulant. Alcohol is a **depressant**. It encourages aggressive and risky behavior because it depresses, or shuts down, the part of the brain that controls judgment.



Alcohol also affects the cerebral cortex, the part of the brain where thinking takes place. A person drinking alcohol may forget recent memories and worries. Some people use alcohol to forget unpleasant events. When alcohol wears off, however, the memories and worries return. Covering them up does not make problems go away. Alcohol is *not* a healthy way to resolve problems.

Alcohol also numbs muscle coordination. We all know how people who are drunk move their bodies. They stagger and flail about. Because alcohol deadens the brain's ability to make judgments, drinkers may not be aware of having lost coordination. They may believe they can safely drive a car



or swim when they cannot. However, look at the statistics. In the United States, there is an average of one alcohol-related car accident resulting in a death every 32 minutes. On the average, one person is injured in alcohol-related crashes every two minutes.

Blood Alcohol Level (BAL): The Measure of Alcohol in the Body

How alcohol affects the body depends mostly on something called the **blood alcohol level (BAL)**. In the person who does not abuse alcohol, the liver can process about one drink an hour. One drink equals one 12-ounce beer, one 5-ounce glass of wine, or 1.5 ounces of liquor. If a person takes more than one drink an hour, the alcohol begins to build up and affects the body more and more. The chart on the following page describes the effects caused at different BALs.

Alcohol Content in One Drink



*A 12 ounce beer has the same amount of alcohol as a 5 ounce glass of wine.
A 5 ounce glass of wine has the same amount of alcohol as 1.5 ounces of liquor.*

The effects of alcohol on a person depend on the amount consumed and other factors. Someone who has recently eaten will feel the effects of alcohol more slowly than someone who has not eaten. The same amount of alcohol will affect a thinner person more than it will affect a heavier person. A person who drinks often will develop a tolerance to alcohol. The more often the person drinks, the more alcohol the person will need to become drunk.

If you drive while under the effects of alcohol (DUI) or while intoxicated (DWI), you stand a good chance of being arrested and losing your license. That is, of course, if you are not one of the thousands upon thousands of Americans who will die this year in a car crash caused by someone who is drunk.



The Effects of Alcohol



Approximate Blood Alcohol Level	Number of Drinks in a One-Hour Period	Effect on a 140-Pound Person
.025	1	<ul style="list-style-type: none"> • feeling of well-being • feeling relaxed and warm • impairment of judgement
.05	2	<ul style="list-style-type: none"> • slower reactions • inhibitions and self-control lessened • behavior can become silly and impulsive
.075	3	<ul style="list-style-type: none"> • hearing and speech affected • coordination and reflexes impaired • person can no longer make reliable decisions about driving
.1	4	<ul style="list-style-type: none"> • legally drunk status in most states* • vision, hearing, and speech impaired • judgement and reflexes impaired
.161	6	<ul style="list-style-type: none"> • legally drunk status in most states* • blurred vision • speech and hearing severely impaired
.215	8	<ul style="list-style-type: none"> • extreme intoxication • no control over thoughts and perceptions • difficulty walking and standing
.321	12	<ul style="list-style-type: none"> • severe and dangerous intoxication • brain unable to control breathing • coma or death

* In Florida, legally drunk status is .08 for adults and zero tolerance or .02 for driver's under the age of 21.

The Hangover: Recovering from Alcohol



A hangover is really their body going through withdrawal.

When most people wake up after a long night of drinking, they experience a *hangover*. A hangover is really their body going through withdrawal—it no longer is getting alcohol. Their head can feel as if it's about to explode as a drum pounds away in the brain. Their stomach can become upset, and the drinker may experience vomiting or diarrhea—or both. What the drinker is experiencing the morning after is caused by a number of things. Alcohol causes their body to lose water, so their brain is dehydrated. As their brain begins to rehydrate, or regain water, their nerves hurt as they swell with



water. Their body also feels the toxic effects of formaldehyde. The gas formaldehyde forms as their body breaks down alcohol.

Hangovers can be severe—just ask anyone who is going through one. He or she will probably swear never to drink again.

Health Consequences

Alcohol has the most damaging effects on the body of any drug of abuse. After a person has been abusing alcohol for some years, he or she can expect one or more of the diseases and disorders described below.

Tissue in the brain is damaged by too much drinking. Drinkers lose control over their eyeballs and may not be able to move them from side to side. They may develop a staggering walk and look as if they are about to fall over at any moment. They may lose their memory—and probably will begin lying to cover it up. Their ability to think will decline. Their moods may swing from happy to sad without a reason. They may begin to feel burning pain in their legs and feet as their circulation becomes poor. They may fall into a coma ... and die. These are the possible effects of alcohol on the brain.

Their *stomach* also can begin to deteriorate. Their stomach can become inflamed and develop ulcers. Cirrhosis, or a diseased liver, will occur as the liver becomes overworked by all the alcohol in the drinker's system. Most alcoholics develop diarrhea, malnutrition, and a diseased pancreas. Any one of these stomach problems can result in death ... and all of them are very painful.

Their *heart* will eventually become damaged by years of abusive drinking. Drinkers also may develop high blood pressure. High blood pressure will cause their heart to work harder than normal and create unnecessary strain. Eventually drinkers will suffer heart failure from damage to the heart muscle.

Even *skeletal muscles* damaged from too much drinking become weak and swollen. Some bones may even die or become arthritic.

Alcoholics also suffers from ugly *facial disorders*. Their face becomes red as alcohol makes the blood rush to the surface of the skin. Alcoholics may develop red bumps on their face and nose. Their skin can become scaly



and covered with dry flakes. Their skin will eventually turn purple from bleeding in the skin. And drinkers are apt to come down with skin infections from poor circulation.

Drinkers may develop *cancer* of the mouth, colon, rectum, stomach, prostate, thyroid gland, or pancreas. Alcoholics may look old, but few of them live out a normal life span.

The person who abuses alcohol may suffer from *blackouts*. A blackout is different from passing out. A person can suffer a blackout and not lose consciousness. However, after a blackout, the person will not remember what has happened.

Abusive drinkers can eventually suffer from *hallucinations*. Drinkers will begin hearing voices and seeing things. And their personality may change. A once thoughtful and kind person can become angry, irritable, and impatient.

Mixing Alcohol with Other Drugs: A Dangerous Combination

Drinking while doing other drugs is dangerous. People who mix a tranquilizer with alcohol may be depressing their nervous system to a dangerous level. Tranquilizers, sedatives, or any kind of barbiturate mixed with alcohol can cause people to pass out or even fall into a coma. In addition, because alcohol impairs judgment, drug takers may take more pills or drugs than they realize. They may take an overdose of drugs.

Alcohol and Pregnancy: Risking the Baby's Health

The pregnant woman who drinks puts herself and her baby at risk. **Fetal alcohol syndrome (FAS)** affects babies whose mothers abused alcohol during pregnancy. The baby can develop a set of birth defects, including low birth weight, mental disabilities, behavioral problems, and deformed faces.

GOVERNMENT WARNING:

ACCORDING TO THE SURGEON GENERAL, WOMEN SHOULD NOT DRINK ALCOHOLIC BEVERAGES DURING PREGNANCY BECAUSE OF THE RISK OF BIRTH DEFECTS.

CONSUMPTION OF ALCOHOLIC BEVERAGES IMPAIRS YOUR ABILITY TO DRIVE A CAR OR OPERATE MACHINERY, AND MAY CAUSE HEALTH PROBLEMS.



Scientists are uncertain how much pregnant women can drink without harming their baby. So the best strategy for pregnant women is to avoid alcohol completely.



Myths about Alcohol: What You Don't Know Can Hurt You and Others

Myth: "A can of beer or glass of wine has less alcohol than a mixed drink of liquor."

Truth: An ounce of alcohol is an ounce of alcohol, whether it is in a can of beer, a glass of wine, or a mixed drink.



Myth: "Mixing beer and wine and liquor will get you more drunk than drinking only one of them."

Truth: An ounce of alcohol is an ounce of alcohol. It doesn't matter where it comes from, your body will react the same way to it.



Myth: "A cold shower or cup of black coffee will sober someone up."

Truth: A cold shower or cup of coffee will only keep a drunken person awake. An awake drunken person is more likely to do something dangerous than one who is allowed to sleep it off.



Myth: "It's OK to mix alcohol and other drugs."

Truth: It is very dangerous to mix alcohol with any other drugs. Alcohol can increase or change the effects of other drugs. Alcohol and other drugs are a deadly combination.



How to Know If You or Someone You Know Has a Drinking Problem

Occasional and moderate drinking for persons of legal age (21 years old in Florida) can be a responsible practice. Responsible drinkers eat before drinking and drink slowly. Responsible drinkers limit themselves to one or two drinks a day. They respect those around them who do not want to drink. They obey the laws—especially the law against driving while under the influence of alcohol. Healthy drinkers do not let alcohol change their personality. They don't drink to become loud or to feel OK about having casual sex. Alcohol does not become their excuse to behave differently than they usually do.



The person with a drinking problem or who is an alcoholic can be helped. Learn the behaviors of someone who has a drinking problem.

- The problem drinker drinks on an empty stomach and gulps drinks. He or she is *drinking to get drunk*.
- The problem drinker *pressures* other people to drink.
- The problem drinker *only socializes with other drinkers* and is uncomfortable with people who don't drink.
- The problem drinker *often gets loud, angry, and violent, or silent and withdrawn* when drinking.
- The problem drinker *drinks to solve problems*; he or she believes alcohol will cure his or her sadness or emotional pain.

Recovering from Alcohol Abuse: Returning to a Productive Life

Alcohol is a very addictive substance. A teenager can become an alcoholic after only a few months of heavy drinking. Alcoholics are willing to give up everything in life to get a drink and continue drinking. Alcoholics often drop out of school and lose their jobs, their families, and even their health. Fortunately, there is help.

Problem drinkers, or alcoholics, usually go through four steps in their road to recovery. The first step is to realize and accept the problem. As long as drinkers deny they have a drinking problem, they cannot begin to get well. Problem drinkers can be very good at denying their problem. They may tell themselves "I wouldn't drink if others would treat me well." Or "I'm not like these other people who can't handle booze."

Four Steps to Recovery

1. Realize and accept the problem.
2. Enter a program.
3. Gain self-understanding.
4. Raise self-esteem.

Next, problem drinkers enter a program. A program includes individual or group counseling. Sometimes alcoholics will first need to enter a hospital during withdrawal to regain their health and strength. At this point, the drinker has begun to share his or her life with the outside world.



The third step leads problem drinkers to self-understanding. Drinkers drink for a reason. They need to become aware of why they drank. They need to see themselves in a new way and to build a self-image that does not include alcohol.

Lastly, problem drinkers need to gain confidence in their ability to work and socialize. Alcoholics have low self-esteem. They need to raise their self-esteem and begin to value their abilities. They need to become productive members of society.

To recover from alcohol, problem drinkers must understand that even when they are not drinking, they are still alcoholics. They must remain on guard against again falling into abusive drinking.

Call for Help: Begin a Program to Recover

Many groups and agencies have been formed to help people with alcohol problems. Alcoholics Anonymous (AA) is a group that has been helping drinkers stay sober for many years. To reach AA, call 1-212-870-3400. The

Call for **HELP!** Alcoholics Anonymous (AA)

1-212-870-3400
<http://www.aa.org/>



National Clearinghouse for Alcohol and Drug Information (NCADI)

1-800-729-6686
<http://www.health.org/>



Al-Anon/Alateen

1-888-4AL-ANON
1-888-425-2666
<http://www.al-anon.org/>



North Florida

www.northfloridaal-anon.org

South Florida

www.southfloridaal-anon.org



National Association for Children of Alcoholics (NACoA)

1-888-55-4COAS
1-888-554-2627



National Clearinghouse for Alcohol and Drug Information will answer any questions you have about alcohol and how to stop letting it run your life. Their toll free number is 1-800-729-6686. If someone in your family drinks too much alcohol, you also need help. An alcoholic affects not only himself but those around him. Al-Anon/Alateen is an organization that helps family members of alcoholics recover. Alateen is a recovery program for young people. Call them toll free at 1-888-425-2666. There is also the National Association for Children of Alcoholics (NACoA). NACoA advocates for all children and families affected by alcohol and other drug dependencies. Call them toll free at 1-888-554-2627.



Practice

Use the list below to complete the following statements.

alcohol	fetal alcohol syndrome (FAS)
blackouts	hangover
blood alcohol level (BAL)	heart
depressant	inhibitions

1. How the body is affected by alcohol depends mostly on something called the _____ .
2. _____ affects babies whose mothers abused alcohol during pregnancy.
3. When drinking alcohol, people lose their _____ .
4. The _____ will eventually become damaged by years of abusive drinking.
5. _____ is the drug in *beer*, *wine*, and *liquor*.
6. A _____ is really the body going through withdrawal.
7. The person who abuses alcohol may suffer from _____ and not remember what has happened.
8. Alcohol is a _____ .

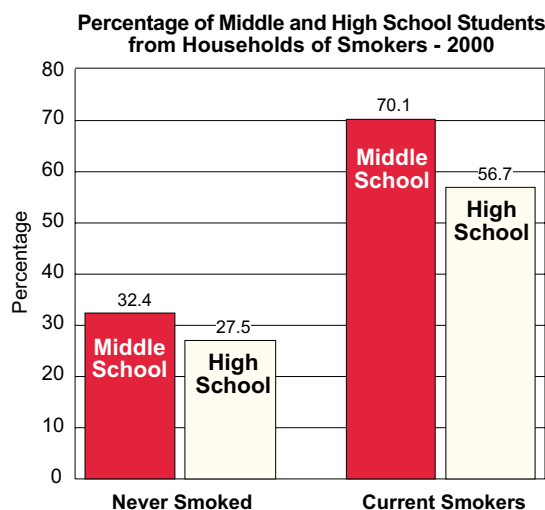


Tobacco: The Legal Drug That Damages the Body on Contact

Very few people who have smoked a cigarette enjoyed their first experience. The first-time smoker probably choked and coughed on the smoke. He or she may even have become dizzy and suffered a headache and an upset stomach. Good news: cigarette smoking has been rapidly declining among American teenagers. Still, almost one in every 18 eighth-graders, one in every eight tenth-graders, and one in every five twelfth-graders regularly smoke cigarettes. Why do people start and continue to use this life-threatening product?

Why People Start Using Tobacco: Copying Other People's Behavior

Few people would ever smoke cigarettes if they weren't influenced and encouraged to do so. Many smokers have been influenced by watching their parents, older siblings, and friends smoke. Smoking cigarettes becomes a way to model themselves after their family members. Teenagers are four times more likely to start smoking if they see their parents or siblings smoking. Parents who smoke should understand that they are probably passing their cigarette habit on to their children.



One-half of all teenagers who have at least two friends who smoke also begin to smoke. Very few teenagers who do not have smoking friends become smokers themselves. We can pick our friends, and choosing healthy friends who don't smoke is a good way not to be tempted ourselves to become smokers.



Advertising is also a powerful influence on teenagers. Cigarette ads show macho, healthy cowboys as they ride through beautiful nature scenes. Ads also show attractive men and women socializing. We want to be like these successful and good-looking people. Cigarettes appear to be a part of their image, just as the successful businessperson wears a tailored suit and carries a laptop computer onto a plane. These images, however, are far from the truth. Smokers are not healthy. Nor are they sexy—they smell of stale smoke and have yellow teeth. They may be good-looking for a few years, but smoking will hurt their good looks with added wrinkles and bad skin.

Advertising companies work hard to hook young adults. Advertisers want to replace the two million smokers throughout the world who die each year from lung cancer and other smoking-related diseases.

Why People Continue to Use Tobacco: The Addictive Drug *Nicotine*

Tobacco is made up of hundreds of chemicals. One of these chemicals—nicotine—is an addictive drug. Smokers become addicted to nicotine. Nicotine is a **stimulant** and gives smokers a rush. When this rush wears off, smokers begin to go through withdrawal. They feel a letdown. Without another dose of nicotine in their system, smokers may begin to feel irritable, dull, sleepy, and even angry. To avoid feelings of withdrawal, smokers smoke another cigarette.

Smokers also begin to make smoking part of their routine. After eating, they light up a cigarette. With a soft drink or beer, they smoke a cigarette. They take a smoke break at work. They learn to have a cigarette when they awaken in the morning or as they drive to school or work. So their routines reinforce their need for cigarettes. Every time they finish eating, their mind says: “It’s time for another smoke!”

Smokers also continue to smoke to avoid *smoker’s cough*. If you’ve ever watched a smoker begin to cough uncontrollably, you have seen *smoker’s cough*. This cough is actually caused by tiny fibers in the lungs attempting to clear germs, mucus, and dirt from the lungs. The smoker smokes another cigarette to paralyze these fibers and stop the cough.



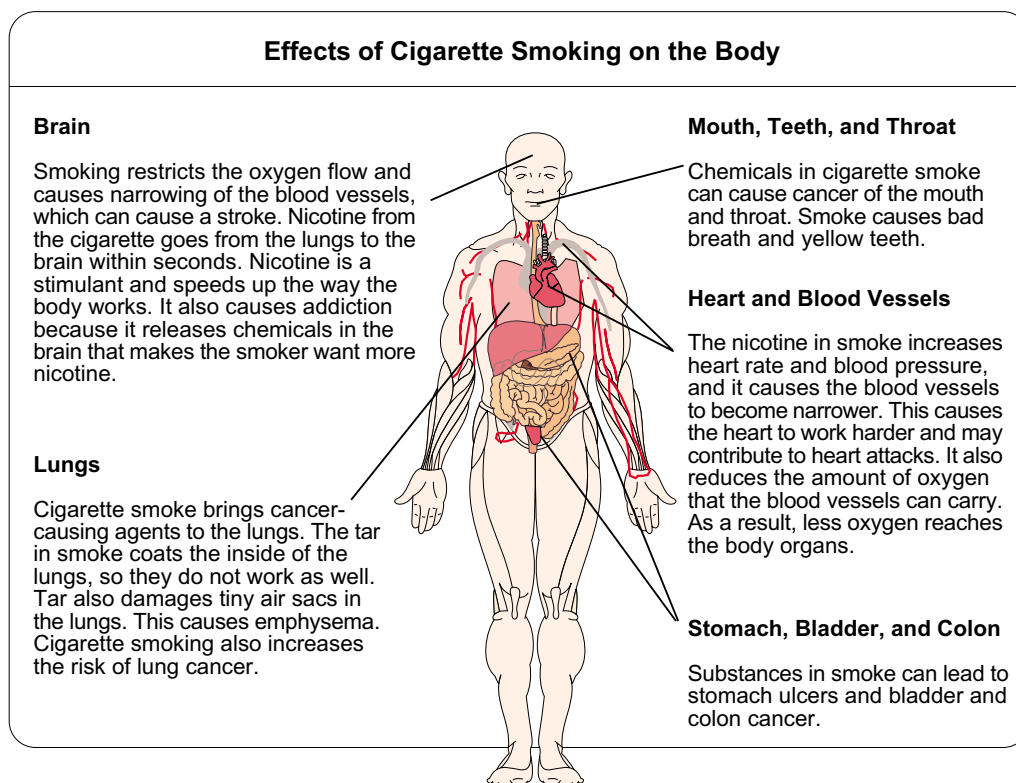
Very few teenagers who do not have smoking friends become smokers themselves.



Like alcohol, cigarettes are a legal drug. The smoker who wants to quit will have a difficult task. Cigarettes are hard to hide from. We see them in ads, in movies, in restaurants ... everywhere! The best way to avoid a cigarette addiction is not to start smoking.

How Tobacco Affects the Body

Three of the most poisonous and harmful ingredients in cigarettes are nicotine, **tar**, and *carbon monoxide*. Nicotine cuts down the flow of blood in the body. Consequently, the body becomes starved for the oxygen carried by blood. The heart pumps harder to try to get more blood and oxygen to the different parts of the body. Nicotine also raises the smoker's blood pressure.



The tar in tobacco is brown and sticky—it is similar to the tar used to cover roads and roofs. The sticky mass coats the smoker's lung. Tar is a cancer-causing substance.

Carbon monoxide is a poisonous gas. It robs the blood cells of oxygen. Smokers actually choke their body when they inhale smoke. The body will be short of oxygen for up to six hours after a person smokes a cigarette.



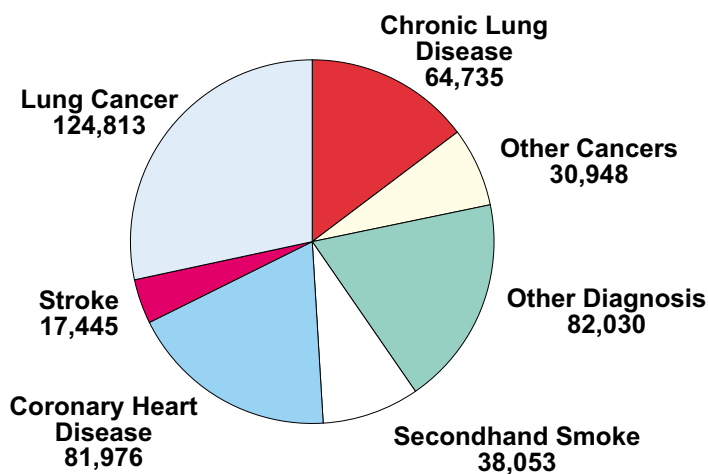
Nothing a cigarette actually does to the body makes people feel good or relaxed. Smokers have *taught* themselves to enjoy cigarettes' harmful effects on the body.

Health Risks

Cigarette smoking is the leading cause of preventable death in the United States. Tobacco will kill more than 440,000 Americans this year. Cigarettes will even start nearly 25 percent of all fires in the United States each year. If we could end smoking, many long-term health problems would be eliminated. Smokers are twice as likely to die from *cancer* as nonsmokers. Most cases of lung cancer would vanish. There would be many fewer cases of cancer of the throat, kidneys, the bladder, or the pancreas. Smoking is a major cause of emphysema, a painful disease of the lungs that leaves its victims choking for air.

Smoking also causes immediate health problems. As soon as smokers take a few puffs on a cigarette, their hearts speed up. The temperature in their fingers and toes drops—smokers are often cold. Smoking keeps their immune system from doing its job. Consequently, smokers are more likely than nonsmokers to catch colds, the flu, or other infections.

**440,000 Deaths in the United States
from Smoking Cigarettes***



*average annual number of deaths from 1995-1999

Pregnant mothers who smoke are starving their babies of needed oxygen. These mothers have more miscarriages, premature births, and low-weight births than mothers who don't smoke.



Passive Smoke: How Cigarettes Kill Nonsmokers

Unfortunately, even people who don't smoke can be harmed by smokers. Smoke inhaled by a smoker is called *mainstream smoke*. Smoke from the burning end of a cigarette is called *sidestream smoke*. Sidestream smoke can be more harmful to nonsmokers than mainstream smoke is to smokers. Some studies show that sidestream smoke contains *more* nicotine, tar, and carbon monoxide than mainstream smoke.

Breathing in the smoke from other people's cigarettes is also called *passive smoking*. You are at risk of developing many of the same diseases and disorders that smokers do, if you breathe sidestream smoke. In fact, for every eight smokers who die from tobacco, one nonsmoker dies from secondhand smoke. This adds up to more than 65,000 nonsmokers who will die from *passive smoking* this year. Children of parents who smoke have more lung diseases than the children of nonsmokers.

Remember: Everyone has a right to breathe clean air. Many laws have recently been passed that ban smoking in public places such as government buildings and universities. You have the right to ask that they are enforced!



Smokeless Tobacco: Chewing and Dipping

Smokeless tobacco is chewed or dipped. When chewing tobacco is used, a wad or "quid" is placed between the cheek and teeth. The user sucks on it to get the taste. When tobacco is dipped, the user places a pinch between the lower lip and teeth. The tobacco juices mix with saliva and are absorbed into the body.

The juices from both the chew and the dip must be spit out or swallowed. The nicotine in both of these tobacco products causes the

Smokeless tobacco—snuff and chewing tobacco

- **Health problems and other negative effects**—face, mouth, throat, and stomach cancer, gum recession, gum disease, loss of bone in the jaw, mouth sores, precancerous lesions in the mouth, stomach ulcers, hypertension, heart disease, bad breath, tooth decay, and tooth stains.
- **Addictive**—the amount of nicotine absorbed is 2 to 3 times the amount delivered by a cigarette.

Early signs of oral cancer:

- sores, lumps, or white or red patches
- sores that do not heal
- sore throat for prolonged time
- difficulty chewing
- feeling of something in throat
- restricted movement of jaws or tongue





same health problems that cigarettes do. These products, however, also cause extreme damage to the mouth. Oral cancer, or cancer of the mouth and gums, is often caused by smokeless tobacco. Chewers and dippers also experience tooth decay—their teeth fall out and the roots become sensitive to heat and cold.

Quitting: Being Good to Your Body

Most teenagers who smoke claim they will quit. Three out of four, however, will fail. Smoking is a hard habit to quit—without a plan. There are two basic ways to quit: *tapering off* and going *cold turkey*.

When smokers taper off, they begin smoking fewer and fewer cigarettes each day until finally they are not smoking. When smokers use the cold turkey method, they just suddenly quit. They may pick a day after which they will not smoke another cigarette. Some people find this method easier. It is easier for them to not smoke at all than to smoke fewer cigarettes than they usually do.

There are also products that help smokers quit. One product is a patch worn on the skin. The patch releases nicotine into the smoker's body. Each day the smoker wears a patch that releases less nicotine into the body. This gradual withdrawal from nicotine saves smokers from the discomfort of physical withdrawal from nicotine.

Although this system and others can help lessen the discomfort of physical withdrawal, almost all smokers have developed a psychological dependence on cigarettes. Cigarettes have been a part of their daily routine. They have used cigarettes to seek comfort. They look forward to their cigarettes at different times of the day. Giving up this comfort will not be easy.

One way to overcome a psychological dependence on cigarettes is to learn the benefits of being a nonsmoker.

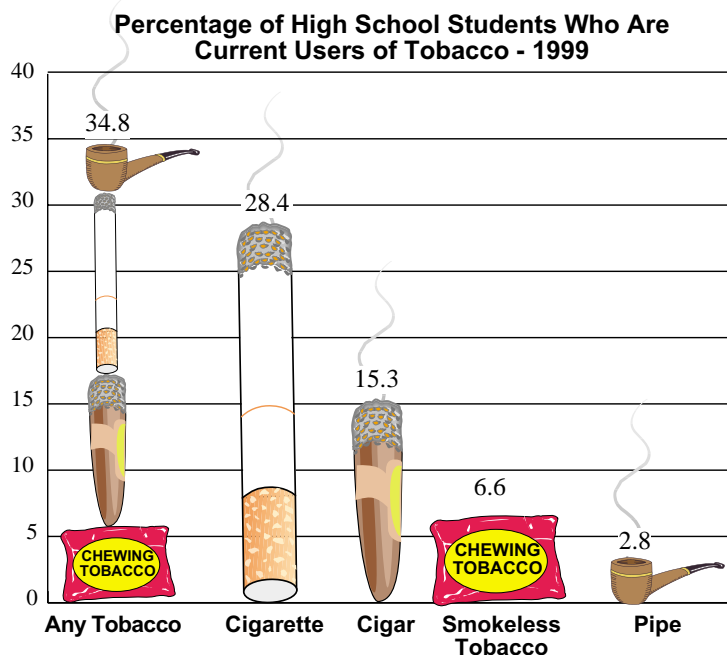
- I can breathe deeply, and the air I take in is clean and healthy.
- My food tastes better. My sense of taste is much sharper now that it's not being dulled by cigarettes.



- I don't have to buy cigarettes; I'm saving a lot of money. I don't have to carry cigarettes around.
- I don't smell; my breath, clothes, and hair smell good again.
- I don't have to offend others and foul their air with my smoking habit.
- I can date many more people who otherwise would not tolerate my bad habit.
- My surroundings are no longer filled with dirty ashtrays and ugly cigarette butts. And I'm not tempted to litter the streets with my cigarette butts.

Try to concentrate on the gains you'll make from not smoking rather than the craving you feel for another cigarette. Avoid the places and situations where you used to smoke—change your routine. When you feel the urge for a cigarette, go for a walk, exercise, or spend time with people who don't smoke.

If you need help to quit, see your doctor, nurse, or local health department. The sooner you decide to quit, the easier it will be.





Practice

Use the chart below to write one of the **physical effects** from the **use of tobacco and alcohol** beside each number.

Tobacco	Alcohol
1. _____ _____ _____	1. _____ _____ _____
2. _____ _____ _____	2. _____ _____ _____
3. _____ _____ _____	3. _____ _____ _____
4. _____ _____ _____	4. _____ _____ _____
5. _____ _____ _____	5. _____ _____ _____
6. _____ _____ _____	6. _____ _____ _____



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. Over-the-counter drugs cannot be abused.
- _____ 2. A can of beer or glass of wine has less alcohol than a mixed drink.
- _____ 3. *Denial* is a strategy used by many drug users to avoid the truth.
- _____ 4. One-half of all the people in our jails and prisons are serving time for selling, buying, or using illegal drugs.
- _____ 5. It's OK to mix alcohol and other drugs.
- _____ 6. Driving or riding with someone under the influence of alcohol is the leading cause of death among teenagers.
- _____ 7. Drugs of abuse produce a feeling of euphoria called a *high*.
- _____ 8. Alcohol and other drugs are a deadly combination.
- _____ 9. A cold shower or cup of black coffee will sober someone up.
- _____ 10. Using tobacco cannot cause death.
- _____ 11. Mixing beer and wine and liquor will get you more drunk than drinking only one of them.
- _____ 12. The same amount of alcohol will affect a thin person more than it will affect a heavier person.
- _____ 13. Having alcohol in your nervous system can increase or change the effects of other drugs.

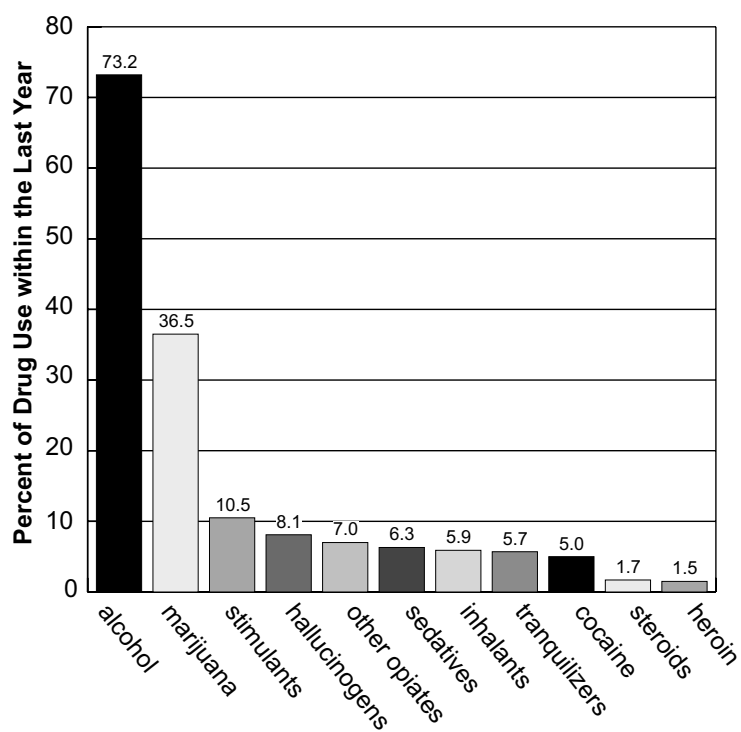


Psychoactive Drugs: Drugs That Affect the Mind

Drugs of abuse are also known as **psychoactive drugs**. *Psycho-* refers to the *mind*, or brain. These drugs act on the user's brain. Some of them will put us to sleep; others will keep us awake. Some of them will make us hallucinate; others will confuse and disorient us. According to how they act on the brain, psychoactive drugs can be classified as **cannabinoids**, **hallucinogens**, stimulants, depressants, **narcotics**, or **inhalants**.

One thing all of these drugs have in common is that they are extremely dangerous. When abused, these drugs will harm the body and the mind. Some may even cause death.

Drug and Alcohol Use by High School Seniors - 2000



Cannabinoids: Marijuana and Hashish

Marijuana is often called by its slang names, including *pot*, *grass*, *weed*, and *Mary Jane*. Marijuana is smoked as a cigarette, called a *joint*, or in a pipe. Some users eat marijuana. Marijuana comes from the dried flowered tops and leaves of the hemp plant *Cannabis sativa*. Hashish is a concentrated form of marijuana and is usually smoked in a pipe.



How Cannabinoids Affect the Body and Mind

When these drugs are smoked, their key ingredient, THC (tetrahydrocannabinols), is absorbed into the lungs. It then travels through the blood to the brain. Once in the brain, it begins to act on the central nervous system. These drugs give the user a feeling of euphoria. Some users will also hallucinate, or begin to see and hear things that aren't really there. Users will also experience an altered sense of time. A few minutes may seem like hours, or an hour may seem like a few minutes. Almost all users feel the urge to eat, an experience commonly referred to as the *munchies*. Marijuana and hashish users often have reddened eyes and dilated, or enlarged, pupils. Their mouths often become very dry.

Marijuana and hashish can make some users feel anxious and uncomfortable. They may feel afraid of the surrounding world. This experience is called *paranoia*. Some users will lose their self-confidence and become confused. They may not be able to understand others or put together sentences that make sense. They may lose their coordination, balance, and ability to drive—just as they would if they were drunk. They may also feel sleepy and weak.



*Marijuana comes from the dried flowered tops and leaves of the Indian hemp plant, *Cannabis sativa*.*

Health Risks

During the 1960s, when marijuana and hashish use was common, users claimed that the drug was safe and not harmful. However, these drugs are not harmless. They damage the lungs more than even tobacco does. Users of these drugs increase the risk of developing lung cancer. These drugs cause the heart to beat faster or irregularly. The user's immune system is impaired and loses some of its ability to fight off diseases. Some marijuana plants have been treated with dangerous and poisonous pesticides. Users will never know whether the marijuana or hashish they are smoking contains these poisons. These drugs also reduce a male's sperm count.

Marijuana and hashish not only damage the body, they also damage the mind. Users experience short-term memory loss. Consequently, they find it difficult to learn while using these drugs. They lose their ability to



concentrate and pay attention. Users of these drugs can also develop **amotivational syndrome**—commonly called *burn out*. Marijuana and hashish users may become bored with life and lose their interest in accomplishing long-term goals. They perform poorly in school and work, and they become irresponsible. However, scientists and researchers do not think that these drugs cause permanent brain damage.

Although marijuana and hashish users do not develop a physical addiction, they have been known to become psychologically dependent. When they stop using these drugs, they may *crave* the drug, or want the drug very much. Withdrawal from the drug may cause restlessness, irritability, and nervousness.

Hallucinogens: LSD, Mescaline, Psilocybin, and MDMA

LSD, mescaline, psilocybin, and MDMA (ecstasy) are the most commonly abused hallucinogenic drugs. LSD (lysergic acid diethylamide) is often called by its slang names: *acid*, *trip*, *cubes*, *dots*, and *big D*. It comes from a fungus that grows on some grains. It usually comes in the form of a capsule, tablet, liquid, or is added to absorbent paper, such as blotter paper. LSD is extremely powerful. One danger in using LSD is that the people who make it often pay little attention to the amount they put in each dose. A square of blotter paper may contain enough LSD on it to permanently harm or even kill the user.

Mescaline comes from the peyote cactus. Its slang names include *mesc*, *buttons*, *peyote*, and *bad seed*. It comes in the form of hard brown discs, which are chewed, swallowed, or smoked. It also comes in tablets or capsules that are swallowed. Users may experience vomiting, sweating, and severe stomach cramps.

Psilocybin is a drug that grows on some mushrooms. It is often called *mushrooms* or *shrooms*. The mushrooms are chewed, swallowed, or made into tea.

Although once legal, MDMA, often called *ecstasy*, can no longer be legally produced or used. Ecstasy is not considered a safe drug. Some people may be extremely sensitive to ecstasy and even a single dose can kill them. Research also has linked ecstasy to long-term damage to parts of the brain critical to thought and memory. Many adolescents, however, continue to abuse this drug.



How Hallucinogens Affect the Body and Mind

Users of hallucinogenic drugs will *hallucinate*. These drugs cause users' brains to alter some or all of the images and sounds they receive. Colors may change or grow brighter. Sounds may echo or become louder. In addition, users may see and hear things that are not really there. A streak of light may suddenly pass through the sky. A snake may suddenly wiggle across the floor.

Hallucinogenic drugs are unpredictable. When people take hallucinogens, they cannot know how their mind will be affected. They may experience exciting images and suddenly think of new ideas. Or they may have a *bad trip* and find themselves in a nightmare world they can't escape. Everyone may look like monsters and make them fear for their lives. They may be unable to turn off deafening sounds and blinding lights. As you can see, taking hallucinogens is like rolling dice. You never know what kind of experience you will have or what will happen to you.



Users may have a bad trip on a hallucinogenic drug, and a snake may suddenly appear to wiggle across the floor.

Health Risks

Scientists are unsure whether LSD, mescaline, and psilocybin cause long-term damage to the mind and body. However, these drugs can be very dangerous. They can make users behave dangerously. Users may jump from a high ledge, believing they can fly. They may think a moving car is not dangerous and stand in front of it.

In addition, LSD can leave users with *flashbacks*. In some cases, people who used LSD weeks or months in the past can suddenly experience an LSD trip at any time. Users may be driving a car or taking an important exam. **Remember:** LSD is unpredictable.

After repeated use, larger doses are needed to produce the same effects. However, hallucinogenic drugs do not cause withdrawal symptoms when use is stopped. But do keep in mind that, for some people, even a single dose of ecstasy may cause death.



Stimulants: Amphetamines and Cocaine

Besides caffeine (the drug in coffee and many sodas), the most commonly abused stimulants are amphetamines and cocaine. Amphetamines have many slang names including *bennies*, *speed*, *uppers*, and *crystal*. They are also called *pep pills* because they *pep up* the user.



coca plant

Cocaine comes from the leaves of the coca plant and is used in many forms. When it is made into a white powder, it is called *cocaine*. Cocaine is either snorted or sniffed into the nose or injected into a vein. Cocaine has many slang names including *coke*, *snow*, *blow*, *toot*, *lady*, and *line*. In recent years, cocaine has been sold in a form that can be smoked, commonly known as *crack*, or *rock*. Crack cocaine is sold in small rocks that look like soap. When it is smoked, it makes a *crackling* sound.

Amphetamine addicts are often called *speed freaks*. Cocaine addicts are often called *coke heads*. And crack cocaine addicts are often called *crack addicts*.

How Amphetamines and Cocaine Affect the Body and Mind

Amphetamines and cocaine stimulate the nervous system and do have some medical uses. However, when people use them without a doctor's prescription, this is drug abuse.

People who abuse amphetamines, cocaine, and crack cocaine take the drugs to get the euphoria and rush they produce. However, the rush from these drugs lasts a very short time. These drugs also make users feel excited and powerful—as if nothing can hurt them. This feeling alone often leads users of stimulants to commit violent and dangerous acts. People can become addicted to amphetamines and crack after only one use.

Crack addicts and amphetamine addicts are known to do almost anything to get more of the drug. When people use crack repeatedly, they lose interest in everything else. Their thinking becomes confused. Their vision can become blurred. They don't care about eating, having sex, or even caring for their children.



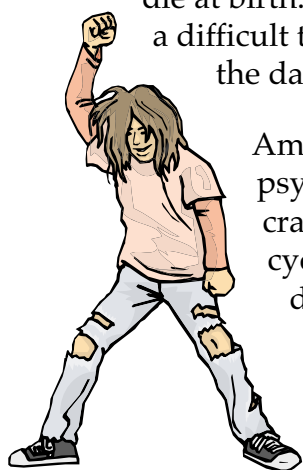
Drug pushers, or sellers, began to make crack or rock because it is cheaper to make than cocaine. Drug pushers could then sell this drug to people who otherwise could not afford to buy it. A dose of crack may cost between \$10 and \$25. A dose of the drug provides 5-20 minutes of a rush. People will often buy and do crack until their money runs out.

Health Risks

People who use amphetamines, cocaine, and crack do much damage to their bodies. Their bodies are forced to work harder than usual. Bodies are like machines, and users of stimulants wear them out. These drugs can cause bleeding of the brain, high blood pressure, and heart and liver damage. Users may even become mentally ill. Many users die of heart attacks, seizures, and strokes. Some famous entertainers and athletes have died from using these drugs.

People who snort cocaine damage their nose and sinuses. They may develop constant nose bleeds. The lining of their nose and sinuses may swell up. They may even end up with a hole in the cartilage that separates their nostrils. People who inject cocaine are apt to contract hepatitis B, AIDS, and other infections.

Smoking crack can cause lung infections and chronic coughs. Pregnant mothers who use crack often have babies with birth defects or babies who die at birth. The babies are born addicted to the drug. They have a difficult time just surviving and will never fully recover from the damage.



People who abuse stimulants take the drugs to get the euphoria and rush they produce.

Amphetamine, cocaine, and crack addicts develop a psychological addiction. When the drug wears off, they crash and depression sets in. They often will begin a cycle in which they take the drugs to escape their depression. When the drug wears off, they crash again. And so they take the drug again to escape the tired and empty feeling.

During withdrawal they will feel irritable, tired, and sleepy. Most will experience depression and will do most anything to get drugs. Some amphetamine addicts have even committed suicide when they couldn't get the drug.



Abused Drugs and Substances

Drug	Drug Forms	Slang Names	Effects of Normal Dose	Effects of Single Overdose	Effects of Habitual Overdose
Barbiturates	sleeping pills	downers, goofballs, yellow jackets, reds, phrennies, red devils, sopers, blues, ludes	sleepiness; fatigue; forgetfulness; unable to think clearly	extreme sleepiness; poor or unclear speech; deep sleep or coma; death	persistent sleepiness; persistent forgetfulness; psychological and physical dependence; causes tolerance; death
Tranquilizers	ativan, librium, valium, xanax	downers	feeling of calm and no worries; induce sleep	extreme sleepiness; dizziness; poor vision; poor or unclear speech	psychological and physical dependence; may destroy blood cells; may cause coma; may cause death
Narcotics	codeine, heroin, methadone, morphine	schlooby, H, horse, junk, scag, smack, dolly, M, white stuff	stop pain; sleepiness; unable to work or think clearly	extreme sleepiness; possible deep sleep; possible coma; may cause death	persistent sleepiness; persistent forgetfulness; psychological and physical dependence; causes tolerance; may cause death
Alcohol	beer, wine, whiskey, other liquors	booze, hooch, juice brew, vino, sauce	causes silliness and clumsiness; unable to think clearly or react quickly	drunkenness; upset stomach; coma; death	weight gain; alcoholism; brain damage; psychological and physical dependence; causes tolerance
Caffeine	coffee, cola, tea, cocoa	none	feeling of being awake; increased ability to think and react quickly	crankiness; nervousness; unable to sleep; upset stomach	extreme restlessness; unable to sleep; upset stomach; bouts of anger; psychological dependence; causes tolerance
Amphetamines	benzedrine, dexedrine, methedrine	uppers, bennies, dexes, speed, crystal, ice	increased blood pressure; increased heart beat; increased breathing rate; extremely awake and overly excited	extreme restlessness; rapid speech; inability to sleep; cause stomach problems; loss of control of muscle movement	extreme sleeplessness; poor eating habits; mental illness; skin problems; hallucinations; brain and heart damage; psychological dependence; causes tolerance; may cause death
Cocaine	powder, pills, "rocks"	snow, coke, toot, line, crack, rock, C, blow, lady	increased blood pressure; increased heart beat; increased breathing rate; overly excited	extreme restlessness; inability to sleep; stomach problems; depression; mental illness	sleeplessness; persistent state of being overly excited; mental illness; damage to blood vessels; psychological dependence; causes tolerance
Nicotine	cigarettes, cigars, pipe tobacco, smokeless tobacco	smokes, butts, chew	feeling of calm; increased blood pressure	headaches; upset stomach; loss of appetite	breathing problems; heart and lung diseases; psychological dependence; causes tolerance
Marijuana	cigarette	pot, grass, weed, Mary Jane, tea, reefer, joint, roach, doobie	light-headedness; loss of sense of time and how fast things are moving	feeling of drunkenness and fear; hallucinations	extreme fatigue; loss of interest in school or work; throat and lung problems; mental illness; psychological dependence; low sperm count
Other Hallucinogens	LSD, mescaline, psilocybin, PCP, MDMA	acid, blotter, green/red dragon, big D, sugar, dots, trip, cube, mesc, buttons, peyote, bad seed, mushrooms, shrooms; angel dust, loveboat; ecstasy, designer drug, X	loss of sense of time and how fast things are moving; increased energy; feeling of fear; hallucinations	feeling of fear; sickness; mental illness; extreme fatigue; shaking and tremors; hallucinations; death	extreme feelings of fear; mental illness; hallucinations; psychological dependence; causes tolerance
Inhalants	solvents, aerosols	glue, benzene, toluene, freon	feeling of calm; unable to move well; damage to nose and lungs	extreme sleepiness; feeling and look of drunkenness; deep sleep or coma; death	hallucinations; damage to the brain, liver, kidneys, and bones; psychological dependence; causes tolerance; death



Depressants: Barbiturates and Tranquilizers

Stimulants *speed up* the nervous system. Depressants do just the opposite—they *slow down* the nervous system. The depressant most often used and abused is alcohol. Barbiturates and tranquilizers are the other most abused depressants. They come in the form of pills. Barbiturates and tranquilizers have many slang names including *yellow jackets*, *reds*, *downers*, *goofballs*, *sopers*, *ludes*, and *blues*.

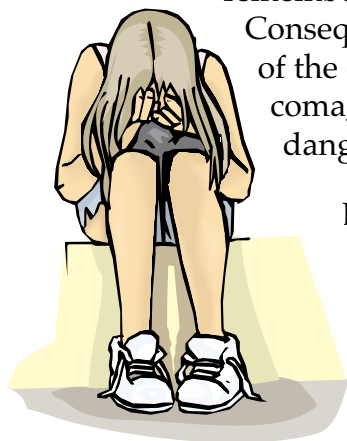
How Barbiturates and Tranquilizers Affect the Body and Mind

Barbiturates and tranquilizers slow the heart rate and lower blood pressure. Used under a doctor's directions, barbiturates and tranquilizers can improve and even save some people's lives. These drugs can help control epilepsy and mental illness.

Abusers of these drugs enjoy having their senses dulled by the drug. They enjoy having their body functions slowed down. They like the sleepy feeling and calmness brought on by the drugs. Some people even enjoy the confusion, lack of judgment, and forgetfulness produced by barbiturates. However, these drugs pose serious dangers.

Health Risks

Long-term use of barbiturates and tranquilizers can cause depression in users. Because their judgment and memory is poor, they may not remember how many pills they have taken.



Long-term use of barbiturates and tranquilizers can cause depression.

Consequently, they may take an overdose. An overdose of the drug may cause users to fall into a stupor or coma, and they may die. These drugs are particularly dangerous when mixed with alcohol.

Barbiturate and tranquilizer addicts become physically and psychologically addicted. During withdrawal, addicts sweat heavily. They may experience nausea and vomiting, and have seizures. They may suffer from panic attacks and even *psychosis*. Psychosis is a mental disorder. People with psychosis often hallucinate. They may withdraw from reality.

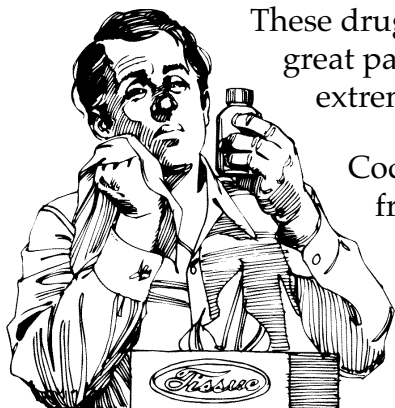


Narcotics: Codeine, Heroin, Morphine, and Opium

Narcotics are derived from the opium poppy plant. Some narcotics are prescribed by doctors to relieve pain, coughs, or diarrhea. Narcotics are abused because they produce euphoria in users. The most commonly abused *narcotics* are codeine, heroin, morphine, and opium. These drugs have many slang names including *smack*, *horse*, *scag*, *white stuff*, and *M*.

How Narcotics Affect the Body and Mind

The word *narcotics* comes from *narcosis*, which means sleep. These drugs are used to help patients who suffer from great pain. Narcotics help block pain and cause extreme sleepiness.



Some narcotics are prescribed by doctors to relieve pain, coughs, and diarrhea.

Codeine is legally used to help people who suffer from intense coughing. It comes in liquid form, capsules, and tablets. It is abused for the euphoria it produces.

Morphine is a very strong painkiller. Doctors use morphine to give cancer patients relief from the extreme pain they feel. It comes in white crystals, tablets, and solutions. It is swallowed or injected.

Heroin is the most abused of all the narcotics. It is illegal in the United States and has no medical use. It comes in the form of a powder or a tar-like substance. It can be smoked, snorted, or injected. Users of heroin say that all their worries disappear and they feel a sense of euphoria. However, when the heroin wears off, users will feel even more of the worry or anxiety they were trying to escape.

Opium relieves pain and produces euphoria. Users lose their appetite and their ability to think and remember. It comes in chunks or powders and is smoked, eaten, or injected.



Health Risks

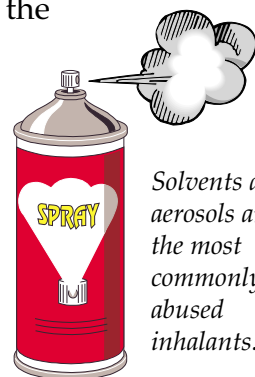
Users of narcotics are often sick. These drugs keep the immune system from working to fight disease. Abusers who inject narcotics may develop skin infections. Users sometimes do not care about their health or hygiene. They often share needles and many become infected with hepatitis B or the fatal AIDS virus. Abusers who overdose often die.

Narcotics cause physical and psychological addiction. During withdrawal, addicts experience chills, muscle aches, spasms, nausea, vomiting, and sleeplessness. Withdrawal is so painful that addicts will do almost anything to avoid it. The most important thing in most addicts' lives is to get more of the drug. They will commit crimes and sell their bodies to get a dose, or *fix*, of the drug.

Inhalants: Solvents and Aerosols

Inhalants are substances that can be inhaled, or breathed in.

Users soak a rag with the substance and then inhale the fumes. *Solvents* and *aerosols* are the most commonly abused inhalants. Solvents are liquids that become fumes at room temperature. Aerosols are substances added to products to make them sprayable.



Solvents and aerosols are the most commonly abused inhalants.

How Inhalants Affect the Body and Mind

Inhalants work on the cells in the brain. Like hallucinogens, inhalants cause unpredictable effects. They may cause excitement, irritability, lack of coordination, or loss of judgment. They may cause sleepiness and affect users much the way alcohol does. Some users lose their fear and will do many things they otherwise would not. Some users will even hallucinate.

Health Risks

Inhalants are easy to find and use, but they may cause some of the most damaging health effects—including death—of any substances abused. They can cause paralysis. They can make users pass out and have seizures. If users pass out while they are in the act of inhaling a substance, they may continue inhaling the fumes and die.



Inhalants also cause brain damage, heart attacks, and lead poisoning. They can damage the nose, throat, lungs, and nervous system. Inhalants can displace the oxygen in the lungs and cause death by suffocation. They were never meant to be used inside the body, and the body reacts to them as it would to any poison.

People develop physical and psychological addictions to inhalants. During withdrawal, the addict may hallucinate, or have tremors, cramps, and chills.



Practice

Use the list below to complete the following statements.

amotivational syndrome	hallucinogens	stimulant
cannabinoids	inhalants	tar
depressants	narcotics	

1. Nicotine is a _____ and gives smokers a rush.
2. Three of the most poisonous and harmful ingredients in cigarettes are nicotine, _____, and carbon monoxide.
3. Marijuana and hashish users become bored with life and lose their interest in accomplishing long-term goals. Users of these drugs can also develop _____, commonly called *burn out*.
4. When _____ are smoked, their key ingredient, THC (tetrahydrocannabinols), is absorbed into the lungs. These drugs give the user a feeling of euphoria.
5. LSD, mescaline, psilocybin, and MDMA (ecstasy) are the most commonly abused _____.
6. Stimulants *speed up* the nervous system. _____ do just the opposite—they *slow down* the nervous system.
7. _____ are derived from the opium poppy plant.
8. Solvents and aerosols are the most commonly abused _____.



Other Illegal Drugs Produced and Sold: *Look-Alikes* and *Designer Drugs*

Look-alike drugs are made to look like certain illegal drugs. For example, *look-alike drugs* are made to look like real amphetamines and imitate their effects. They are sold on the street as *uppers* or *speed*. These drugs are really a mix of legal over-the-counter drugs found in diet pills and decongestants. However, each batch of look-alikes varies in strength. The user never really knows exactly what he or she is getting. Because look-alikes are often weaker than illegal drugs, people often take too many of them. The mixtures in look-alikes can cause dangerously fast heart rates, changes in blood pressure, strange behavior, nervousness, and breathing problems. Regular use can lead to psychosis. Use in combination with other drugs, such as alcohol, can lead to serious reactions.

Designer drugs are synthetic drugs similar in chemistry to certain illegal drugs. For example, the designer drug MDMA (ecstasy) resembles cocaine in chemistry. These drugs do not undergo quality control. They may be more dangerous than the original, imitated drug. Symptoms of designer drug use include uncontrollable tremors, drooling, impaired speech, paralysis, and irreversible brain damage.

Drug Use: The Penalties You'll Pay

Obviously there are reasons why so many people use drugs. It would be a lie to say that drugs never make people feel good. Many people who have taken narcotics did experience euphoria. They did feel light and carefree. They did believe that the feeling the drug gave them was unique and special. If none of these drugs gave users a heightened experience, no one would do them. And the government would not have to make laws against their sale and use.

But look at all the penalties you'll pay for using a drug illegally or for using an illegal drug. Every state in this country has laws against producing, selling, or buying illegal drugs. Once you are a convicted felon, you can no longer vote, hold a federal job, or own a gun, and you may have difficulty getting hired for many responsible jobs.



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In addition to the legal penalties, developing an addiction or chemical dependence can cost you a lot. Many addicts use all of their money and valuables to buy drugs. They may steal and turn to other kinds of crime to raise money to support their drug addiction. Once addicted, getting the drug becomes the most important thing in their lives. They would steal from family and friends to make sure they can buy drugs.

Drug addicts and users often lose their families and friends. They surround themselves only with others who do drugs. They lose interest in anyone who is not a drug user.

Drugs threaten users' health in many ways. Each time people use drugs, they are risking their health and even their life. One overdose can cause death. If drug users continue to use some psychoactive drugs for months and years, they may permanently damage their health. If a woman uses drugs during pregnancy, she also risks the health of her baby.

Many drug users wake up one day and look back on an unproductive life. Very few long-term drug users would choose to be drug addicts—just ask one.

What to Do If You Have a Drug Problem

If you are experimenting with psychoactive drugs, alcohol, or tobacco, stop now. Each time you use any kind of drug, you are one step closer to becoming a full-time user and one step farther away from getting free of drugs. If you find that you can't stop experimenting, then you know you need help to quit. Admitting to someone that you need help quitting is a very responsible and mature act.

Denial is a strategy used by many drug users to avoid the truth. They deny to themselves and to others the fact that they do have a drug problem. "I can quit anytime I want to," they will say. Or "I only do drugs because there is nothing else to do." They have trouble being honest about their drug use. Check to see if you are using denial to explain your drug problem. **Remember:** alcohol is the most abused psychoactive drug by adolescents.



Answer the following:

- Have your personal appearance and hygiene gotten worse since you first used drugs?
- Do you find yourself lying to your parents or friends to hide your drug use?
- Are you spending your money on drugs or borrowing money from others to buy drugs?
- Has your schoolwork suffered since you began doing drugs?
- Has your memory gotten worse since you began doing drugs?
- Do you find yourself spending a lot of time thinking about buying and using drugs?
- Have your relationships with your family and friends suffered since you began doing drugs?

If you answered “yes” to any of these questions, then do yourself the biggest favor of your life. Just make a call and talk to *someone*. The Center for Substance Abuse Treatment National Drug and Alcohol Treatment Referral Service will help you understand how drugs are affecting your life. They will help you find help. Call their toll free number: 1-800-622-HELP (1-800-622-4357). Pass the word on to a friend who could use the help.



**The Center for Substance
Abuse Treatment National
Drug and Alcohol Treatment
Referral Service**

1-800-622-4357

Alternatives to Drugs

Many drug users began using drugs to relieve their boredom. Responsible people, however, find more productive ways to fill their time. Finding interesting things to do is not always easy. You have to take responsibility for your time.



Rather than harming your *body* with drugs, look for some healthful alternatives. Take up a sport. Develop a fitness routine. When you exercise, your brain releases *endorphins*. Endorphins are chemicals that give you a natural high. This effect is often called *runner's high*.

Rather than harming your mind with drugs, look for some healthful alternatives. Take up an art or a craft. The pleasure we get from using our creativity and making something also gives us a rush—a natural rush.



Rather than harming your body with drugs, look for some healthful alternatives.

Consider your time too important to spend in a wasteful activity such as using drugs. Drug use just burns time. All of us have bad days. We may find ourselves wondering whether it matters if we accomplish something. Drug users use their doubt as an excuse to do drugs. People with strong wills and positive attitudes take a different approach. They know that a productive and healthy life will not just happen. They know that they must make life valuable. And they know that drugs are valuable only to the person who sells them.

Summary

Drugs are classified in three different ways. *Over-the-counter drugs* are easily available at many stores. *Prescription drugs* can only be bought with a prescription, or doctor's note. *Illegal drugs* describe drugs that cannot be legally made or sold. Illegal drugs also describe prescription drugs which have been stolen, given away, or sold on the street.

Many drugs are used properly and legally to help people with physical and emotional problems. However, drugs have become a major concern for our communities. Some drugs are powerful substances that many people are abusing. Some drugs, including *psychoactive drugs*, make users feel *euphoria*, or they speed up or slow down the *nervous system* of drug users. Some psychoactive drugs cause people to *hallucinate*, or see, hear, or feel things that are not real.

Psychoactive drugs include *alcohol*, *cannabinoids* (marijuana and hashish), *hallucinogens* (LSD and ecstasy), *stimulants* (amphetamines, cocaine, and crack cocaine), and *narcotics* (codeine, heroin, morphine, and opium).



These drugs can cause users to become *physically dependent*, *psychologically dependent*, or both. When users are dependent on, or *addicted* to, a drug, their bodies need the drug. If they don't get the drug, they will experience *withdrawal*. Withdrawal describes the physical or emotional symptoms a person experiences as a drug is cleansed from the body.

Users of psychoactive drugs will also develop a *tolerance* for a drug. They will have to use more and more of the drug to get the experience they want. The more drugs they take, the more damage could be done to their body.

Drugs harm the body in a number of ways. Some can cause immediate harm. An overdose, or taking too much of a drug, can cause psychosis, brain damage, or paralysis, and can even kill users. In addition, some drugs make users behave irresponsibly. An intoxicated person will experience loss of coordination and reflexes. However, users will also lose judgment. They may believe they can safely drive or do other difficult tasks. Users may *hallucinate* and believe they can safely jump from a high ledge. And many drugs cause people to lose their *inhibitions*. They may have casual sex or behave in ways they otherwise would not. Unfortunately, one moment of poor judgment can result in a person becoming pregnant or being infected with hepatitis B or the deadly AIDS virus.



Drugs also cause long-term harm to the body and mind. Alcoholics often suffer from liver disease and other organ damage. Cigarette smokers suffer from lung disease and heart problems, as well as premature wrinkles. People who are addicted to stimulants may die of heart attacks, seizures, or strokes.

Most drug *addicts* become so dependent on drugs that their whole life is centered on getting and using drugs. They may commit crimes to get money for drugs. They often lose their family's support and only make friends with other drug users. Few drug addicts enjoy their way of life—but addiction can be stronger than many people's wills. Escape from addiction can sometimes take years and may never occur. Fortunately, drug abusers can get help. Many people have recovered from drug *misuse* and *drug abuse*.



Practice

Use the list below to complete the following statements.

blood alcohol level
legal
mind

misusing
over-the-counter

prescription
see and think

1. Drugs work by affecting the body, the _____, or both.
2. Because drugs of abuse affect the way users _____ about their surroundings, users may do something that causes injury or death to themselves or to others.
3. There are three different groups of drugs: over-the-counter, _____, and illegal.
4. *BAL* refers to the _____ in a drinker's body.
5. The use of _____ drugs, such as alcohol and tobacco, harms our communities as much, or even more, than the use of illegal drugs.
6. _____ drugs are also called *nonprescription drugs*.
7. If someone does not follow instructions on the use of drugs, then they are _____ them.



Practice

Complete the following statements with as many **phrases** as you can.

1. Good reasons for someone to *stop* using drugs include ...

2. A hangover, or withdrawal from alcohol, can cause feelings in your body such as ...

3. Ways to respond to someone who is pressuring you to drink include ...



4. Good reasons to be a nonsmoker include ... _____

5. Common methods used to stop smoking include ... _____



Practice

Use the chart below to answer the questions about each **drug**. Write **yes** or **no** in the space provided.

	Alcohol	Tobacco	Crack Cocaine	Marijuana	LSD
1. Is it a drug?					
2. Is it legal?					
3. Does it impair judgment?					
4. Does it produce euphoria?					
5. Does it cause withdrawal?					
6. Is it health-damaging?					
7. Does it affect relationships?					



Practice

Use the chart below to write the **effects** and **health risks** for each **psychoactive drug** in the space provided.

Psychoactive Drugs			
	Examples	Effects	Health Risks
Cannabinoids	Marijuana Hashish		
Hallucinogens	LSD Mescaline Psilocybin MDMA (ecstasy)		
Stimulants	Amphetamines Cocaine		
Depressants	Barbiturates Tranquilizers		
Narcotics	Codeine Heroin Morphine Opium		
Inhalants	Solvents Aerosols		



Practice

Answer the following using complete sentences.

1. Drugs—including alcohol and tobacco—are often described as having damaging effects on the bodies and minds of users. But when teenage students look at other teenagers who use drugs, they often see peers with healthy-looking bodies and even some with smart minds. Why don't these drug users seem to have been hurt by using drugs? What would be a better way for teenagers to see how drugs can affect users?

2. Some teenagers have seen how damaging drugs are. Yet some of these same teenagers still use drugs. What are some of the dangerous beliefs these teenagers use to support their drug use?



3. Some of the earliest ads for cigarettes actually claimed cigarettes were healthy—that smoke was soothing to the throat. However, cigarettes are not healthy. They provide nothing satisfying to a person who is not addicted. What claims do ads use to try to get nonsmokers to start smoking?



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. Drug addicts and users often lose their families and friends.
- _____ 2. Drugs never make a person feel good.
- _____ 3. Smokeless tobacco is chewed or dipped.
- _____ 4. Even those persons who *don't* smoke can be harmed by smokers.
- _____ 5. Pregnant mothers who smoke are depriving their babies of needed oxygen.
- _____ 6. The use of cigarettes, chew, or snuff causes only a few thousand deaths each year.
- _____ 7. Three of the most poisonous and harmful ingredients in cigarettes are nicotine, tar, and carbon monoxide.
- _____ 8. Cigarette and alcohol advertising has little influence on teenagers.
- _____ 9. The last step for an alcoholic on the road to recovery is to realize and accept the problem.
- _____ 10. It's OK to mix alcohol and other drugs.
- _____ 11. The pregnant woman who drinks or smokes puts her baby at risk.
- _____ 12. Alcohol has the most damaging effects on the body than any drug of abuse.
- _____ 13. Alcohol attacks the body's central nervous system.
- _____ 14. Of all drugs, alcohol can be the easiest to become addicted to and the hardest habit to quit.



- _____ 15. Some of the more common legal drugs include cocaine, marijuana, and heroin.
- _____ 16. When we take an aspirin for a headache, we are taking a drug.
- _____ 17. Drugs affect either the body, the mind, or both.
- _____ 18. Over-the-counter drugs require a doctor's prescription.
- _____ 19. Prescription drugs are not available without a doctor's note because they can be dangerous.
- _____ 20. Taking a drug for something other than medical purposes or in a way that can hurt a person's health is called *drug abuse*.
- _____ 21. When a person has a physical dependence, or has a physical addiction to a drug, his or her body will not function normally without the drug.
- _____ 22. Mainstream smoke is more harmful to the smoker than sidestream smoke is to the nonsmoker.
- _____ 23. Psychoactive drugs act on the brain to alter the mood or feelings of the user.
- _____ 24. When abused, drugs harm the body and mind and may cause death.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|---|---------------------------------|
| _____ 1. drugs that can be legally bought without a doctor's note in a grocery store, drugstore, or discount store; nonprescription drugs | A. alcohol |
| _____ 2. the body's increasing resistance to the effect of a drug, creating a need for taking more and more of the drug over time to get the same results | B. drugs |
| _____ 3. leaves used in cigarettes, cigars, chewing tobacco, and snuff | C. fetal alcohol syndrome (FAS) |
| _____ 4. a person's bodily need for a drug | D. inhibition |
| _____ 5. the system in the body that sends and receives messages to control the body's activities | E. over-the-counter |
| _____ 6. a blocking or holding back of a behavior or action | F. nervous system |
| _____ 7. a set of birth defects found in babies who are born to mothers who abuse alcohol during pregnancy | G. physical dependence |
| _____ 8. the drug found in beer, wine, and liquor; affects the nervous system | H. psychological dependence |
| _____ 9. the symptoms experienced by a drug user when he or she stops using a drug | I. tobacco |
| _____ 10. a person's emotional need for a drug | J. tolerance |
| _____ 11. chemical substances that affect the body, the mind, or both | K. withdrawal |



Practice

Use the list below to complete the following statements.

codeine	illegal drugs	oxygen
coffee	look-alike drugs	passive smoking
designer drugs	LSD	psychoactive
heroin	marijuana	

1. Drugs that cannot be legally made or sold, *or* prescription drugs which have been stolen, given away, or sold on the street are called _____ .
2. If you breathe in the smoke from other people's cigarettes, which also is called _____ , you are at risk of developing many of the same diseases and disorders that smokers do.
3. The most commonly abused narcotics are _____ , morphine, opium, and _____ .
4. _____ , mescaline, psilocybin, and MDMA (ecstasy) are the most commonly abused hallucinogenic drugs.
5. Drugs made to look like certain illegal drugs are called _____ .
6. Synthetic drugs that are similar in chemistry to certain illegal drugs are called _____ .
7. Pregnant mothers who smoke are starving their babies of needed _____ .
8. Alcohol is the most abused _____ drug by adolescents.



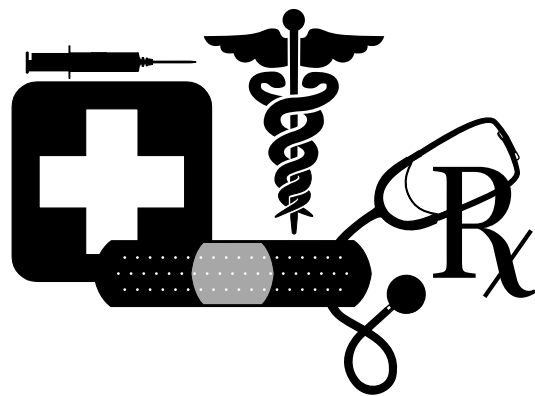
9. A cold shower or cup of black _____ will *not* sober someone up.
10. Hashish and _____ can make some users feel anxious and feel afraid of the surrounding world.

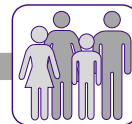
Unit 6: First Aid: Emergency Care

This unit reviews important steps that can be taken in life-threatening situations. The unit also discusses heart attacks, shock, and severe bleeding and what to do in each of these possibly fatal situations.

Unit Focus

- what first aid is and when first aid is used
- easily learned first aid techniques that can save lives
- what we should do at an accident scene or if someone suffers a sudden illness
- the information we should give over the phone during an emergency
- symptoms of a person who may be suffering from shock or a heart attack





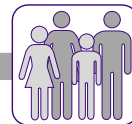
Vocabulary

Study the vocabulary words and definitions below.

- A-B-C-S checklist** the checklist to be done on victims of an accident or sudden illness; check for open *airway*, check for *breathing*, check for *circulation*, and check for *severe bleeding*
- abdominal thrust** a technique used to dislodge a particle such as food blocking a person's airway; also known as the *Heimlich maneuver*
- cardiopulmonary resuscitation (CPR)** a technique used to start the flow of blood and oxygen in a person whose heart is no longer beating
- carotid pulse** the pulse located on either side of the neck, just below the ear
- chest compression** a technique used to circulate the blood in a person whose heart has stopped beating
- circulation** the movement of blood through the body
- conscious** being awake or able to respond
- emergency medical service (EMS)** the team of people who responds to emergencies in each city or town



- first aid** help given first to a victim of an accident or sudden illness
- medical emergencies** situations in which a person or persons need immediate care for injuries or illnesses
- rescue breathing** pushing air in and out of the lungs of a person whose breathing has stopped
- shock** a possible reaction to injury or illness in which blood flows so slowly as to threaten a person's life
- unconscious** inability to be awakened or to respond



Unit 6: First Aid: Emergency Care

Introduction

Every day thousands and thousands of people suffer from a life-threatening injury or illness. Life-threatening injuries or illnesses are **medical emergencies**. In *medical emergencies*, victims must be given medical treatment immediately, or they may die or suffer serious, permanent health problems.

Most of these injuries or illnesses happen outside a hospital or where there is no medical professional to provide immediate treatment. In those cases, victims may not survive if the people who first reach the scene of an accident or illness cannot give **first aid**.

First aid is exactly what the phrase describes. It is the help, or *aid*, that is given *first*. Those persons who arrive first at the scene of a medical emergency will only be able to give first aid if they know a few important techniques. Some of the most important techniques are **rescue breathing, cardiopulmonary resuscitation (CPR), abdominal thrust** (also known as the *Heimlich maneuver*), treatment for severe bleeding, and treatment for **shock**.



Reading descriptions of these techniques is only the first step in being able to use them.

All of us should take a first aid and CPR course. Your local American Red Cross agency and American Heart Association offer training courses.

Learning life-saving techniques and treatments will help both victims and those persons who find themselves at the scene of a medical emergency. Victims will receive the immediate attention they need. Persons who give the treatment will feel the joy and satisfaction of knowing they helped others survive. Imagine finding yourself in the middle of a medical emergency and not knowing what to do. Learn to use your body and mind to save a life.



Responding to an Accident: Look First; Act Second



Imagine that you are driving down an empty highway. As you come over a rise, you discover a car accident. A few people have been thrown from their cars and lie on the side of the road. A few other people are limping around, but they are bleeding and confused. A few others seem unhurt and may not have been involved in the accident. What will you do?

If you are like most people, your heart will begin to beat very fast, and your adrenaline will start pumping. You will begin to feel your body ready itself to respond to this medical emergency. You can train yourself to stay calm and think before you act. To help those who are injured, you will need to keep your head and follow a plan.

Three Basic Steps in an Emergency

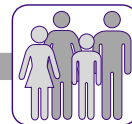
- CHECK the scene and the victim.
- CALL 9-1-1 or your local emergency number.
- CARE for the victim.



Look: Collect Information

First, you will want to *look* and survey the accident scene. Don't be reckless and just rush in to danger. Ask yourself: Is this scene safe for me to enter? Are there any dangers present? Is there a puddle of gasoline leaking from a car or truck? Can you smell gas? Has a power line fallen? Have chemicals been spilled? If you find the scene is not dangerous to yourself, enter the scene carefully.

Next you will begin to *collect information*. This information will be relayed over the phone to the **emergency medical service (EMS)**. EMS is the team of people who responds to emergencies. Whenever you see an ambulance speeding by, you are looking at one part of EMS. In most areas, the phone



number for EMS is 9-1-1. In some areas, however, EMS is contacted by dialing “0” and asking the operator to make the connection. Find out your local EMS number and commit it to memory.



Responding to an Accident

1. Look and survey the accident scene—is the scene safe for me to enter?
2. Collect information—how many victims; how did it happen?
3. Do not move the person unless it is necessary to prevent further injury—moving a victim could cause paralysis.
4. Send for help—go for help yourself only if no one else is around.
5. Treat life-threatening conditions—breathing stopped, heartbeat stopped, severe bleeding—with first aid.
6. Remain with victim until medical help arrives.

If there are any bystanders, ask them what has happened. Ask one of the bystanders to call EMS. Ask another bystander to alert and direct traffic. If you are alone, you should begin your survey of the scene before going in search of a telephone. Ask one of the victims what has happened. “Are there victims trapped or hidden? How many victims are there?”

Do not move any of the victims. If they have neck or spinal injuries, moving them could cause paralysis or even death. However, you may find that you must move a victim to save his life. For example, he may be floating in water or trapped near fire. In these cases, move his body in a way that will put the least strain on the neck or spine. Position yourself at the head end of the person. Use the victim’s shirt, sweater, or jacket. Gather the victim’s clothes tightly behind the neck. Support the victim’s head with the clothes and your hands. Then drag the victim to safety by

pulling the clothes. Keep his head and body in a straight line. If you cannot use the victim’s clothes, place your hands under the shoulders and rest the victim’s head on your arms. Pull the victim in a straight line. Always pull the victim the shortest distance needed to escape the danger.

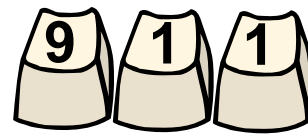




When you come upon a victim, always speak to him. Tap the victim's shoulder. Do not shake the victim. You may further injure the victim's head, neck, or spine. In a loud voice, ask: "Are you OK?" A person who is conscious will answer you. Anyone who can speak has *not* stopped breathing. If he can answer, he is **conscious**. Use a positive and reassuring tone of voice. How a victim feels about his injuries can make a difference in whether he survives. If a victim loses hope, his body may not work as hard as it can to survive.

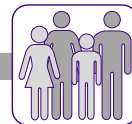
Tell a victim that you are there to help him. Ask him for any information about the accident. For example, ask him the following questions: "Can you tell me what has happened? Are you hurt? Where does it hurt?" And ask him *not to move* until help arrives. You will want to pass the answers to these questions on to the EMS team. If the victim's answers do not make sense, he may have suffered a head injury. If he tells you he was thrown from a car and landed on his head, you can assume he has a head and neck injury. Continue asking the person questions. If the person stops answering, she may have lost consciousness.

If at any time the victim does not answer questions or appears **unconscious**, shout "Help! Call 9-1-1!" Try to get the attention of anyone nearby who may be able to help you and who can call for an EMS team. Whenever you find a person who is unconscious, use the **A-B-C-S checklist** to be sure his injury is not life-threatening.



In many accidents, more than one person has been hurt. In such a case, you must decide who needs your help most. Use the *A-B-C-S checklist* to decide who has suffered a life-threatening injury. Help those victims first.

A B C S Checklist	
(A)irway	Is the victim's airway blocked?
(B)reathing	Has the victim's breathing stopped?
(C)irculation	Has the victim's heartbeat stopped?
(S)evere Bleeding	Is blood pulsing or gushing from a victim's wound?



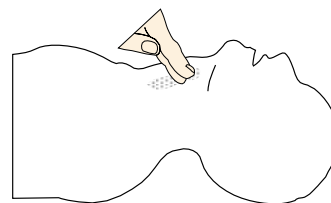
LOOK

LISTEN

FEEL

To check for a *blocked airway* and *breathing*, place your ear and cheek close to the victim's mouth and nose. Use your cheek to *feel* for air. Use your ear to *listen* for breathing. And use your eyes to *see* if the person's chest rises and falls. A good way to remember this is the phrase "look, listen, and feel."

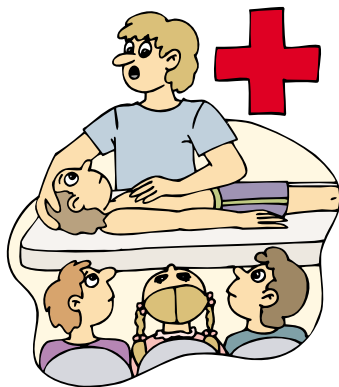
To check for **circulation** or tell if the person's heart is beating, take the **carotid pulse**. The *carotid pulse* is located on either side of the neck, just below the ear. To find the carotid artery, place the tips of your first two fingers into the groove on either side of the neck by the windpipe, or *trachea*. Then slide your fingers until they are about one inch below the top of the jaw bone. Press gently on only *one* side until you feel regular pressure just below the skin. Check the pulse for at least five seconds but *not* for more than 10 seconds.



checking the **carotid pulse**

Severe bleeding will usually be evident. However, if a victim is bundled in clothes or otherwise covered, you should check for bleeding.

You may come upon an accident scene but find no bodies or find no one who can tell you what has happened. Use the clues you find to figure out what has happened. Is there an overturned car near a body of water? If so, begin to check the water for victims. Is there an overturned car near an incline? If so, look down the incline to see if someone was thrown from the car. If you find a young child who is unconscious near a power line, assume the child has been electrocuted.



You can get training by taking courses in first aid and CPR, such as those offered by the American Red Cross or the American Heart Association.

If the victim can talk, tell him or her you want to help and ask for *permission* to begin first aid. Tell the victim if you have had training in first aid. Remember, you can get training by taking courses in first aid and CPR, such as those offered by the American Red Cross or the American Heart Association. This unit, however, does not count as training—it is only a description of first aid techniques and CPR.



If any of the victims *cannot breath, has no pulse, or is bleeding severely* and you are alone, you should give them aid before stopping to phone for help. Once you have given aid or if the victims do not need immediate attention, find a phone and call the EMS team.

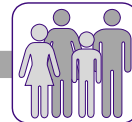
Act: Call for Help

The phone call you or someone else makes to the EMS team can be the difference between saving lives and losing lives. The call should quickly give the person on the other end *all* the necessary information. The information should be relayed in a specific order to the *dispatcher*, or the person who answers calls for the EMS team. Commit this order to memory.

1. **Tell the dispatcher the *location of the accident*.** Be as specific as possible. Name the nearest cross streets. For example, you might say: "I'm near the intersection of Gaines Street and Macomb Street." If you are using a pay phone, the cross streets or the address are often listed on the phone.
2. **Tell the dispatcher the telephone *number from which you are calling*.** Simply say: "The number here is" Read the number directly from the telephone.
3. **Tell the dispatcher *what has happened*.** Be as specific as possible. Explain what you know about *how the accident happened*. Tell the dispatcher *how many victims* there are and *how badly each is hurt*.

For example, you might say: "There has been a car accident. One car hit another from the side. One car has flipped over and is lying on its roof. There are four victims. One victim is trapped under the flipped car. He can breathe, but he cannot move his legs. One victim was thrown from the flipped car. She is unconscious but breathing. The two victims from the other car, a man and a woman, are bleeding severely, but they are conscious. One of the cars is leaking gasoline onto the street." From this information, a dispatcher can decide how many ambulances to send. She can also decide whether a fire truck or other emergency vehicle is needed.





In another situation, you might say: “An elderly man appears to have had a heart attack. He has fallen and hit his head. He is not breathing and has no pulse. He is pale.”

The dispatcher now has a good picture of the medical emergency.

4. **Tell the dispatcher *what is being done for the victims.*** For example, you might say: “I have the two victims who are bleeding applying pressure to their wounds. The bleeding has slowed down. I have not been trained in first aid. What should I do?”

In the case of the heart attack victim, you might say: “I have laid the victim on his back and covered him with a blanket. What should I do?”

The dispatcher now has a good picture of what is being done for the victims. She can direct you to do more or to leave the victims until the EMS team arrives.

5. **Wait for the dispatcher to hang up.** *Never hang up first.* The dispatcher may have important questions or directions for you.

This phone call has prepared the EMS team for what it will find once it arrives at the accident scene. The EMS team will arrive on the scene prepared to jump into action. In a medical emergency, minutes or even seconds can be the difference between life and death.



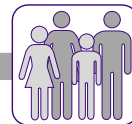
Practice

Use the list below to write the correct term for each definition on the line provided.

abdominal thrust
cardiopulmonary resuscitation (CPR)
first aid

medical emergencies
rescue breathing
shock

- _____ 1. a possible reaction to injury or illness in which blood flows so slowly as to threaten a person's life
- _____ 2. help given first to a victim of an accident or sudden illness
- _____ 3. a technique used to start the flow of blood and oxygen in a person whose heart is no longer beating
- _____ 4. situations in which a person or persons need immediate care for injuries or illnesses
- _____ 5. a technique used to dislodge a particle such as food blocking a person's airway; also known as the *Heimlich maneuver*
- _____ 6. pushing air in and out of the lungs of a person whose breathing has stopped



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|------------------------------------|
| _____ 1. being awake or able to respond | A. A-B-C-S checklist |
| _____ 2. the team of people who responds to emergencies in each city or town | B. carotid pulse |
| _____ 3. inability to be awakened or to respond | C. circulation |
| _____ 4. the movement of blood through the body | D. conscious |
| _____ 5. the checklist to be done on victims of an accident or sudden illness; check for open <i>airway</i> , check for <i>breathing</i> , check for <i>circulation</i> , and check for <i>severe bleeding</i> | E. emergency medical service (EMS) |
| _____ 6. the pulse located on either side of the neck, just below the ear | F. unconscious |



Practice

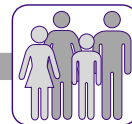
Answer the following using short answers.

1. Why should you never rush onto the scene of an accident? _____

2. What should you do to find out if a person is conscious or unconscious? _____

3. Why should you never hang up first when reporting an emergency to a dispatcher? _____

4. Why should you not move a person who has suffered an injury? _____



5. How do you check someone's pulse? _____

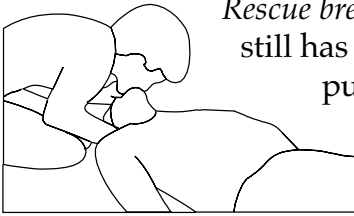
6. If you have to move a person who has suffered an accident, how should you do it? _____



Rescue Breathing: The Breath of Life

Accidents or illnesses can cause a person to stop breathing or to be unable to inhale enough oxygen to stay alive. These accidents and illnesses include the following:

- heart disease or heart attack
- poisonous gases
- suffocation
- shock or severe bleeding
- strangulation
- stroke
- electrocution
- drowning
- overdose of drugs
- airway blocked by food, an object, or the tongue



Rescue breathing helps a victim who is not breathing but still has a pulse. Rescue breathing is a technique used to push air in and out of the lungs of a person who has stopped breathing. When you perform rescue breathing, you breathe air from your own lungs into the victim's lungs.

Rescue breathing can keep a person alive.

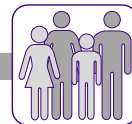
Without air, a person can suffer brain damage in as little as four minutes. A person can die from lack of air in as little as five minutes. No person can survive longer than *10 minutes* without air. However, as long as a victim's heart is beating and he is suffering from no other life-threatening injuries, rescue breathing can keep a person alive.

Whenever possible, use a breathing barrier, such as a special protective face shield or resuscitation mask to avoid direct contact with body fluids. However, do not delay care if one is not available or you do not know how to use it.

The First Step: Positioning the Victim

If the victim is not breathing, perform either *rescue breathing*, *CPR*, or the *abdominal thrust* (also known as the *Heimlich maneuver*). *CPR* and the abdominal thrust will be described later in this unit.

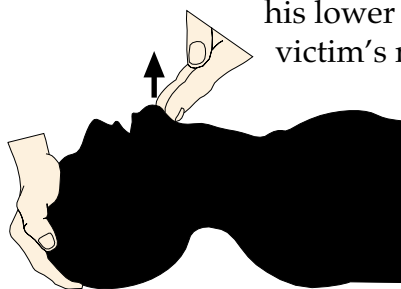
Rescue breathing is much easier to give if the victim is lying on his back. If you are fairly sure the victim collapsed and was not injured, turn him onto his back if he is not already. If, however, the victim has suffered an accident, check to see if he is breathing. If he is breathing, don't move him onto his back.



If the victim is not breathing, you must be very careful as you roll him onto his back. Your goal is to roll the victim as a unit, all at once, without twisting any body parts. First, straighten his arms and legs so they won't get in the way. Then roll the victim toward you. Support his head and neck with one hand, and pull with your other hand just under the victim's arm. **Remember:** Keep the victim's body from twisting so you do not damage the neck or spine.

The Second Step: Opening the Airway

Once the victim is on his back, his *airway* must be opened. Kneel down at the side of the victim's head. Then place your palm on the victim's forehead and apply backward pressure. Place the fingertips of your other hand under the jaw near his chin. Then support and lift his lower jaw with your fingertips, but do not close the victim's mouth. If necessary, pull the lower lip down slightly with your thumb to keep the mouth open. When you are done, his head should be tilted back, and the chin should point straight up. This maneuver will open the victim's mouth and airway, and move the tongue away from the back of throat.



Do not use this *head-tilt chin-lift maneuver* if you suspect a head, neck, or back injury. For a suspected head, neck, or back injury, the *jaw-thrust maneuver* is used to open the airway on an adult or on a child. Try to open the airway by lifting the chin *without* tilting the head.

There are four key points to remember for opening the victim's airway.

1. Place one of your palms across the victim's forehead.
2. Using your other hand, place your fingertips under the bony part of the jaw near the chin.
3. Support and lift the jaw with your fingertips, but avoid closing the victim's mouth.
4. If necessary, pull the lower lip down slightly with your thumb to keep the mouth open.



The Third Step: Mouth-to-Mouth Breathing

Continue holding the victim's head tilted back. Put your ear just above his mouth and look at his chest. Look, listen, and feel for any signs of breathing. Do this for three to five seconds. If he is breathing, you will see his chest rise and fall, hear air at his mouth and nose, or feel air on your cheek.

If the victim is not breathing, you should begin filling his lungs with air. Use the hand you have on his forehead to pinch his nose shut. This will keep the air you blow into his mouth from escaping through his nose. Take a deep breath and open your mouth wide. Cover the victim's mouth with your own mouth. Make a tight seal. Give the victim two full slow, gentle breaths. Each breath should last about two seconds.



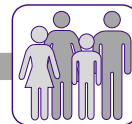
Pause and take a breath between rescue breaths given to the victim. Remove your mouth from the victim's mouth between breaths long enough to allow his lungs to *deflate*, or to breathe out the air. Each rescue breath should cause the victim's chest to clearly rise.

If air will not go into his lungs when you give two full, slow, gentle breaths, retilt the head and try again. You may not have tilted the head back far enough, the tongue may be blocking the airway, or an unseen object could be blocking the airway.

Alternate Third Step: Mouth-to-Nose Breathing

On some victims you will not be able to make a tight seal over their mouth. When you blow air into their mouth, the air may leak out. Or, the victim's mouth or jaw may be injured. In some cases, the victim's jaw may be shut tight, and you cannot open his mouth.

If you cannot make a tight mouth-to-mouth seal, give mouth-to-*nose* breathing. Tilt the victim's head back. Close his mouth by pushing on the *chin*. *Do not push on his throat*. Blow two full, slow, gentle breaths into his nose. Each breath should last about two seconds. Pause and take a breath between rescue breaths given to the victim. Remove your mouth from the victim's nose between breaths long enough to allow his lungs to deflate. Each rescue breath should cause the victim's chest to clearly rise.



The Fourth Step: Look, Listen, and Feel for Signs of Circulation

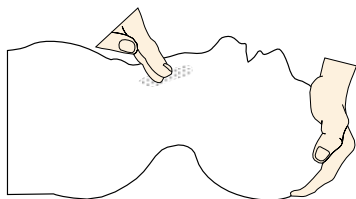
After you have given two full breaths, check the victim for signs of circulation. Signs of circulation include normal breathing, coughing or movement in response to rescue breaths, and a pulse. If the person has a pulse, his heart is still beating. If he does not have a pulse, his heart has stopped and needs to be started again.

Signs of Circulation

- normal breathing
- coughing or movement in response to rescue breaths
- a pulse

Remember: Do not spend more than 10 seconds doing the check.

Check the *carotid pulse*. It is located on either side of the neck by the windpipe, or *trachea*. Place the hand you used to pinch the victim's nose closed back on his forehead. Place the fingertips of the other hand on either side of his neck, just below the ear. Then slide the fingertips of your first two fingers into the groove on either side of the neck by the windpipe. Press gently on only *one* side until you feel regular pressure just below the skin. Check the pulse for at least five seconds but for *not* more than 10 seconds. (Try to find your own carotid pulse right now.)



If the victim is not breathing and *does not have a pulse*, you should begin giving CPR. (If you have *not* been trained in CPR, continue giving rescue breathing.) If, however, the victim is not breathing but *has a pulse*, you should continue giving rescue breathing.

The Fifth Step: Continuing Rescue Breathing

To continue rescue breathing, use the following steps:

1. Make sure the victim's head is still tilted back or tilt his head back again. (See "The Second Step: Opening the Airway.")
2. Pinch the victim's nose shut again.
3. Take a deep breath, open your mouth wide, and make a tight seal over the victim's mouth, or nose if you can't seal the mouth.



4. Blow to fill up the victim's lungs. Watch to be sure his chest is rising.
5. Listen and feel for air. Watch to be sure his lungs are deflating, or breathing out the air.

Do these five steps every five seconds as you continue rescue breathing. It may help you to count to yourself as you do each step: "one-one-thousand ... two-one-thousand ... three-one-thousand ... four-one-thousand ... five-one-thousand ..." and breathe into the victim on the five-one-thousand count.

Stop after one minute or 12 breaths to check for signs of circulation. Look, listen, and feel. *Do not spend more than 10 seconds doing the check.* Check every few minutes after the first minute for signs of circulation. If at any time you cannot find a pulse, give the victim CPR if you know it.

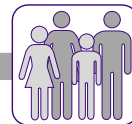
Troubleshooting: Avoid Getting Air in the Stomach

Sometimes when a victim is given rescue breathing, his stomach will fill with air. When this happens, his lungs cannot fill with air. To avoid filling the victim's stomach with air, remember the following key points:

- Keep the victim's head tilted all the way back.
- Blow just hard enough to make his chest rise.
- Pause between breaths long enough to let his lungs empty and for you to get another breath.

Troubleshooting: Vomiting

If the victim should vomit, carefully turn his head *and* body to the side. Then quickly wipe the vomit out of the victim's mouth and continue where you left off.



Follow-Up Care for Rescue Breathing

Continue rescue breathing until an EMS team or professional health-care person arrives. You may need to continue rescue breathing for a long time. Some victims can be kept alive by rescue breathing but will not begin to breathe on their own without medical treatment.

If a person begins to breathe after you've given rescue breathing, stay with him. He may stop breathing, and you may need to again begin rescue breathing.



The Special Case: Infants and Children Rescue Breathing



Most techniques used to give rescue breathing to adults are also used for infants and children.

Infants, or babies, are under one year of age. *Children* are between one and eight years of age. Most of the techniques you use to give rescue breathing to adults are also used for infants and children. However, you will need to make small changes in the technique because the bodies of infants and children are smaller.

The First Step: Check for Foreign Material in Mouth. Hold the baby securely in crook of your arm, face up. If you see foreign material, use your finger to remove it. Do not blindly sweep your finger in the baby's mouth.

The Second Step: Opening the Airway. Tilt the baby's or child's head back gently but *not* as far as you would an adult's head.

The Third Step: Mouth-to-Mouth-and-Nose Breathing. Put your mouth over the mouth *and* nose of a baby or child. Use a slow, gentle breath on a baby or child. Each breath should last about 1½ seconds. Pause and take a breath between rescue breaths given to the victim. Each rescue breath should cause the victim's chest to clearly rise.

The Fourth Step: Look, Listen, and Feel for Signs of Circulation. Check for the signs of circulation: normal breathing, coughing or movement in response to rescue breathing, and a pulse. Do not spend more than 10

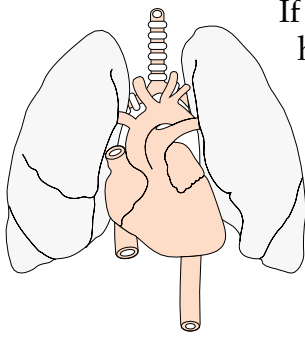


seconds doing the check. Check the pulse of a baby or child by placing your fingertips on the inside of the upper arm. This pulse is called the *brachial pulse*. Place the tips of two fingers halfway between the elbow and the shoulder. Place your thumb on the opposite side of the arm and squeeze gently.

If a baby or child is not breathing but does have a pulse, give one slow, gentle breath every three seconds for an infant or baby and every four seconds for a child.

If the victim is not breathing and does not have a pulse, he needs CPR.

CPR: Keeping the Lungs *and* Heart Working



*Cardio refers to the heart;
pulmonary refers to the lungs.*

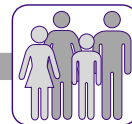
If a heart attack, illness, or injury makes a person's heart stop beating, he or she will not continue to *breathe*. If this happens, a person must be given cardiopulmonary resuscitation (CPR). CPR may be the victim's only chance for survival until professional medical care arrives. *Cardio* refers to the heart; *pulmonary* refers to the lungs. CPR is a combination of rescue breathing and **chest compression**. Rescue breathing provides the lungs oxygen. Chest compression keeps the blood flowing through the body. When you give CPR, you breathe oxygen and circulate blood for a person whose heart and lungs have stopped working.

CPR has saved thousands and thousands of lives. When you learn CPR, you are doing your community a great service. You become someone who can save a life in an emergency. Call your local American Red Cross agency or American Heart Association to sign up for a CPR course.

Recognizing a Heart Attack

A heart attack will often cause a person's heart to stop beating. The instant you think someone is suffering a heart attack, call an EMS team.

The most common signal that someone is having a heart attack is a feeling of uncomfortable squeezing or pain in the center of the chest. Sometimes



the pain seems to be indigestion. The pain may travel out from the center of the chest to the shoulders, arms, neck, and jaw. Other signals include sweating, nausea, shortness of breath, and feeling weak.



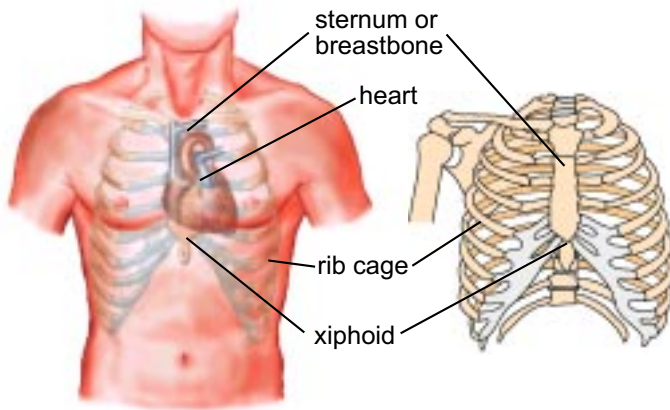
Steps for Treating a Heart Attack

1. The victim should sit or lie down with his head propped up.
2. If the victim is conscious, administer any heart medication he may take.
3. Send for an ambulance immediately. Be sure to tell them the victim has had a heart attack so the EMS team will have oxygen with them.
4. Stay with the victim in case he stops breathing and rescue breathing is necessary.
5. If the victim goes into cardiac arrest, perform CPR.
6. Treat the victim for shock by elevating the feet and covering him with a blanket if he begins getting cold.

Chest Compression: Pumping Blood through the Body

The heart is a large muscle that works like a pump. It pumps blood through the body by closing and opening. When the heart stops beating, it no longer pumps blood. *Chest compression* forces the heart to open and close.

The heart lies between the *sternum*, or breastbone, and backbone. The sternum runs down the front of the chest. When you give chest compressions, you push on the lower half of the sternum. This push squeezes the heart between the sternum and the backbone. Blood is then pushed through the body.



It is very important to find the right spot on the sternum to push. Find your own sternum—it is the bone in the center of your chest to which your ribs attach. Then trace it down to its tip. The tip of your sternum is called the *xiphoid*.

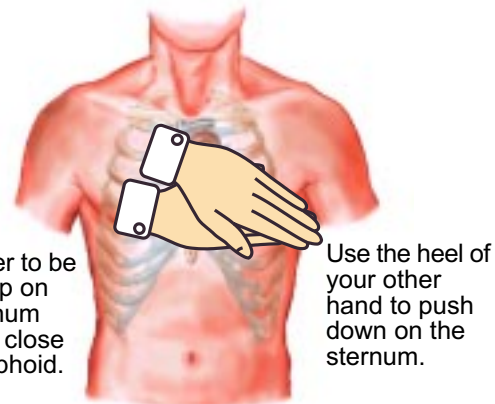
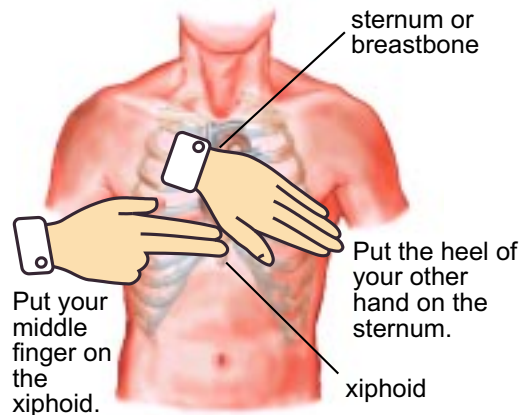


Another way to find the xiphoid is to locate the lower edge of the rib cage. With your middle and index fingers, trace the edge of the ribs up to the notch where the ribs meet the sternum. This notch or center point is the xiphoid.

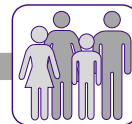
Once you've found the victim's xiphoid, put your middle finger on it. Then rest

your index next to your middle finger. Your index finger should now be closer to the victim's heart than your middle finger is. Put the heel of your other hand on the sternum next to your two fingers. You will use the heel of your other hand to push down on the sternum. If, by accident, you push down on the xiphoid, it may damage the victim's liver. It is better to be too far up on the sternum than too close to the xiphoid.

Next, put your other hand on top of the hand now resting on the sternum. Keep the fingers of both hands off the victim's chest. You are more likely to break the ribs if you push with fingers. Use only the heel of your hand to push. Either lace the fingers on both hands



It is better to be too far up on the sternum than too close to the xiphoid.



together, hold them pointing up in the air, or grasp your wrist with your other hand. Choose the method that is most comfortable for you and helps to keep your fingers off the victim's ribs.

The victim should be on a firm surface before receiving CPR. If the victim is on a soft bed or in the water, your chest compressions will not squeeze the heart between the sternum and backbone. If the victim is on a soft surface and cannot be moved, place a board or other firm surface beneath the victim's back.

The victim's head should be placed at the level of his heart or slightly lower than his heart. If his head is higher than his heart, blood will not flow to the brain.

Now you are ready to follow the steps for chest compression.

1. On your knees, bend over the victim. Do not sit on your heels. Spread your knees about shoulder-width apart. Shift your shoulders so they are directly over the sternum and your hands. Push straight down! Use your body weight. Keep your elbows straight. If you do not push straight down, the victim's heart will not be squeezed between his sternum and backbone.
2. As you push, bend from your hips, not your knees. This will help you push straight down. If you find yourself rocking back and forth on your knees, you are not pushing straight down.
3. Be sure to push straight down with your fingers pointing directly away from you. If your hand is at an angle, you will push on the victim's ribs rather than his sternum. This may injure the victim and will not squeeze his heart.
4. Compress the chest of an adult $1\frac{1}{2}$ inches to 2 inches. Push smoothly. Do not jerk your weight. Do not stop at the top or at the bottom of your push.
5. Compress the chest at a rate of 100 compressions per minute. To help you give compressions at the proper rate, count aloud: "One-and-two-and-three-and-four-and" Each count should be a little faster than a second. Practice counting using a watch with a second hand.



Combining Chest Compression *and* Rescue Breathing: 15-2 ... 15-2

Remember: CPR uses chest compression to keep the blood flowing. Use rescue breathing to provide the lungs with oxygen.

During CPR you will give 15 chest compressions—at the rate of 100 per minute. After 15 chest compressions, give the victim two full, slow, gentle breaths. Each breath should last two seconds.

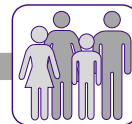


Keep repeating this pattern: 15 chest compressions followed by two slow, gentle breaths. Remember the CPR numbers—15-2 ... 15-2 ... 15-2 ... 15-2 ... Each time you begin chest compressions, measure up from the xiphoid to the correct spot on the sternum. It is extremely important to locate the correct hand position each time you begin chest compressions.

The Goal: Reviving the Pulse and Breathing

Don't lose sight of your goal. You are trying to help the victim regain his breathing and pulse. When you come upon an unconscious person who is not breathing, give him two full, slow, gentle breaths. Then check for signs of circulation: normal breathing, coughing or movement in response to rescue breaths, and a pulse. Spend between five and 10 seconds checking for signs of circulation and a pulse on his neck. *Do not spend more than 10 seconds doing the check.*

- If you find a pulse and the victim begins breathing, stop rescue breathing. Continue to check his breathing and pulse often.
- If you find a pulse but no breathing, continue to give rescue breathing. Continue to check for a pulse often.
- If you find no pulse, begin CPR—rescue breathing with chest compressions. Call for help. If someone responds, have the person call for an EMS team.
- Once you have started CPR, check the pulse and breathing after the first minute. Then check it every few minutes after that. Always check for pulse and breathing *after you have given the two breaths*. Do not stop CPR for more than five seconds.



- If you find no pulse or breathing, continue CPR. To continue CPR give two breaths first and then 15 chest compressions.
- If you find a pulse but no breathing, stop chest compressions but continue to give rescue breathing. Continue checking for pulse and breathing.
- If you find a pulse and breathing, stop CPR. Continue checking for pulse and breathing. Either one may stop at any time. Get the person to a hospital or medical professional quickly.

If a second rescuer arrives on the scene. If you have been performing CPR by yourself and another person arrives, you should do the following:

1. Check to be sure an EMS team has been called.
2. Ask whether the other person knows CPR.
3. Finish the 15 chest compressions and two breaths you are giving.
4. If you need rest and the other person knows CPR, ask him or her to take over.
5. While the other person performs CPR, continue checking the victim for a pulse.

If you arrive on a scene where someone is giving CPR.

1. Call an EMS team if one has not been called.
2. Tell the person whether or not you know CPR and can take over.
3. If she asks you to take over, wait until she has completed chest compressions and the two breaths.
4. Check for pulse and breathing.
5. If there is no pulse or breathing, begin CPR.



Training in CPR: Responsible Citizenship

What you have just read is a description of CPR. It will prepare you to take a course in CPR. What you have just read, however, does not make you trained in CPR. Only a course given by the American Red Cross, the American Heart Association, or some other certified agency can train you.

Learning how to give CPR is a part of responsible *citizenship*. We owe it to each other to learn the techniques and skills that may save a life. CPR training does not take very long. Taking CPR training is a great gift we can give to our communities. It is a way of showing that we care about others.

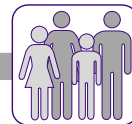
The Special Case: Giving CPR to Infants and Children

Giving Chest Compression to an Infant or Baby, from Birth to Under One Year of Age. To find the right spot on an infant for chest compressions, first place your index finger across the chest so that it touches both of the infant's nipples. Below your index finger, place your middle and ring fingers. Then compress with your middle and rings fingers. Be sure not to push too closely to the *xiphoid* or tip of the *sternum*. The sternum is the bone on the center of the chest to which the ribs are attached. (See pages 247-248.)

- Compress an infant's or baby's chest $\frac{1}{2}$ inch to 1 inch.
- Push smoothly and gently at a rate of 100 times a minute, or about two times a second.
- Give five chest compressions followed by one breath: 5-1 ... 5-1 ... 5-1 ...
- Pause 1-1½ seconds after each breath for the infant or baby to exhale.

Giving Chest Compression to a Child between One and Eight Years of Age. Compress a child's chest with the heel of *one* hand. Use the same hand position as you would on an adult. Compress at a rate of 100 times per minute or about two times a second. Compress a child's chest a little more than you would a baby's chest—about 1 inch to 1½ inches.

- Give five chest compressions followed by one breath, just as you would for an infant or baby.
- Pause 1-1½ seconds after each breath, as you would for an infant or baby.



Practice

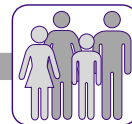
Use the list below to write the correct term for each definition on the line provided.

10 minutes	CPR
breathe	EMS team
center of the chest	infants and children
chest compression	rescue breathing
citizenship	

- _____ is done for a victim who is not breathing but still has a pulse.
- No person can survive longer than _____ without air.
- If the victim is not breathing and *does not have a pulse*, you should begin giving _____.
- Most of the techniques you use to give rescue breathing to adults are also used for _____. However, you will need to make small changes in the technique.
- If a heart attack, illness, or injury makes a person's heart stop beating, he or she will not continue to _____.
- CPR is a combination of rescue breathing and _____.
- The instant you think someone is suffering a heart attack, call a(n) _____.

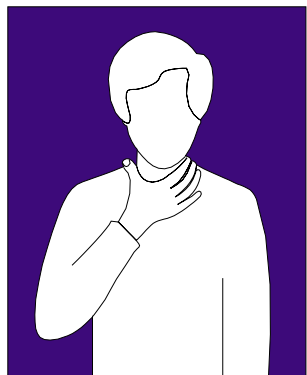


8. The most common signal that someone is having a heart attack is a feeling of uncomfortable squeezing or pain in the _____ .
9. Learning how to give CPR is a part of responsible _____ .



The Abdominal Thrust: Opening a Blocked Airway

A person may be unable to breathe because food or an object is blocking



Grasping the throat is the universal signal that a person is choking.

his airway. Some of the signs that a person is having trouble breathing are gasping, choking, coughing, wheezing, and grasping the throat. Grasping the throat is the universal signal that a person is choking. Use it if you ever find yourself unable to breathe.

If you think someone cannot breathe, ask him: “Are you choking?” A person who has a completely blocked airway cannot breathe, cough, or speak. He will only be able to answer by nodding his head “yes.” If you get no response at all, assume that the person *is* choking.

If the airway is *almost* completely blocked, you may hear a high-pitched noise when the person inhales. Or you may hear a very weak cough. First aid is the same for a completely blocked airway and an almost completely blocked airway.

If a person is coughing forcefully, you should let him alone. Encourage the person to continue coughing. Do *not* slap the person on the back. Strong coughing is the best method for getting rid of food or an object stuck in an airway. In addition, if a person *can talk*, do not try to remove an object from the airway.

Helping the Conscious Choking Victim

If the person cannot speak, cough, or breathe, have someone call for an EMS team. Then begin using the *abdominal thrust*. The abdominal thrust is a technique used to force food or objects out of an airway. People have used the abdominal thrust thousands of times to free blocked airways.

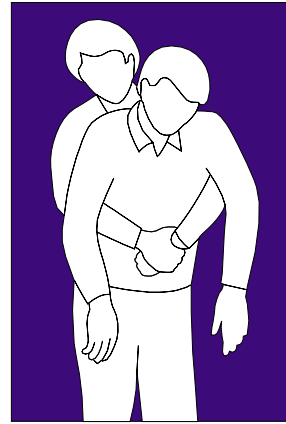


abdominal thrust

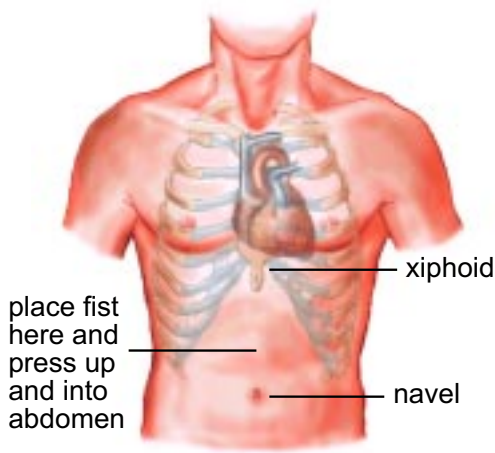


The abdominal thrust is also known as the *Heimlich maneuver*. The *abdomen* refers to the stomach. In this technique, you will perform a thrust on the abdomen. The air trapped below the food or object will then force or pop it out of the airway.

Begin by standing behind the victim. Try to have the victim stand with his feet about shoulder-width apart. While standing behind the person, place one of your feet between his two feet and place your other foot slightly behind you to brace yourself. Then hug the victim by putting your arms under his arms.



The abdominal thrust is also known as the Heimlich maneuver.



You want to give the abdominal thrust at a point on the abdomen slightly above the navel, or belly button, and well below the tip of the xiphoid. Remember that pressing on the xiphoid can injure the victim.

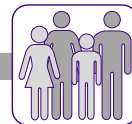
Make your hand into a fist. Then put your thumb side against the victim's abdomen. Grasp your fist with your other hand. Then press it up and into the victim's abdomen with a *quick upward thrust*.

Repeat quick upward thrusts until the food or object pops out or until the victim becomes unconscious.

What to Do If the Victim Becomes Unconscious

If the victim is choking and becomes unconscious, gently lay him on the floor. Position him on his back with his face up.

Perform a *finger sweep*. During a finger sweep you will sweep your fingers through his mouth to check for food or an object. The finger sweep must be done carefully. If you just stick your fingers into his mouth, you may push the food or object further into his airway.



Grasp the victim's tongue and lower jaw between your thumb and fingers. Pull his jaw and tongue down towards his chest. With the index finger of your other hand, follow down along the inside of one cheek. Slide your finger until you touch the base of his tongue or his throat. Then sweep across from one side to the other side. Use a hooking action to loosen and remove any object. Do not attempt to pull out any lodged item unless it sweeps out freely.

If the finger sweep does not remove the object and the airway remains blocked, begin rescue breathing. If the breaths won't go in, begin abdominal thrusts again. However, you will perform these thrusts while the victim continues to lie on the ground. Straddle the victim's thighs. Then put the heel of one hand on the victim's abdomen—on the same spot at which you gave abdominal thrusts when the victim was standing. Put your other hand on top of the hand already positioned on his abdomen. Press on the abdomen with a quick upward thrust. Give five quick thrusts. Make each thrust separate from the others.

After giving the five thrusts, do the following:

1. Move back to the victim's head and perform another finger sweep.
2. Give two full breaths.
3. If air still does not go in, perform another six to 10 abdominal thrusts.
4. Repeat steps 1-3 until you are successful at removing the object and the victim begins breathing or until EMS arrive.

What to Do If Your Own Airway Becomes Blocked

If your own airway becomes blocked by food or an object, first signal to the people around you that you are choking. Use the universal signal—grasp your throat with one or both of your hands.

If you are alone, give yourself abdominal thrusts. Press your fist slightly above your navel and give quick, inward and upward thrusts. You can also give yourself thrusts by leaning over any firm object, such as the back of a chair or a porch railing.



What If a Choking Person Is Pregnant or Too Large?

If a pregnant woman begins choking or if the person is too large for you to reach around his waist, use *chest thrusts*. To perform chest thrusts, do the following:

1. Reach around the person's chest from behind, with your arms directly under the victim's armpits.
2. Place the thumb side of your fist on the middle of the sternum at about the level of the person's armpits.
3. Grasp your fist with your other hand and pull straight back with quick thrusts.



Severe Bleeding: Life-Threatening Loss of Blood

Severe bleeding must be treated immediately. A victim can die from blood loss in a few minutes or even a few seconds. Severe bleeding is defined as blood that is spurting or gushing from a wound. You may think that a person has lost a lot of blood when this isn't the case. Even a small amount of blood can be shocking and may look like much more than it really is.

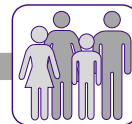


Apply continuous and direct pressure to the bleeding wound.

Before treating severe bleeding, put on a pair of rubber gloves, if they are available. Whenever possible, do not come into contact with another person's blood. After you've treated a bloody wound, wash your hands with soap and warm water.

To stop severe bleeding, place a thick pad or a sterile dressing on the wound. Then apply continuous and direct pressure—press hard on the wound and do not stop pressing to check the wound.

If there are no broken bones near the wound, elevate the wound. Raising it higher than the heart will slow down the bleeding.



After the bleeding stops, dress the wound with an antiseptic and a sterile gauze. Seek medical attention immediately.



Steps for Stopping Bleeding

1. Cover your hands with something the blood will not soak through, such as rubber gloves. Whenever possible, do not come into contact with another person's blood.
2. Cover wound with a thick pad or sterile dressing.
3. Apply continuous and direct pressure—press hard on the wound and do not stop pressing to check the wound.
4. If there are no broken bones, elevate the wound higher than the heart to slow down the bleeding.
5. After bleeding stops, dress the wound with an antiseptic and sterile gauze and wrap a pressure bandage tightly over the dressing.
6. Seek medical attention immediately.

Shock: The Body's Response to Severe Injury or Illness

In some cases, after an injury or illness, a person will go into shock. When a person experiences shock, her blood begins to flow so slowly that it threatens her life. The body's vital *organs* such as the brain, heart, and lungs cannot survive for long without if blood is not circulating.

Always consider shock when a person has suffered an injury or illness. Shock can be caused by bleeding, poisoning, insect bites and stings, snakebites, electrical shock, burns, heart attacks, severe injuries, and even psychological trauma. A person may go into shock after seeing an accident or someone die. Shock can sometimes be difficult to recognize. If there is any chance a person has gone into shock, treat the person immediately and call an EMS team.



The Signs of Shock: Changes in Behavior and the Body

Shock has many signs. During shock, a person may behave in a confused way. Her pulse or breathing may be very rapid or very slow. Her arms and legs may tremble or be very weak. Her skin may become cool and moist. Her lips or skin may become blue or pale, or her pupils may become enlarged.



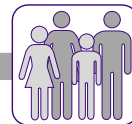
Steps for Treating Shock

1. The victim should lie on her back with feet elevated eight to 12 inches to help the blood flow to the important organs.
2. If the victim begins vomiting, place her on her side so her airway does not become blocked.
3. If the victim has trouble breathing, place her in a semi-sitting position.
4. Keep the victim from getting cold by putting blankets underneath and around her—be sure to not overheat the victim.
5. If victim is outside on a hot day, put some shade over her and loosen her clothing.
6. Seek medical attention immediately.

Treating Shock: Improving Blood Flow and Maintaining Temperature

To treat shock, you want to help the victim's blood flow to the important organs—brain, heart, and lungs. If you do not think the victim has head or neck injuries, put the victim on her back. Raise her feet off the ground from eight to 12 inches. Use any available object to rest her legs on, such as a blanket, piece of wood, box, or books.

If you think or know the victim has a head or neck injury, keep her lying flat on her back and wait for an EMS team. Do not move the victim unless there is immediate danger, such as a fire, electrical wires, or poisonous gas.



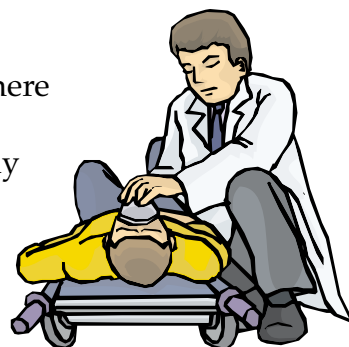
Sometimes a victim in shock will begin vomiting. If this happens, place the victim on her side so her airway does not become blocked.

If the victim has trouble breathing, place her in a semi-sitting position, using boxes, pillows, or blankets to raise her head and back. This position will ease her breathing.

When a victim is in shock, her temperature may drop. A lower temperature than normal slows the flow of blood. Keep the victim from getting cold by putting blankets underneath and around her. However, do not overheat the victim. Too much heat will draw blood away from the vital organs. If the victim is outside on a hot day, put some shade over her and loosen her clothing.

Summary

First aid is the help that is given first in a *medical emergency*. Most injuries and illnesses happen where there is no health-care professional to provide immediate treatment. In these cases, a victim may not survive if the people who first reach the scene of an accident or illness cannot give first aid until an *emergency medical service (EMS)* team arrives.



First aid is the help that is given first in a medical emergency.

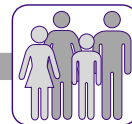
Some of the most important first aid techniques are *rescue breathing*, *cardiopulmonary resuscitation (CPR)*, *abdominal thrust*, treatment for severe bleeding, and treatment for *shock*. Your local American Red Cross agency or American Heart Association offer training in CPR and first aid.

When you find a victim who is injured, ill, or unconscious, use the *A-B-C-S checklist*. (A) Is his airway blocked? (B) Has his breathing stopped? (C) Has his heartbeat and circulation stopped? (S) Is he bleeding severely from a wound?

If the victim has a blocked airway or is giving the universal signal for choking, use abdominal thrusts to free his airway. If the victim has stopped breathing, begin giving rescue breathing. Rescue breathing will



supply the victim's lungs with oxygen and may help the victim begin breathing on his own. If the victim has no heartbeat or pulse, begin giving CPR. CPR combines rescue breathing and *chest compressions*. CPR is used to keep the blood circulating in a person whose heart has stopped working. If the victim is bleeding severely, apply direct pressure to the wound. Always check for shock in a person who has been injured, who is suffering from a sudden illness, or who has experienced a psychological trauma.



Practice

Answer the following using complete sentences.

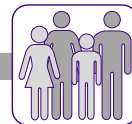
1. What is the most common sign that someone is having a heart attack? _____

2. How do you check someone's breathing? _____



3. What are two signs that a person may be in shock? _____

4. What is the most important first aid treatment for a person who is in shock and has not suffered a head or neck injury? _____



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. Learning first aid takes many years of studying.
- _____ 2. In most areas, the phone number to reach emergency medical services (EMS) is 9-1-1.
- _____ 3. You cannot use abdominal thrusts on yourself if you begin choking on food.
- _____ 4. If you think someone or yourself is having a heart attack, call EMS immediately—do not wait to see if the pain goes away.
- _____ 5. A person in shock may suffer a drop in his temperature and may need to be kept warm and covered with blankets.
- _____ 6. A *finger sweep* is used to check a victim's mouth for food or an object that may be blocking the airway.
- _____ 7. Use a positive and reassuring tone when you speak to victims—do not let victims lose hope.
- _____ 8. A-B-C-S stands for *airway, breathing, contact, and strangling*.
- _____ 9. If a victim begins to vomit and does not have an injured neck or spine, turn the victim to the side so she will not suffocate.
- _____ 10. When you learn CPR, you are doing your community a great service—you can become someone able to save a life in an emergency.
- _____ 11. If possible, wear rubber gloves to avoid contact with another person's blood.
- _____ 12. Use direct and continuous pressure on a wound to stop severe bleeding.

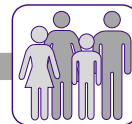


Practice

Answer the following using complete sentences.

1. Imagine that you come upon an accident scene. You have been trained in rescue breathing and CPR. You find two people, both unconscious. One of the persons is not breathing, has no pulse, and is very cold to the touch. The other person is not breathing but does have a pulse. Which person do you attend to first? Why?

2. Imagine that you come upon an accident scene. An EMS team is just driving off with the victims. You are left alone with another person who saw the accident. He is starting to shiver and complains of feeling very cold. His lips are turning blue, and he tells you he is feeling very weak in the legs. What should you do before finding help?



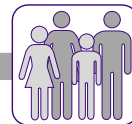
3. Why is learning first aid and CPR a community service and an act of good citizenship?



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|------------------------------------|
| _____ 1. inability to be awakened or to respond | A. A-B-C-S checklist |
| _____ 2. being awake or able to respond | B. carotid pulse |
| _____ 3. the checklist to be done on victims of an accident or sudden illness; check for open <i>airway</i> , check for <i>breathing</i> , check for <i>circulation</i> , and check for <i>severe bleeding</i> | C. chest compression |
| _____ 4. the pulse located on either side of the neck, just below the ear | D. circulation |
| _____ 5. the team of people who responds to emergencies in each city or town | E. conscious |
| _____ 6. a technique used to circulate the blood in a person whose heart has stopped beating | F. emergency medical service (EMS) |
| _____ 7. the movement of blood through the body | G. first aid |
| _____ 8. a possible reaction to injury or illness in which blood flows so slowly as to threaten a person's life | H. medical emergencies |
| _____ 9. situations in which a person or persons need immediate care for injuries or illnesses | I. rescue breathing |
| _____ 10. pushing air in and out of the lungs of a person whose breathing has stopped | J. shock |
| _____ 11. help given first to a victim of an accident or sudden illness | K. unconscious |



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. *First aid* is help that is given at a doctor's office during a routine examination.
- _____ 2. Life-threatening injuries or illnesses are called *medical emergencies*.
- _____ 3. If you come upon the scene of an accident, rush into the scene as fast as you can—a few seconds could save a life.
- _____ 4. In most areas, the number to call for help if someone has been hurt is 9-1-1.
- _____ 5. Always move a person who has been injured to a more comfortable spot, such as under a tree.
- _____ 6. When you call for emergency help, tell the person only the location of the accident; then hang up.
- _____ 7. *Rescue breathing* is a technique used to push air into the lungs of a person who is not breathing.
- _____ 8. *CPR* is a technique used on a person who is breathing but is unconscious.
- _____ 9. A person who is not breathing can survive for 20 minutes without air.
- _____ 10. A heart attack will often cause a person's heart to stop beating.
- _____ 11. If you think someone is having a heart attack, wait to see how serious it is before calling for help.
- _____ 12. Shortness of breath and sweating can be signs of someone having a heart attack.



- _____ 13. CPR is a technique used to circulate blood and provide oxygen.
- _____ 14. Learning CPR takes years of study.
- _____ 15. Only a doctor, nurse, or healthcare professional can give CPR.
- _____ 16. When a person goes into shock, his blood flows too quickly through his body.
- _____ 17. The abdominal thrust, also known as the *Heimlich maneuver*, is used to dislodge an object or food from a blocked airway.
- _____ 18. The abdominal thrust is difficult to learn and can only be done by a healthcare professional.
- _____ 19. To signal that you are choking and can't breathe, put your hands over your eyes.
- _____ 20. To check a person for a pulse, watch to see whether the person blinks.
- _____ 21. If you come upon a person who has been badly injured, tell the person if you think he may not live—be honest!
- _____ 22. If a person begins choking but can cough, leave the person alone and tell her to continue coughing.
- _____ 23. If you think a person cannot breathe, immediately ask her if she wants some water.
- _____ 24. To move an injured person, pull the person gently by the arms.
- _____ 25. Don't talk to a person who is injured; the person may be confused.

Unit 7: Consumerism: How to Use Money Wisely

This unit describes what a budget is, what credit is, and how to manage your money wisely. The unit also explains what can happen when people do not carefully watch their spending habits

Unit Focus

- meaning of consumer and consumerism
- what a budget is and how to develop a budget
- different kinds of credit and how they are best used
- questions smart consumers can use to make the best selection from the many items and brands in the marketplace
- fraudulent practices consumers may face
- advertising practices often used in the marketplace





Vocabulary

Study the vocabulary words and definitions below.

- advertising** the practice of using paid announcements in newspapers and magazines, over radio and television, on billboards, etc., to sell products
- annual percentage rate (APR)** the yearly percentage rate charged on a loan or debt
- balance** difference between the amount paid and the remainder owed
- budget** a plan for saving and spending money
- consumer** one who buys a product
- consumerism** the practice of spending money wisely
- contract** an agreement enforceable by law between two or more parties
- credit** buying something now and paying for it at a later date while you use it
- credit card** a small card identifying a person as having a credit account with a store or financial institution



discretionary	left to your own judgment or choice
finance charge	the actual dollar amount of interest or penalty a consumer is charged; often equals the APR expressed as a dollar amount
fixed expense	an expense that does not change from week to week or month to month <i>Examples:</i> rent, loan payments, car insurance
fraud	trickery or deceit
goods	items for sale that can be touched and carried away <i>Examples:</i> computers, bicycles, clothes
installment loan	a loan or debt repaid in fixed monthly amounts
interest	the rate charged on money borrowed or owed
late fee	a penalty charged for a late loan payment
lender	an institution or individual who makes loans
membership fee	a fee charged to credit card holders for the use of the card



minimum payment	the smallest amount a <i>lender</i> will permit a borrower to pay each due date on a loan or debt
needs	goods and services that are necessities <i>Examples:</i> food, clothing, shelter, medical care
revolving credit account	an account that permits consumers to make monthly payments on a debt; minimum payment is usually a percentage of debt plus an interest charge
savings account	an account established to save money
services	activities performed for others for money; things that people want done for them but are unwilling or unable to do for themselves <i>Examples:</i> haircut, dental work
wants	goods and services that a consumer may want to buy but that are not necessities



Unit 6: Consumerism: How to Use Money Wisely

Introduction

A **consumer** is someone who buys something. Some of the things consumers buy can be touched and carried away after they are bought. These items are called **goods**. That CD you bought recently is a good. So is a computer, a bicycle, and clothing. Eventually, a good is used up or worn out. Consumers can also buy **services**. *Services* can be seen but are not used up in the same way goods are. Services are often performed on something already owned. When you have a dress or suit dry cleaned, your hair cut, or your lawn mowed, you have bought a service. Doctors, dentists, accountants, attorneys, and mechanics all offer a service. What you buy from them is their ability to do something.



You are buying a service when someone cuts your hair.

When consumers attempt to buy the best goods and services at the lowest

prices, and to borrow money wisely, they are practicing **consumerism**. Humans have been *consumers* and have practiced *consumerism* for thousands of years.



You are buying a service when you use a mechanic.

Now more than ever we are challenged to be *wise* consumers. With so many different kinds of jeans or bicycles or CD players to buy, how can we determine which product gives the best value? Advertising blares that this



The average person will earn and manage more than a million dollars in his or her lifetime.

one is *the best* and that one is the *answer to your problems* and this other one is *guaranteed to be the lowest priced*.

Not only are we faced with more and more choices, but we're managing more income than ever before. The average person will earn and manage more than a million dollars in his or her lifetime. Even teenagers in the United States will spend 10 billion dollars this year! How wisely will you spend and borrow money?



Budgeting: Taking Control of Our Money

If we had all the money in the world, we wouldn't have to think about how to spend our money. We would buy anything and everything we want and need. But we are not fabulously wealthy. We have a limited amount of money, and we have to make *choices* about how to spend and save our income.

Some of us think about the choices we make. We set aside enough money during the week so we can enjoy a concert on the weekend. If we want to begin saving for college or vocational school, or buy an expensive item such as a computer or car, we set aside some money every week until we've saved the necessary amount.

However, some of us make choices without thinking. We spend all of our money for the week by Thursday and then find ourselves without the money to see a movie or go to a restaurant on the weekend. We



never seem to have the money for those things we really want. When we think back, we may not even know where our money went. We started the day with a 10-dollar bill in our pocket and little by little it disappeared. We just can't seem to hang onto our money!

The best way to take control of our money is to make a **budget**. A *budget* is a plan for spending and saving money. Corporations and businesses budget their money. So do governments and individuals. They see how much income they have and decide how to use that income to reach their goals. Some of us may imagine ourselves in the future as presidents of large corporations. But if we can't manage our small incomes, how can we ever manage the thousands, even millions, of dollars a business may earn and spend?

Develop a Plan: Charting Income and Spending

At first we have to follow a series of steps to develop a budget. After a while, these steps will become a natural part of our lives.

Figuring your income. Begin by figuring the income you earn over a period of time. If you have a part-time job and receive a check every week,



then develop a weekly budget. If you receive a check every two weeks, then make a budget based on two weeks. Include all of your income: your paycheck, allowance, and even the occasional baby-sitting money you earn from a neighbor.

Tracking your spending. Next begin keeping track of all the money you spend during a budget period. If you're planning a biweekly budget, then record every purchase for two weeks. To gain a good overview of your spending practices, do this for an additional two-week period.

Two-Week Spending List

lunch money/ eating out	movies/ entertainment	clothes
\$8.00 - pizza	\$3.25 - rent video	\$40.00 - sweater
\$26.00 - lunch money	\$11.00 - 2 movies	
\$7.00 - food at movie		
personal items		
\$2.50 - toothpaste		

Begin keeping track of all the money you spend during a budget period.

Check Stub:
 No. 155
 Bill Balance
 112 Check Street
 Anyplace, FL
 12/5/2002
 Pay to the order of Sweater Shop \$ \$40.00
Forty and 00/100 Dollars
 THE BIG BANK
 ANYPLACE, USA
 Bill Balance

Examine how you've spent money. Separate your list into **needs** and **wants**. *Needs* are goods or services or payments that are important and essential. Needs are *necessities* or things necessary for living—food, clothing, shelter, medical care. Needs are items or costs you have

to use money for—whether you want to or not. Buying food for lunch at school is a need. So is buying school supplies and school clothes. Making your weekly payment on a loan from your parents is also a need. (You need to be a responsible person.) Do you need to drive to your job and pay your own car insurance? Then list the cost under *needs*. Wants are goods and services people would like to have if they had the money to buy them.

Two Week Spending List Wants and Needs		
Wants	Needs	Income
\$40.00 - sweater	\$26.00 - lunch money	\$65.00 - Part-time
\$8.00 - pizza	\$ 2.50 - toothpaste	job (take
\$7.00 - food at movie	\$ 5.50 - school	home pay)
\$3.25 - rent video	supplies	
\$11.00 - 2 movies	\$34.00 - total needs	
\$69.25 - total wants for	for two weeks	
two weeks		

Separate your *two-week spending* list into needs and wants. Are you over or under budget?

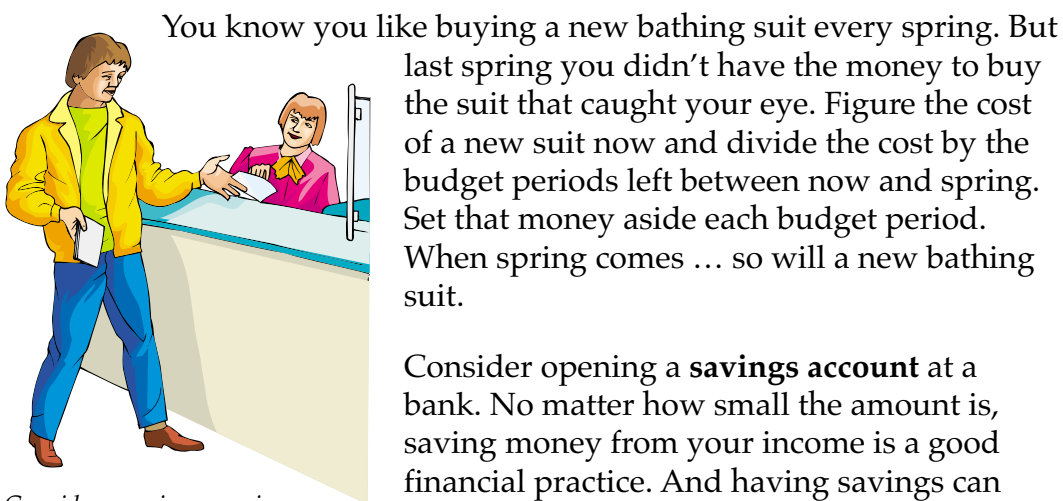


Some of the payments you make on needs do not fit neatly on weekly, biweekly, or even monthly budgets. You may pay your car insurance every three months or every six months. Divide your car insurance so it fits your budget period. If you pay \$150 every three months, your biweekly car insurance cost is \$25.

When you get older, your needs will probably include many more **fixed expenses**. *Fixed expenses* don't change from week to week. Your rent or house payment will be a fixed expense. Each month you'll pay your landlord or **lender** the same amount. Your car payments and any other loan payments will be fixed expenses. List these costs on the *need* side of your budget.

Some things we spend money on are not needs. They are *wants*. Although we enjoy these items, we could do without them—if we wanted to. That CD just released by your favorite artist or group is a want. So is that ice cream you wolfed down between lunch and supper. And remember that new video game you bought and lost interest in after a few days? That's a want, too.

Now add up the total cost of all your *needs* for the two-week period. Subtract the total cost of your needs from your total income. Whatever money is left can be spent in whatever way you choose or can be used for **discretionary** spending. But wait! Don't rush off to spend that money on any *want* that jumps into your head. Consider the different ways you might want to use that money. Set some goals!



Consider opening a savings account at a bank.

You know you like buying a new bathing suit every spring. But last spring you didn't have the money to buy the suit that caught your eye. Figure the cost of a new suit now and divide the cost by the budget periods left between now and spring. Set that money aside each budget period. When spring comes ... so will a new bathing suit.

Consider opening a **savings account** at a bank. No matter how small the amount is, saving money from your income is a good financial practice. And having savings can give you security. If some unexpected expense



pops up, you'll be prepared. Without savings, you'll have to borrow money and go into debt to pay for those financial bumps in the road up ahead. A savings account gives you more control over your future.

Now obviously even a budget won't permit you to buy everything you want. Decide which of your wants are the most important. Helping you get the things that are most important to you is one of the benefits of having budgeted your money.

Biweekly Budget	
Income:	\$65.00 - Part-time job (take home pay) \$65.00
Spending Needs:	\$26.00 - lunch money \$ 2.50 - toothpaste \$ 5.50 - school supplies \$34.00 - total needs for two weeks
Spending Wants:	\$40.00 - sweater \$8.00 - pizza \$7.00 - food at movie \$3.25 - rent video \$11.00 - 2 movies \$69.25 - total wants for two weeks

This plan is over budget—choices must be made!



Practice

Use the list below to write the correct term for each definition on the line provided.

budget	fixed expense	savings account
consumer	goods	services
consumerism	lender	wants
discretionary	needs	

- _____ 1. the practice of spending money wisely
- _____ 2. activities performed for others for money; things that people want done for them but are unwilling or unable to do for themselves
- _____ 3. items for sale that can be touched and carried away
- _____ 4. a plan for saving and spending money
- _____ 5. one who buys a product
- _____ 6. an expense that does not change from week to week or month to month
- _____ 7. goods and services that are necessities
- _____ 8. goods and services that a consumer may want to buy but that are not necessities
- _____ 9. left to your own judgment or choice
- _____ 10. an account established to save money
- _____ 11. an institution or individual who makes loans



Practice

Write **W** if the item is a **want**. Write **N** if the item is a **need**.

- _____ 1. a bus pass to get to school and work
- _____ 2. a haircut
- _____ 3. a payment on a loan from your parents
- _____ 4. a CD player
- _____ 5. a movie
- _____ 6. a physical health check-up
- _____ 7. a pair of shoes for school
- _____ 8. a day at Disney World
- _____ 9. a concert ticket
- _____ 10. a dental check-up



Using Credit: Borrowing Money

During most of our country's history, business was done on a *cash and carry* basis. You paid for something when you bought it. **Credit**, or buying now and paying later, has all but replaced the old system. More than a trillion dollars in credit purchases a year are made by consumers in the United States.

No matter how well we budget our money, many of us will choose to use credit for some of our purchases. We may use **credit cards**—small plastic cards that show the identification number of a credit account we have with a store or a financial institution. Or we may take out a loan with a bank or other financial institution. Whatever form of credit we use, we are borrowing money. Borrowing money can be very helpful in achieving the lifestyle we want to live. But borrowing money can also be a dangerous practice for those who are not well informed or who abuse credit.



credit cards

Credit Cards: Plastic with Purchasing Power

Businesses offer consumers three different types of credit cards.

Single-purpose credit card. The *single-purpose* credit card is issued by a company for use only at stores or businesses they own. Some big oil companies, department stores, airlines, and even restaurants and hotels offer customers single-purpose credit cards.



credit cards

Businesses offer single-purpose credit cards for one reason. They want to encourage people to buy from their particular company. Drivers are more likely to gas up at a station at which they can charge their gas purchase. If we

don't have money but need some clothes, we'll go to the department store where our *plastic*—a credit card—is accepted. Many of these cards offer **revolving credit accounts**. Each month the consumer can make a **minimum payment** on the **balance** she owes. However, the consumer also has to pay **interest** on the entire balance.



Bank credit cards. These credit cards are offered by banks and other financial institutions. The most well known are Visa and MasterCard. Many businesses throughout this country and the world accept Visa and MasterCard in payment for purchases. These cards are attractive to retailers and businesses because the bank, not the user of the card, pays for the purchases. The bank then collects the purchase price from the cardholder. Like single-purpose credit cards, many bank credit cards offer revolving credit. They also charge interest on any balance the cardholder does not pay in full.

Travel and entertainment credit cards. The most well known of these is the American Express card. Others include Diners Club and Carte Blanche. They can be used at many businesses throughout the world, especially hotels, restaurants, and retail stores. Unlike many single-purpose and bank credit cards, these cards do not offer revolving credit. The balance must be paid in full each month.

The Advantages of Credit Cards

When used wisely, credit cards can make shopping easy for consumers. It can be easier—and safer—to carry a credit card than to carry cash. A lost credit card can be replaced; lost cash cannot.

A credit card can make it possible for the consumer who doesn't have the money at the time of a sale to take advantage of the savings. Credit cards are also useful in emergencies. Expensive car repairs could leave a consumer without transportation if he didn't have the money to cover the cost. But the consumer with a bank card can charge now and pay later.

The Pitfalls of Using Credit Cards

Getting credit cards can be quite easy. Using them wisely is much harder. Many credit card users run up huge amounts of debt. Their lack of discipline leads them to charge more than they can afford. So learn the language of credit and be a wise and disciplined user.



Many credit card users run up huge amounts of debt.



Membership fee. Some credit cards charge a **membership fee**. The cardholder may have to pay from \$25 to \$50 or even more. Be certain to read all **contracts** before signing them and opening a charge account with any credit card company.

Annual percentage rate (APR). Credit cards charge interest on any balance that is not paid in full by the due date marked on each monthly statement. This interest is expressed as an **annual percentage rate (APR)**. Many credit cards charge as much as 18% interest a year on unpaid balances. This works out to $1\frac{1}{2}\%$ a month ($12 \text{ months} \times 1\frac{1}{2}\% = 18\%$). Although this may not seem like much, on an unpaid balance of \$500, a cardholder will pay \$90 or more in interest over a year. By paying the entire balance due each month, the cardholder avoids any interest.

Finance charge. Listed on each monthly statement is a box titled **Finance Charge**. The number in this box is the actual dollar amount in interest or penalty that the company has charged to a cardholder's account. The finance charge is often the APR, or interest, expressed as a dollar amount.

PLEASE MAIL THIS PORTION WITH PAYMENT TO P.O. BOX 2390

Lexington's
DEPARTMENT STORE

Angela B. Gibson
#16 Melrose Place
7345 N. Main
Chicago, IL 20002

☐ IF ADDRESS IS INCORRECT, PLEASE CHECK BOX

ACCOUNT NO. 064-173-357-15

PREVIOUS BALANCE .00

MINIMUM PAYMENT 20.00

THIS PAYMENT

BILL CLOSING DATE 11/05/02

Account number

Last date transactions were processed

DATE	DEPT.	DESCRIPTION	PURCHASES	CREDITS	PAYMENTS	ITEM NO.
10-28	852	HOUSEWARES	39.90			04-951H
10-28	654	ELECTRONICS	499.00			05-753E

Amount owed.

PREVIOUS BALANCE	CHARGES	FINANCE CHARGE	CREDIT / RETURNS	PAYMENTS	NEW BALANCE	PAST DUE AMOUNT
.00	538.90	.00	.00	00.00	538.90	.00

ACCOUNT NO.	CREDIT LIMIT	TO AVOID ADDITIONAL FINANCE CHARGE, PAY	PAYMENT DUE DATE	MINIMUM PAYMENT DUE
064-173-357-15	800		11-25-02	20.00

credit card statement



The finance charge can also include any **late fees**. Some credit cards not only charge interest on the balance due, but they also charge a *late fee* if they do not receive at least the *minimum payment due* by the due date. This fee can be \$15 or higher. Also, if you charge more than your credit limit, you may need to pay an over-the-limit finance charge for each month you go over. This fee can be \$20 or higher.

Membership fees, the annual percentage rate (APR), finance charges, late fees, over-the-limit fees—they all add up to this: If you run up a large debt on a credit card and can't afford to pay it in full each month, you're in for some expensive charges. Suddenly, items that seemed like a bargain when you bought them will become very expensive.

So when you consider buying something on a credit card, remember this: If you know you won't be able to pay for it by the *payment due date*, then add the interest (and late fee if there will be one) to the price of the item. Then ask yourself if you really want to make this purchase on a credit card.

All Credit Cards Are Definitely Not Created Equal

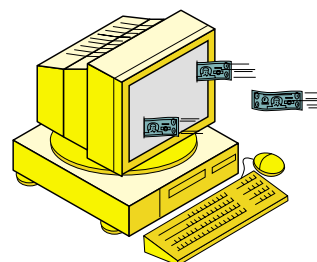
Shop around for the best deal on a credit card. There are many to choose from and new ones are being offered each month. Look for a credit card with the following features:

- low APR
- no membership fee or a very low membership fee
- no late fee or a low late fee.

Protection against Credit Card Fraud

Credit card **fraud** is a multi-million dollar *business*. Thieves are constantly developing new ways to steal money from people by fraudulently using their credit cards. The following are some tips for avoiding credit card frauds.

- always destroy a credit card that has expired or that has been canceled



Be careful giving your credit card number over the phone or on the Internet.



- always check credit card receipts before signing them (make sure the amount of purchase and the total amount are correct)
- save all credit card receipts and compare them with your monthly statement
- never give your credit card number over the phone or on the Internet unless you're charging an item and have checked the company or organization with which you're doing business



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|---|---------------------------------|
| _____ 1. an account that permits consumers to make monthly payments on a debt | A. annual percentage rate (APR) |
| _____ 2. the rate charged on money borrowed or owed | B. balance |
| _____ 3. the actual dollar amount of interest or penalty a consumer is charged | C. contract |
| _____ 4. buying something now and paying for it at a later date while you use it | D. credit |
| _____ 5. a small card identifying a person as having a credit account with a store or financial institution | E. credit card |
| _____ 6. the smallest amount a lender will permit a borrower to pay each due date on a loan or debt | F. finance charge |
| _____ 7. the yearly percentage rate charged on a loan or debt | G. fraud |
| _____ 8. an agreement enforceable by law between two or more parties | H. interest |
| _____ 9. difference between the amount paid and the remainder owed | I. late fee |
| _____ 10. a penalty charged for a late loan payment | J. membership fee |
| _____ 11. a fee charged credit card holders for the use of the card | K. minimum payment |
| _____ 12. trickery or deceit | L. revolving credit account |



Installment Loans: Borrowing Money for Expensive Items

Credit cards are one way of borrowing money. They offer the cardholder *open-ended credit*. The company issuing the credit card puts a limit on the total amount a consumer can purchase on his or her card. However, there is no agreement on how much below that limit the cardholder will use.



Another way of borrowing money is called the **installment loan**. An installment loan is a specific amount of money a consumer borrows to pay for a particular item. Without these loans, some people could never buy big-ticket items

such as cars, refrigerators, washing machines, or stereo equipment. Most people would have to do without these essential or helpful items for many years while they saved up the purchase price. Installment loans permit consumers to use these items while they pay for them.

The retailer from whom a consumer buys an item may offer installment loans. Loans from retailers, however, often turn out to be very expensive. Consumers will do better if they take out an installment loan from a commercial bank, credit union, savings and loan association, or consumer finance company. These loans are called *installment loans* because consumers make installments, or payments, on a regular basis. Most contracts call for monthly payments of equal amounts.

Like the loan made on a credit card, these loans also charge interest. The smart consumer shops around and finds the lowest interest rate. Always include the interest charges and any other costs of borrowing money when figuring the cost of a purchase. Some installment loans also charge consumers an initial fee for making the loan.



This search for the lowest interest rate is easier than it sounds. Financial institutions use many different methods to calculate interest. Consequently, a loan with an interest rate of 15 percent may actually end up being more expensive than a loan with an interest rate of 16 percent. The smart consumer asks for a








<h1>Myers Used Cars</h1>		
 \$10,999.00	 Door Busters!	 \$6,999.00
 \$8,999.00	6.9%* *for 60 months <i>Hurry! Sale ends May 4</i>	 \$12,999.00

table that explains exactly how much interest will be paid over the life of the loan. The smart consumer also asks a financial expert not connected to the *lender* to review all contracts. Remember—once you sign a contract, you'll have to live with it!

Many installment loans have a clause that permits the lender to *repossess*, or take back, the item

purchased if the consumer does not make payments on the loan. Some contracts permit the lender to take a percentage of the consumer's wages if payment is not made. This process is called *garnishing wages*.

Most financial institutions will check your financial history before giving you a loan. They will judge whether you will be able to make payments on an installment loan. They will want to know how much you earn, how long you've worked at the same job, and whether you've used credit responsibly in the past. No financial institution can deny you a loan if you meet their standards. They cannot deny you a loan based on your sex, marital status, race, religion, national origin, or age (unless you are under the legal age).

Wise Borrowing and What to Do If You Can't Make Payments

The wise borrower uses a formula to keep her debt under control. She doesn't let the total of her credit payments exceed more than 20 percent of her after-tax income. If her take-home pay is \$1200 a month, her total payments on credit card charges and installment loans will not be more than \$240 ($\$1200 \times 20\% = \240).

If you find that you can't make payments on a credit card or installment loan debt, call the *lender*. Lenders want to help you make a plan to pay off debt. It is to their advantage if you make





partial payments rather than making no payment. If your debt is from a credit card, the company will stop your credit. But if debt is too heavy, you wouldn't want to continue using your credit card anyway.

Buying for Value: Knowing the Questions to Ask

Finding the money with which to buy something is only part of the work a smart consumer does. Few consumers have avoided the experience of buying something only to get it home and find that it was poorly made or that it really wasn't what they wanted. It's easy to know you want a CD



How can you know which CD player is the right one for you?

player or a computer. But with all the types and brands on the market, how can you know which is the right one for you? Consumers can use some handy categories to help them sort through the many items that fill the marketplace.

Price: How Much Will This Cost?

Sure, it's easy to look at price tags of different items and see which is the cheapest. But the cheapest is not always ... the cheapest. Be sure to include all the costs. Will the item need to be delivered? If so, how much will delivery cost? What about installation? And if the item needs to be serviced in the future, how much will that cost? Does the warranty cover the entire purchase?

Performance: How Well Does It Work?

Consumers can find helpful guides that compare the performance of different brands of the same item. Magazines such as *Consumer Reports* can be found in any local library. They list the results of different tests and studies on consumer goods and services. Consumers can often test items in the store or, in the case of a car, on the road. Check to see if a watch is accurate, if stereo speakers provide dynamic sound, and if a car handles well.



Durability: Will It Last?

Don't be afraid to jiggle the knobs on a toaster-oven or check all the gauges in a car. A reputable store or retailer will not object. If you're buying a shirt, check to see how securely the buttons are sewn or how well the zipper on a pair of jeans zip. If repairs had to be made, how expensive would they be? Does one brand offer a longer warranty than the others?

Convenience: Will I Enjoy It?

How well is the item designed? Will I have to make myself into a pretzel to check the oil on this car? Is it hard to change CDs on this player? Is this desk the right height for a computer keyboard? Do I find this backpack comfortable when it's filled with books?

Safety: Can I Live with This Purchase?

Does this car perform poorly in crash tests? Will this hair dryer cause an electrical shock if it touches water? Do the wheels on these roller blades come off easily?

Adding Up the Score

List the five categories above according to importance. Then give a point value to each item you're considering buying. If you ranked *safety* the most important, give the safest item a 10, the next safest a lower number, and so on. If you ranked *price* the next most important category, give the least expensive item a 9 or an 8, and the next least expensive item a lower number, and so on. When you've numbered all the brands you're considering buying, add up the scores. The brand or item with the highest score may be the one you'll be most happy with.

	Performance(10)	Price (9)	Durability (8)	Convenience (6)	Safety (4)	Total
Pace CD Player	9	7	8	5	4	33
Reding CD Player	10	5	7	6	4	32
ABC CD Player	7	9	6	5	4	31
B & B CD Player	6	8	5	5	4	28



The possible points in each category is determined by the consumer. For this consumer, *price* was only slightly less important than *performance*. Therefore, a 9-point scale was used for grading *price* and a 10-point scale was used for *performance*. *Convenience* was only about two-thirds as important as *price*, and so a 6-point scale was used for *convenience*. The Pace, Reding, and ABC CD players earned similar scores. But note that the ABC CD player scored only 7 points in *performance*, the most important category. This consumer should probably choose between Pace and Reding CD players for his or her purchase.

Don't Make Snap Judgments: Don't Be Fooled by Price or Brand Name

Some consumers may think that the most expensive item is the best. Tests and experience have shown that price is not a reliable indicator of quality. Some items are more expensive because a famous person advertises them or because they are made to look expensive.

The brand name of an item is also not a reliable indicator of its quality. A company that made quality products two years ago may have slipped in quality control over time. And a company that made poor products last year may have improved. Don't be fooled by a name.

Buyer Satisfaction: Don't Settle for Less

Stores that don't treat their customers well do not survive very long. So most stores will go out of their way to keep you satisfied ... and returning. If you're unhappy with an item you've purchased, return immediately to the store and explain your complaint. In most cases the store will solve your problem.

If, however, the store doesn't respond satisfactorily to your complaint, then take your problem to the company's headquarters. The address of the company headquarters and the name of the company's president can be found in *Standard and Poor's*, a reference book in your local library. Address your letter to the president. Explain your complaint and explain what you would like the company to do. Would you like it to refund your money, exchange your purchase for another item, or repair your purchase? The more specific you are, the greater the chance the company will respond to your problem.



Consumer Fraud: Buyer Beware

In all of your consumer transactions, be wary. Consumers who are too trusting or are unaware of their rights are cheated out of millions of dollars a year.

Ordering goods through mail-order catalogs or the Internet is fast becoming one of the most popular ways to shop. When done right, this can save the consumer time and money. To be safe, never send cash through the mail. One dishonest individual in the process can remove



Consumers who are too trusting or are unaware of their rights are cheated out of millions of dollars a year.

your cash from your order. Use checks, money orders, bank transfers, credit cards, debit cards, or electronic “digital” cash as payment. Each of these can be used as proof that the company received your money.

Thieves have fraudulently attempted to get money from

consumers through the mail. Consumers are mailed merchandise they have *not* requested. Enclosed with the merchandise is a note that says: “If you’d like to keep this merchandise, send money to the address below. If you choose not to keep this merchandise, return it to the address below.”

Under federal law, consumers are not responsible for merchandise they receive in the mail that they have not ordered. You are under no obligation to pay for unordered merchandise. You also do not have to pay the postage and return the merchandise. **Remember:** Do not let thieves pressure you through the mail or over the phone to hand over your money, your credit card numbers, or anything. Simply ignore them.

Some retail stores use a practice called *bait and switch*. They advertise a low-priced model of a certain item. This item is called the *bait*. It attracts consumers into the store. However, when consumers try to purchase that item, the salesperson tries to sell a higher-priced model. This is the *switch*—the switch to a more expensive purchase. The salesperson may claim that the lower-priced item has been sold out, or is not very good, or doesn’t have the necessary features that the higher-priced model does. When you hear this pitch from a salesperson, you know you’re in a bait and switch situation. Leave the store and don’t return.



Advertising: Pressing Our Buttons

Historians claim that people began **advertising** their services as early as 1000 B.C. So advertising has been around for a long time, although it has changed through the years. In its earliest form, advertising informed consumers of the product and the price. Over time, however, advertisers have added a twist. They began attempting to make us believe that unless we buy their goods, we are incomplete, less lovable, even less human!

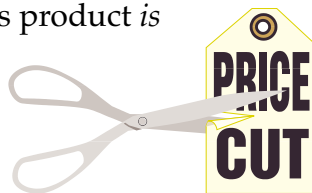
Advertising will probably always surround us. We can't change that. We can, however, be aware of how advertisers try to hook us into buying their goods. This knowledge can help keep us from buying things simply because we are convinced we need them for our happiness. Happiness, popularity, and romance are never as easy to attain as buying a pair of jeans or drinking a soda.

Celebrity Testimonials: The Famous Face

You see it on TV all the time. A celebrity sells something. Michael Jordan sells underwear. Britney Spears sells soda. A famous athlete sells a sports drink. A beautiful actress sells shampoo. We'll never know if these people use the products they sell. They advertise these products for one reason: money—they are paid lots of money. Buy a product because you think it has value, not because a famous person tells you to.

Glittering Generalities: Empty Language

Take a look at the language in some ads. Note how phrases such as *the best*, *this is it*, and *it's the real you* are used. Do they really say anything? In what way is this product *the best*? If this product is *it*, what exactly does *it* refer to? And how can an advertiser really know what the *real* us is? Ads often use meaningless language intended to catch our ear and suggest something bigger than life. Really listen to ads and you'll be a wise consumer!





Appealing to Our Emotions: Playing on Fear

Many ads play on our emotions. They try to make us feel insecure about ourselves. If we don't use this toothpaste, our teeth won't shine, and we'll lose out on love. Use this deodorant or you'll never get that job you want. Drive this car or you're a failure—and everyone will know it. Don't let advertising convince you that your life is incomplete and has no value unless you buy a certain product. Don't let ads tell you who you are or whether you're a success. Be an independent thinker and a wise consumer!



Summary

Consumers need to educate themselves in *consumerism* so they can get the best values when purchasing *goods* and *services*. Wise consumers begin with a *budget*, or a plan for spending and saving their income.

In the past, most business was done on a “cash and carry” basis. Buying on *credit* is now one of the most common ways of making purchases. Credit includes *credit cards* and *installment loans*. These forms of credit allow consumers to use a product as they pay for it. Credit cards can make shopping easier, but consumers must discipline themselves so they do not charge more than they can afford. Installment loans are used for big-ticket items. They are usually paid in equal monthly amounts.

The marketplace is flooded with different items and different brands of the same item. Smart consumers use a series of questions to determine which item and brand is the best for them.

Consumer *fraud* is a big business. There are many thieves and dishonest salespeople waiting to take consumers' money. Consumers need to be aware of the many fraudulent practices they can face. Fraud is practiced in stores, on the phone, in the mail, and on the Internet. Never let anyone pressure you into buying something you don't want. Never give credit card numbers over the phone unless you are sure you are speaking to a representative of a legitimate company. Never send cash through the mail.



To sell many goods and services, producers use *advertising*. Advertising can be helpful in telling us what goods and services are available and what their prices are. But some advertising tries to hook us into believing that we need a product for our happiness or success. Knowing the language and practices of advertising can help us see through ads and decide what products we really want and need.



Practice

Answer the following using short answers.

1. What is a *consumer*? _____
2. What is a *budget*? _____

3. Why is it important to have a budget? _____

4. What are two examples of *fixed* expenses? _____

5. Why is it important to have a savings account? _____

6. What is an example of a single-purpose credit card? _____

7. What features should you look for in a credit card? _____



8. What should you consider when purchasing an item with a credit card account? _____
- _____
- _____
- _____
9. What things can you do to protect yourself against credit card fraud? _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
10. What does an *installment* loan permit us to do? _____
- _____
- _____
- _____



11. What should you do if you discover that you cannot make the payments on a loan? _____
- _____
- _____
12. What should you do if you are dissatisfied with something you have bought? _____
- _____
- _____
- _____
13. How is the fraudulent *bait and switch* practice used? _____
- _____
- _____
- _____
14. What are two ways that advertisers try to convince consumers to buy their products? _____
- _____
- _____
- _____
- _____



Practice

Reread the different **methods** that **advertisers use** to sell their products on pages 296-297. Then **describe an ad you've watched, heard, or read** that uses each of the methods below. Write your **description and examples** in the space next to each method.

Celebrity testimonial: _____

Glittering generalities: _____

Appealing to our emotions: _____



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. *Consumerism* is another word for spending more money than you earn.
- _____ 2. *Consumers* buy goods and services.
- _____ 3. A compact disc is considered to be a *good*, but a haircut is a *service*.
- _____ 4. Living on a *budget* means planning how you will spend and save your money.
- _____ 5. Your *wants* include your lunches for school and school clothes.
- _____ 6. If you have a savings account, you won't ever choose or need to borrow money.
- _____ 7. Any *credit card* can be used for any purchase.
- _____ 8. *APR* stands for advantage pricing rate.
- _____ 9. Credit card *fraud* is not common.
- _____ 10. The recommended limit for money owed on credit card accounts and installment loans is not more than 50 percent of your monthly take-home pay.
- _____ 11. Sometimes a more expensive item is a better buy than a similar but less expensive item.
- _____ 12. Products that are frequently *advertised* on television are usually better buys.
- _____ 13. Advertisers use celebrities and generalities to persuade us to buy their products.
- _____ 14. *Fixed expenses* should not be figured into your budget.



- _____ 15. It is a good idea to save all your expired credit cards.
- _____ 16. Giving your credit card number over the phone to an unknown company is an unsafe practice.
- _____ 17. *Lenders* can legally deny you a loan based on your financial history.
- _____ 18. Lenders can legally deny you a loan based on your sex, marital status, race, religion, or national origin.
- _____ 19. The most important question to ask yourself before purchasing an item is, "What is the brand name?"
- _____ 20. Only poor people need to follow a budget.



Practice

Read each **situation** described in the paragraphs below. Write a brief answer to **describe** how you would respond.

1. Ava wanted to buy a new mountain bike so she could enjoy cycling through the beautiful nature areas in Florida. She decided that performance and price were the two most important guides. The Rugged-Ride model and the Tough-Terrain model performed equally well. But the Tough-Terrain model was less expensive than the Rugged-Ride model. Based on this information only, should Ava buy the Tough-Terrain model? Explain your answer.

2. Ava does not have the money to purchase one of the bikes. Her mother, however, has agreed to co-sign a loan so Ava can borrow the money from a local bank. Ava has discovered that the Save-U-Money Bank offers loans at 14 percent *interest*. But the Save-U-More Money Bank offers loans at 13 percent *interest*. What should Ava do before choosing a *lender*?



3. Ava was very happy with her new Rugged-Ride mountain bike ... at first. Soon she found that the gear-changing mechanism was very hard to move. She had to spend an entire day riding with her bike in the same gear. She took the bike back to the store and explained her problem. The shop promised to fix the problem without a charge. When Ava picked the bike up, the problem had not been fixed. The shop owner said he had done all he could. It was no longer his problem. What should Ava do?



Practice

Use the list below to complete the following statements.

advertising	goods	membership
cash	installment	services
fixed	late	

1. _____ are items that can be touched or carried away after they are bought.
2. _____ loans are often used for buying very expensive items.
3. Doctors, dentists, and accountants perform _____ for consumers.
4. Some credit cards charge a _____ fee.
5. If the minimum payment on a credit card account is not paid by the due date, a _____ fee is charged.
6. When ordering merchandise through the mail, never send _____ with your order.
7. To influence consumers to buy their goods and services, producers use _____.
8. _____ expenses include rent, car payments, and loan payments.



**credit
installment
interest**

**lowest
mail**

**number
repossess**

9. You do not have to pay for or return any merchandise you receive in the _____ that you *did not order*.
10. Credit cards charge _____ on any balance not paid in full by the due date marked on each monthly statement.
11. Getting a(n) _____ loan to pay for stereo equipment or another high-priced item allows you to use it while you pay for it.
12. A(n) _____ card is used to “buy now and pay later.”
13. If a borrower fails to pay back a loan, the lender may _____, or take back, the item purchased.
14. Smart consumers shop around for the _____ interest rate on a credit card or loan.
15. Never give your credit card account _____ to anyone who does not represent a legitimate company.



Practice

Use the list below to write the correct term for each definition on the line provided.

advertising	fraud	minimum payment
consumer	installment loan	needs
finance charge	lender	wants

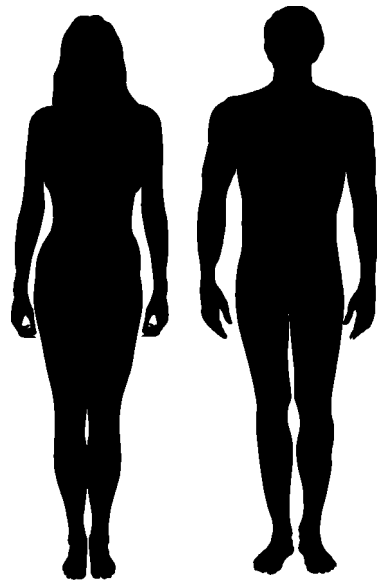
- _____ 1. trickery or deceit
- _____ 2. a loan or debt repaid in fixed monthly amounts
- _____ 3. an institution or individual who makes loans
- _____ 4. the practice of using paid announcements in newspapers and magazines, over radio and television, on billboards, etc., to sell products
- _____ 5. one who buys a product
- _____ 6. goods and services that are necessities
- _____ 7. goods and services that a consumer may want to buy but that are not necessities
- _____ 8. the actual dollar amount of interest or penalty a consumer is charged; often equals the APR expressed as a dollar amount
- _____ 9. the smallest amount a *lender* will permit a borrower to pay each due date on a loan or debt

Unit 8: Puberty: Maturing into Adulthood

This unit gives details about the changes boys and girls go through in puberty. The unit also provides insights into the emotional changes that are associated with puberty.

Unit Focus

- definition of puberty
- physical changes males and females experience during puberty
- effects of puberty on a person's emotional and social growth





Vocabulary

Study the vocabulary words and definitions below.

Female

areola	a ring of color around the nipple of the breast
clitoris	the sexually responsive organ in the female genitals
estrogen	a female sex hormone
labia majora	the outer folds of skin of the external female genitals
labia minora	the inner folds of skin of the external female genitals
menstrual cycle	the time from the beginning of one menstrual period to the onset of the next
menstruation	the process of passing off the lining of the uterus
ovaries	the two reproductive glands in females that produce egg cells and female sex hormones
progesterone	a female sex hormone
uterus	a hollow, muscular pear-shaped organ in females where a fertilized egg will grow; also called the <i>womb</i>
vagina	a muscular, very elastic tube in females that serves as a passageway for childbirth, semen, and menstrual flow; also called the <i>birth canal</i>
vulva	the external female genitals



Male

- circumcise** to remove the skin covering the head of a penis
- ejaculation** the discharge or ejection of semen from the penis
- epididymis** a large coiled tube in males that is located at the outer surface of each testicle; stores sperm after they are produced
- erection** the penis in a rigid or stiff state
- penis** the external organ of the male reproductive system
- scrotum** the external sac in males that holds the testicles
- semen** the whitish mixture of sperm and fluids from the male reproductive glands; also called *seminal fluid*
- sperm** the male reproductive cell; fertilizes a female egg cell
- testicles** two small reproductive glands in males that produce sperm and the male hormone testosterone; also called *testes*
- testosterone** the male sex hormone
- vas deferens** a long tube in males that connects the epididymis to the urethra



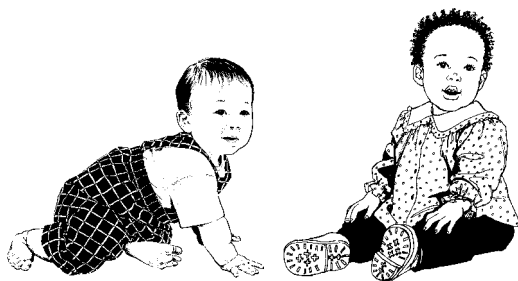
Female and Male

adolescence	the period of life during which a person changes from a child to an adult
embryo	an organism in the early stages of development
fertilize	to join an egg cell and a sperm
hormones	chemicals that cause changes in the body
masturbation	the stimulation of one's own genitals to reach orgasm
nocturnal emissions	ejaculations that take place during sleep; also called <i>wet dreams</i>
orgasm	the physical and emotional sensation felt at the peak or the end of a sexual act
pituitary gland	the master gland that releases hormones
puberty	the period of life during which males and females become sexually developed and able to produce offspring
sexual intercourse	genital contact between individuals; sexual contact with vagina, penis, anus, or mouth
urethra	a narrow tube leading from the bladder through which urine passes out of the body; in the male, it also connects with the vas deferens



Unit 8: Puberty: Maturing into Adulthood

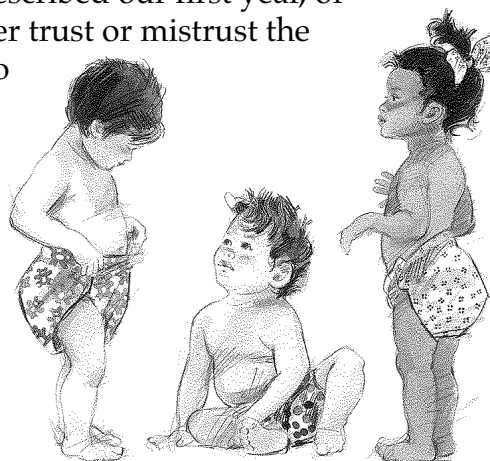
Introduction



In the first year of our lives, we go through an incredible growth period.

Our bodies grow in different ways during different periods of our lives. In the first year of our lives, we go through an incredible growth period. Our weight will triple in our first year. Our height will increase from about 21 inches at birth to about 31 inches by the end of our first year. While our bodies are growing, our personalities are

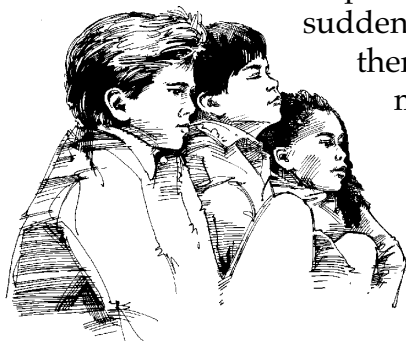
also developing. Erik Erikson, whose writings on human development are accepted by many social scientists, has described our first year, or infancy, as one in which we begin to either trust or mistrust the world around us. Those of us fortunate to find security and love in our small worlds will see those around us as trustworthy. Less fortunate infants may not feel secure or be untrusting of their surroundings.



While our bodies are growing, our personalities are also developing.

After infancy we begin childhood, and our bodies and minds continue to grow. During our early childhood, our bodies increase at an even rate. Our emotions and mental skills also

develop without any sudden leaps. But



Adolescence describes the period of our life when we make the transition from children to adults.

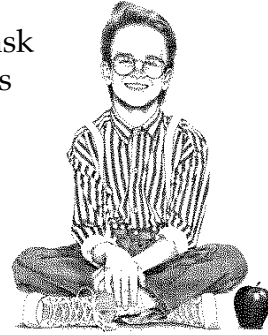
then we begin **adolescence**, and our bodies, minds, emotions, and personalities may suddenly begin to change. We may not understand why.

Adolescence describes the period of our life when we make the transition from children to adults. This shift to adulthood is a period of extreme physical and social changes. Adolescence is a period of becoming—becoming an adult. As



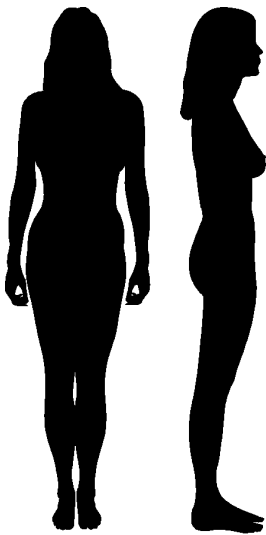
adolescents, most of us watch changes in ourselves and begin to wonder: “What am I becoming?” We begin to focus on our identities. Such questions as “Who am I?” and “Am I normal?” and “What will I be?” begin to puzzle us. We might not ask these questions out loud; nonetheless, nearly all of us spend time during our adolescence wondering and worrying about our bodies and our identities.

As part of adolescence, we go through a stage called **puberty**. During puberty both males and females become sexually developed and able to produce offspring, or babies. Puberty affects not only our physical growth but our social, emotional, and mental growth.



Puberty affects not only our physical growth but our social, emotional, and mental growth.

Physical Changes in Females during Puberty



A girl's body will grow hair and begin taking on the more curved shape of a woman.

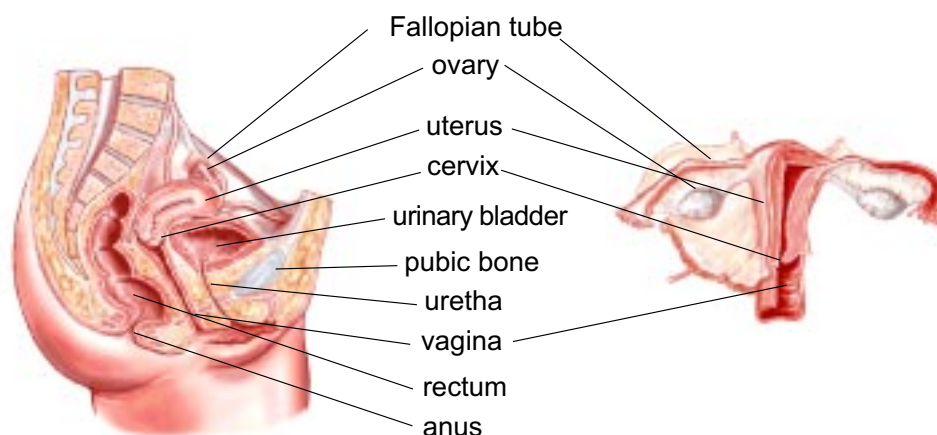
During puberty the girl's body begins to grow in ways that will permit her to become pregnant, give birth, and breast-feed a baby. Puberty in females can begin as early as eight years of age and may not reach completion until age 19. Researchers have used statistics to suggest the average age at which many girls experience particular changes. However, each of us will experience changes when our bodies are ready. Few of us happen to match the statistical averages or charts in textbooks. During puberty the **ovaries** and breasts of a girl will begin to grow and develop. A girl's body will grow hair and begin taking on the more curved shape of a woman, and her voice will deepen slightly. A girl will also begin **menstruation**—a monthly cycle she will experience until she reaches middle age.

The Ovaries: Releasing Hormones and Egg Cells

The first change a girl goes through in puberty cannot be seen. Inside her body, reproductive glands called *ovaries* grow larger and begin producing the **hormones estrogen** and **progesterone**. These hormones will travel through her bloodstream and trigger the other changes in her body that are part of puberty.



When a girl is born, her ovaries contain all of the egg cells she will ever have. On average, between the ages of 10 and 16, a girl will begin to *ovulate*, or release egg cells. It is these egg cells which the male **sperm** may join with, or **fertilize**. If fertilized, an egg cell may begin growing into an **embryo**—the very first stages of a baby.

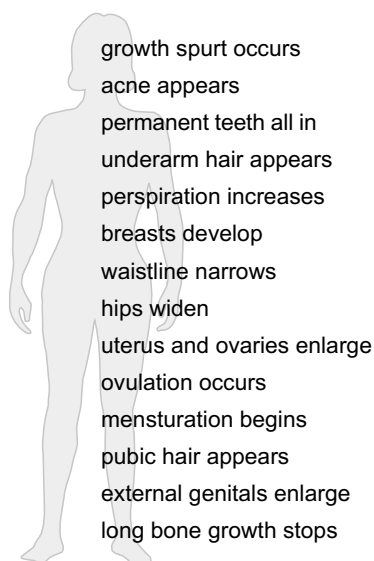


The Female Reproductive System

The Breasts: Producing Milk to Feed Babies

The female body not only bears babies but also can feed babies for many months after their birth. Female breasts produce milk that will supply a baby with all the nourishment it needs until the baby is about six months old. The first signs of a girl's breasts growing will be the appearance of breast buds. The nipple and surrounding ring of color, called the **areola**,

will begin to rise slightly from the skin and take on a definite shape. The color of the nipple and areola may darken.



- growth spurt occurs
- acne appears
- permanent teeth all in
- underarm hair appears
- perspiration increases
- breasts develop
- waistline narrows
- hips widen
- uterus and ovaries enlarge
- ovulation occurs
- menstruation begins
- pubic hair appears
- external genitals enlarge
- long bone growth stops

During the next couple of years the girl's breasts will become fleshy and begin to grow outward. Many girls will notice that one breast grows more quickly than the other. In most cases the smaller breast will catch up and eventually match the size of the larger breast. A girl's breasts will usually finish growing between the ages of 12 and 19. The size of a female's breasts has nothing to do with how much milk they produce.



Unfortunately, many cultures throughout the world place much attention on breast size: girls and young women are often concerned about whether their breast development and size is normal. Each young woman's body develops at a different rate. Breast size is also different for each person and is determined by heredity. There is no "normal" size for breasts.

Body Hair: A Part of the Process

When a girl begins puberty, she will develop body hair around her genitals. This is called *pubic hair* and at first is straight, fine, and sparse. During the years that follow, her pubic hair will grow more coarse.

Young women will also develop underarm hair, which will follow the same fine-to-coarse pattern of growth. The rate of growth of body and pubic hair may mirror the growth of a girl's breasts. About the time her breasts finish developing, so will her body hair and pubic hair.

In our culture, many girls and women remove their underarm hair. Where or why this began is unknown. There is nothing medically beneficial about this practice, and it is strictly a personal decision.

Body Shape: Developing the Look of an Adult

Before puberty girls tend to have little fat on them. They are often bony, and straight lines define their body shape. Shortly after a girl begins puberty, she may go through a growth period. She may suddenly grow inches in a year or less. Her weight will increase with her height, and a layer of fat will pad her body, particularly on her hips and breasts.

The girl's hips will widen, creating a larger passageway for a baby to travel through during birth. As her hips widen, her waist will seem narrower. These changes, along with the additional fat deposits, will begin developing the more curved body shape found in full-grown females.

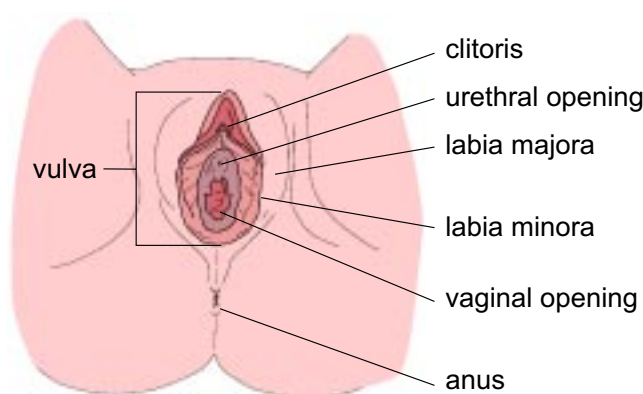
The additional body fat that develops during puberty is not a sign of being overweight. This body fat is a natural part of healthy growth and is a necessary part of becoming a sexually mature female.



Female Genitals: The Vulva and Its Parts

As a group, the female genitals are called the **vulva**. They include the **labia majora**, the **labia minora**, the *vaginal opening*, and the **clitoris**.

The labia majora are the outer folds of the skin of the vulva. The labia majora surrounds the rest of the female genitalia and during puberty may grow slightly larger. The labia minora are the inner folds of the skin of the vulva and surround the **urethra**, through which females urinate. The



Female External Genitalia

opening of the **vagina** is also located inside the labia minora. The vagina is a muscular, very elastic tube. The opening of the vagina goes from this opening in the labia minora to the **uterus** inside the body. The clitoris is a small bit of flesh within the labia minora that is extremely sensitive. Stimulation of the clitoris usually causes feelings associated with sexual arousal.

Menstruation: Passing the Uterine Lining

Within a few years after the onset of puberty, a girl will reach *menarche*, which means that she will have her first menstrual period. Menstruation is one part of the **menstrual cycle**. This cycle prepares the uterus to nourish a fetus if the female's egg is fertilized by (joined with) a male's sperm. This preparation includes building up a lush, nutrient-rich lining in the uterus. If the female's egg is not fertilized, the uterus will begin to shed the lining through the vagina. This shedding of the lining of the uterus through the vagina is called *menstruation*, or a menstrual period.



Sometimes the single egg the ovaries release each month is not fertilized. The female body then begins to shed the blood and tissue that has lined the wall of the uterus. The uterus will also rid itself of the unfertilized egg cell. The uterus will contract until the blood and tissue is free. This waste then passes through a tube leading from the uterus, called the *cervix*. After passing through the cervix, the blood and tissue empties into the vagina. From the vagina, the blood and tissue passes from the body. Most females will pass about one to eight or more tablespoons of blood and tissue. Bleeding will last anywhere from three to seven days.

This passing off of the blood and tissue is called *menstruation*, or the *menstrual period*. The word *menstruation* comes from the Latin word *menses*, which means *month*. Menstruation usually takes place about every 28 days or once a month. However, each female will have her own pattern.

Menstruation is only one part of the menstrual cycle. A menstrual cycle begins with one menstrual period. The cycle lasts until the beginning of the next menstrual period. During the menstrual cycle, a number of things happen. Each thing that happens prepares the uterus to carry an embryo and fetus. After the uterus sheds its lining, it begins to form another lining. This stage takes about a week. When the uterus is ready, the ovaries will *ovulate*, or send an egg to the Fallopian tubes. This is the time when a female is most likely to become pregnant. For the next two weeks the lining will remain intact. If no fertilized egg attaches to the lining, the uterus will begin menstruation to shed its lining. And then the cycle will begin again.

If a female suddenly stops experiencing menstruation, she should see a doctor. This can be a sign that she is pregnant. It can also be a sign of a disorder or disease. Or it may be just a temporary stopping of the cycle that means nothing.

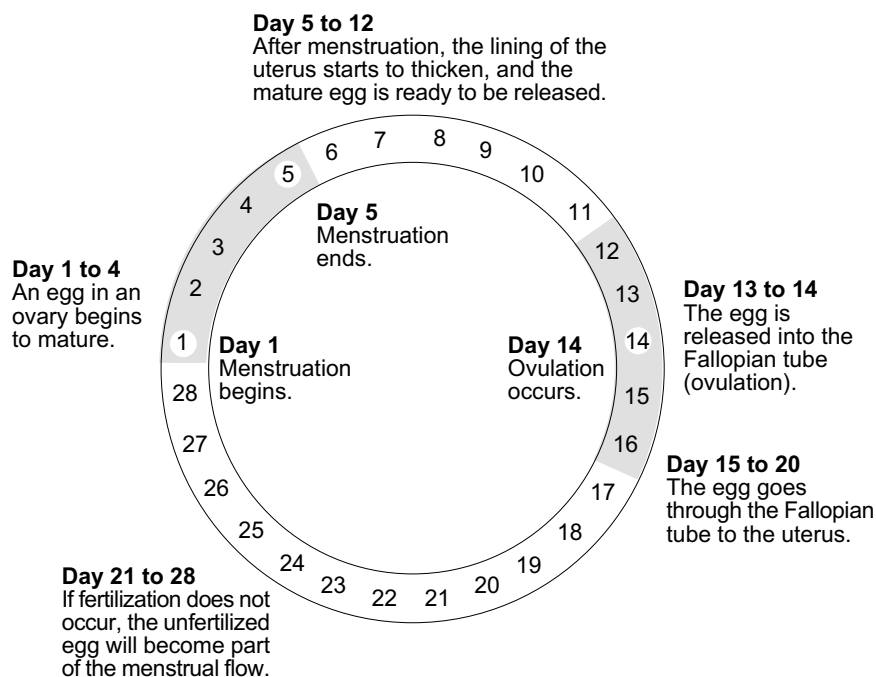
The menstrual period often causes females some discomfort. To shed its lining, the uterus flexes and contracts its muscles. It is these contractions that some females feel as cramps and pain. Sometimes discomfort will also include a feeling of nausea. These cramps and nausea are usually mild. Exercise and warm baths to relax the muscles can ease the discomfort.



Over-the-counter medicines such as aspirin and ibuprofen may also help lessen the pain. A heating pad placed on the lower back or stomach may also help.

Females who eat nutritious food and exercise often feel less discomfort than those who eat poorly and do not exercise.

Most girls begin to menstruate between the ages of 10 and 16. In the early years, their menstrual cycles may be irregular. One cycle may be 21 days, while the next may be 35 days. Girls may skip an occasional period, particularly if they exercise a lot or are extremely undernourished. In time, however, the cycles will usually develop a pattern.



The Menstrual Cycle

Hygiene: Staying Safe during Menstruation

During menstrual periods, females may use various products designed to absorb the flow of blood. One popular and effective product is the tampon, which is placed *inside* the vagina. Sanitary napkins are another method of absorbing blood flow during menstruation. They are placed *outside* the vagina. These products should be changed often to reduce the risk of infection.



A word of caution is needed on the use of tampons. They have been linked to toxic shock syndrome (TSS)—a potentially dangerous disorder. TSS causes a high fever, a skin rash, and in rare cases death. To avoid TSS, change tampons frequently and alternate the use of tampons with sanitary napkins.

Feminine hygiene sprays and deodorants can also pose health risks. They may hide an odor. An odor may be a sign of an infection or disease, which should be checked by a doctor. Spraying deodorants or other products inside the vagina can cause irritation or even infection.

Females may be quite regular and have a period every month, or they may miss a month or more. The physical stress that female athletes put on their bodies can limit the flow of estrogen into their system and cause them to miss menstrual cycles. Poor nutrition or other physical and emotional stresses can also influence menstruation. Pregnancy also causes menstruation to stop during the term of the pregnancy.

Some doctors recommend that girls keep a record of their menstrual cycle. If a girl becomes concerned about the irregularity of her cycle, a written record can help a doctor recognize whether there is a problem.

Once young women have entered puberty, they may notice that from time to time there is a mild whitish discharge from the vagina. This discharge is part of the body's normal cleansing process and is nothing to worry about. Any time that a young woman notices a discharge that is not whitish in color, she should talk with her health-care provider.



Practice

Use the list below to complete the following statements.

28	labia majora	ovaries	uterus
adolescence	menstruation	puberty	vagina
hips	menstrual cycle	pubic	vulva
hormones	milk		

1. _____ is the period of our life when we make the transition from children to adults.
2. We become sexually developed and able to produce offspring in the period called _____ .
3. During puberty a girl's reproductive glands, or _____ , will begin to grow and develop.
4. Body hair, called _____ hair, begins to grow around the genitals in puberty.
5. The female external genitals are called the _____ .
6. During puberty a girl will begin _____ , a monthly cycle.
7. *Menstruation* describes the process that occurs when a female passes off the lining of the _____ .



8. An average menstrual cycle lasts about _____ days.
9. Estrogen and progesterone are _____ that trigger the changes in the female body that are part of puberty.
10. The female breast produces _____ that will feed and nourish a baby.
11. During puberty a girl's _____ will widen to create a larger passageway for a baby to travel through during birth.
12. The whitish discharge that begins flowing from the girl's _____ during puberty is part of a natural cleansing process.
13. The _____ are the outer folds of the skin of the vulva.
14. The _____ prepares the uterus to nourish a fetus if the female's egg is fertilized by (joined with) a male's sperm.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|-----------------|
| _____ 1. the period of life during which males and females become sexually developed and able to produce offspring | A. adolescence |
| _____ 2. the period of life during which a person changes from a child to an adult | B. areola |
| _____ 3. an organism in the early stages of development | C. embryo |
| _____ 4. to join an egg cell and a sperm | D. estrogen |
| _____ 5. chemicals that cause changes in the body | E. fertilize |
| _____ 6. the process of passing off the lining of the uterus | F. hormones |
| _____ 7. a ring of color around the nipple of the breast | G. menstruation |
| _____ 8. a female sex hormone | H. ovaries |
| _____ 9. the two reproductive glands in females that produce egg cells and female sex hormones | I. puberty |



Practice

Use the list below to write the correct term for each definition on the line provided.

clitoris
labia majora
labia minora
menstrual cycle

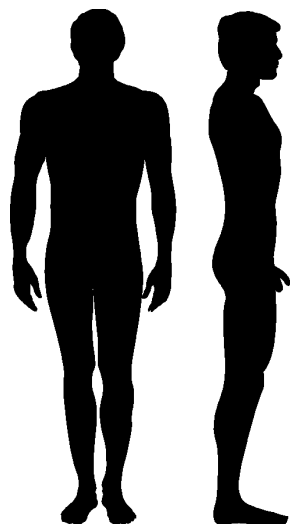
progesterone
sperm
urethra

uterus
vagina
vulva

- _____ 1. the external female genitals
- _____ 2. the sexually responsive organ in the female genitals
- _____ 3. the outer folds of skin of the external female genitals
- _____ 4. a muscular, very elastic tube in females that serves as a passageway for childbirth, semen, and menstrual flow; also called the *birth canal*
- _____ 5. a hollow, muscular pear-shaped organ in females where a fertilized egg will grow; also called the *womb*
- _____ 6. the inner folds of skin of the external female genitals
- _____ 7. a narrow tube leading from the bladder through which urine passes out of the body; in the male, it also connects with the vas deferens
- _____ 8. the time from the beginning of one menstrual period to the onset of the next
- _____ 9. the male reproductive cell; fertilizes female egg cell
- _____ 10. a female sex hormone



Physical Changes in Males during Puberty



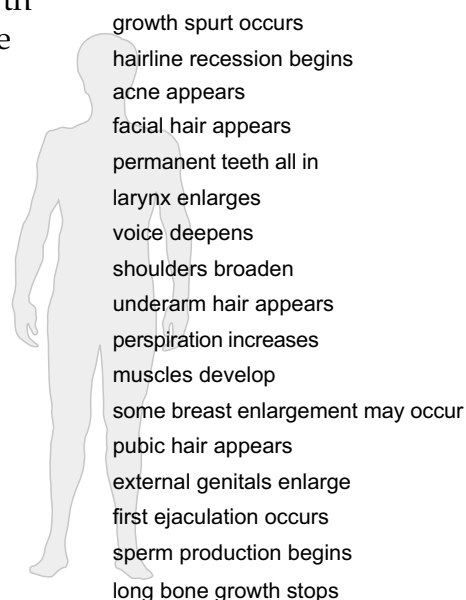
Males tend to begin puberty a few years older than females.

Males tend to begin puberty a few years later than females. Their development through puberty is both slower and longer than that of females. Some boys will not begin puberty until they are 15, or even older. Most, however, begin around 10 years of age and complete puberty by 18. The genitals in males grow and develop during puberty, just as they do in females. This growth makes it possible for males to produce sperm to fertilize the female egg cells. And like females, males grow pubic and underarm hair. But during puberty, males tend to grow more muscle tissue than females do. And the changes in the male's voice are more pronounced than in the female's voice.

Body Growth: Bones, Hair, and Muscle

Like girls, boys will also go through growth spurts during puberty. For many boys, the bones in their hands and feet will grow sooner than the rest of their skeleton. When this occurs, boys may go through an awkward period until the rest of their body catches up. Eventually, most boys will regain their agility and coordination. By the time most males complete puberty, they will have reached their full height.

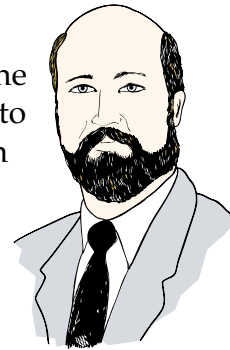
Also like girls, boys will begin growing pubic and underarm hair during puberty. At first their pubic hair will be straight, fine, and sparse. Later it will grow in a triangle of curly and coarse





hair. During their mid- or late-teens many boys will grow fine hair above their lips and sometimes along the jawline and on the face. Eventually this hair will turn to whiskers or a beard. Many boys will also grow hair on their chests. Most of their body hair will darken over time.

During late puberty, some males will notice their hairline receding, or moving back towards the crown of their head. The male hormone **testosterone** has the long-term effect of causing hair to grow below the crown of males' heads and causing hair *not* to grow along the scalp.



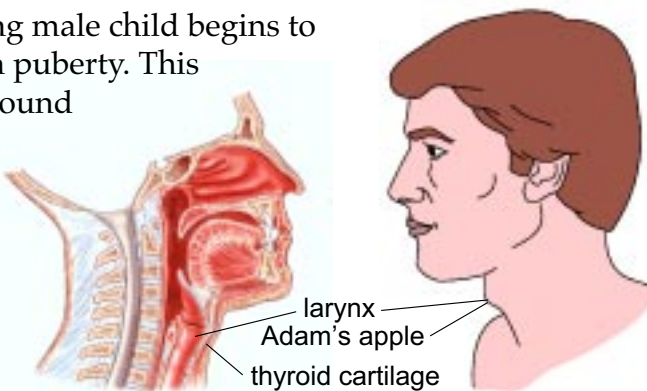
Testosterone has the long-term effect of causing hair to grow below the crown of males' heads and causing hair not to grow along the scalp.

The young man will also begin to develop more muscles during puberty. His shoulders will widen and his arms, legs, and torso take on shape as muscle tissue develops.

The Voice: From High to Low

The high voice of the young male child begins to deepen as he goes through puberty. This happens, on average, at around 14 years of age.

Testosterone causes the larynx, or voice box, to grow. The larynx extends from the back of the tongue to the *trachea*, or windpipe. The larger voice box creates a deeper voice. While the larynx is growing, however, it sometimes quivers. When



In males, part of the larynx may protrude at the front of the neck, forming the so-called Adam's apple.

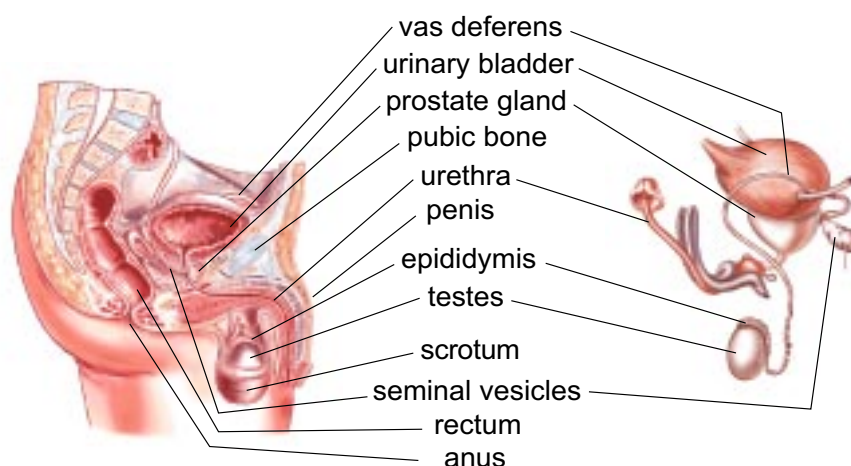
this happens, a boy's voice will break, or suddenly hit a high note. In time, the larynx stops growing, and the male's voice will stop breaking.

Genitals of the Male: The Testicles, Scrotum, and Penis

Puberty begins in the male when his **testicles** or *testes* release the hormone testosterone into his bloodstream. Testosterone triggers all of the other physical changes the male will experience during puberty. The testicles are



two small reproductive glands that hang between his legs in a sac called the **scrotum**. As a boy goes through puberty, his testicles and scrotum will grow and develop. In most cases, one of the testicles hangs lower than the other testicle. This helps eliminate friction that would occur if the testicles hung side-by-side.



The Male Reproductive System

During puberty, a young man's testicles will start producing the male reproductive cells known as *sperm*, and his **penis** will grow larger. Some males have had their penises **circumcised**. Circumcision is a medical procedure in which the small piece of skin that covers the head of the penis is cut away. Circumcision was once performed only in certain religious rituals but is now common among people of many faiths in our society. Circumcision has not been found to provide any specific health benefits or health risks.

Sperm are produced in the testicles. Sperm travel to a large coiled tube on the outer surface of the testicles called the **epididymis**. After about two to 10 days, sperm leave the epididymis and travel through a long tube called the **vas deferens**.

The vas deferens tubes lead to the urethra. The urethra is a tube that runs through the center of the penis. Sperm leave the body through the urethra. The urethra is also the tube through which urine leaves the body during urination. However, a muscle near the bladder contracts and makes it impossible for semen and urine to pass through the urethra at the same time.



As sperm travel through the vas deferens and the urethra, they pass by glands. The glands add fluids that nourish and protect the sperm, enabling the sperm to move on their own. The addition of these fluids to the sperm creates the fluid called **semen**.

An **erection** occurs when a male's penis fills with blood and stiffens. Erections occur for a variety of physical reasons including sexual arousal and the need to urinate, or during the dream state in sleep. An erection allows a male to participate in **sexual intercourse**. *Sexual intercourse* is genital contact between individuals. **Ejaculation** occurs when sperm, mixed with *semen*, is released from a man's penis. Ejaculation can happen during sexual intercourse, during **masturbation**, or during the dream state of sleep. When a male ejaculates, he is said to have an **orgasm**.

Daily cleaning will help keep the genitals—the penis and scrotum—free of rashes and infections. While playing sports, males should support and protect the genitals with athletic supporters, or “cups.” If a male is hit in the testicles and pain or swelling develops, he should see a doctor.

Nocturnal Emissions: “Wet Dreams”

Nocturnal emissions describe *orgasms* that both males and females have while sleeping. The release of fluid during the night is also called a *wet dream* because it usually occurs during a dream. Wet dreams cannot be controlled by either males or females. About two out of five women and four out of five men have experienced nocturnal emissions at some time in their life.

Why we have wet dreams is not clear. Some researchers believe that the male's wet dreams are the body's way of releasing stored sperm. Some researchers believe that these dreams are an outlet for sexual desires in both males and females. The only thing nearly all sensitive parents and adults agree on is this: We should not be embarrassed or alarmed by wet dreams. They are natural and do not indicate a moral weakness or an unnatural sexual desire.

Masturbation: Self-Stimulation

Masturbation refers to the stimulation of one's genitals to reach orgasm. An orgasm is a physical and emotional sensation that is felt at the peak or end of a sexual act. In most instances, people masturbate by rubbing or touching their genitals.



There are many myths about the effects of masturbation that are still common. Rumors have scared people into thinking that physical harm, such as blindness or insanity, can result from masturbation. These rumors are untrue. Masturbation does not cause physical harm. However, different cultures, religions, and families have different opinions about whether or not masturbation is an acceptable behavior. Young people should talk with their parents about family and religious values regarding masturbation.



Practice

Use the list above each section to complete the statements in that section.

circumcised
erection
ejaculation

penis
scrotum
sperm

testicles
testosterone

1. The male's genitals include the _____, scrotum, and _____.
2. The testicles are two small reproductive glands that hang between a male's legs in a sac called the _____.
3. During puberty a boy's testicles will start producing the male sex cells known as _____.
4. Puberty begins in the male when his testicles release the hormone _____ into his bloodstream.
5. An _____ is a stiff penis.
6. When semen, containing the sperm, is released from the penis it is called _____.
7. The penis that has been _____ has had the small piece of skin over its head cut away.



deepen
epididymis
hair

muscle
orgasm
puberty

semen
vas deferens

8. Like girls, boys will begin growing pubic and underarm _____ during puberty.
9. The high voice of the young male child begins to _____ as he goes through puberty.
10. During puberty males tend to grow more _____ than females do.
11. The male goes through _____ at a slower pace and for a longer time than females do.
12. When the male ejaculates, he releases the whitish fluid called _____, which contains his sperm.
13. Sperm travel to a large coiled tube on the outer surface of the testicles called the _____.
14. Sperm leave the epididymis and travel through a long tube called the _____.
15. An _____ is a physical and emotional sensation that is felt at the peak or end of a sexual act.



Puberty and Changing Emotions

The same chemicals, or hormones, in our bodies that cause physical changes also cause changes in our emotions. During puberty we may feel “on top of the world” one moment. The next moment we may feel as if we are carrying the weight of the world on our shoulders. Each day may bring wide swings of emotion. Many adolescents report feeling a deep, almost overwhelming love and appreciation for their parents on one day. The next day, they may feel disgust and even hate for those parents.

One expert on the effects of puberty could suggest only one possible way to manage these extremes of emotion: humor! Learn to laugh at some of our emotions. Develop a sense of humor about the sudden shifts of emotion that can confuse our daily life. Try not to take all of our feelings

so seriously. Recognize these feelings as sometimes just a momentary rush of emotion that will pass.



During puberty most adolescents start to take a new kind of interest in others.

During puberty most adolescents start to take a new kind of interest in others. This interest can take different forms. We may, for the first time in our lives, develop friendships that include romantic feelings. For many people, puberty will also excite sexual desire.

Remember: Puberty is the period when adolescents are becoming sexually mature people who are capable of reproducing. A common part of this process is developing an interest in and a sexual desire for those we find attractive.

Puberty and Social Growth

The new interest we find in others during puberty is a natural part of our social growth. *Social growth* refers to the ways we grow in our interactions with others. During puberty we begin to develop social roles or different identities we will use in our interactions with others.



Most of us will feel satisfaction in developing more responsible and adult-like relationships with others. We may find great satisfaction in doing volunteer work or in going out of our way to do something for a friend or stranger. We will begin seeing ourselves as individuals who can add to the world in good ways. And we may begin to see that we can be an important and valuable part of other people's worlds.

As young children, most of us accepted what we were taught. Our values and beliefs usually mirrored those of our parents and teachers. During puberty we begin to work out our own identities. We begin to see our families in a new way. One day we will probably be on our own, supporting ourselves and making our own decisions. We see that we are both a part of our families as well as individuals separate from them. We may question things we were or are being taught. We begin to develop our own sense of right and wrong behavior.

When we develop our own values, we often find ourselves pulled by two opposite forces. What do we do when our own values conflict with those of our peers? Puberty is a time when we find out which is more important to us—following our own paths or following those of others.



What do we do when our own values conflict with those of our peers?

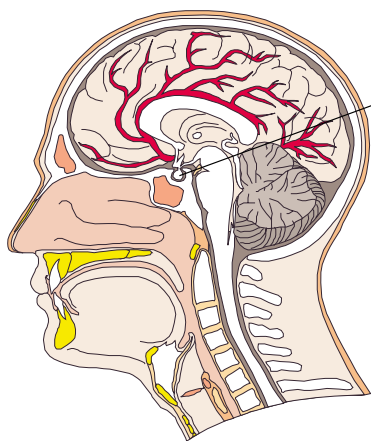
From birth we respond to our gender, or our classification as males or females. If we are males, we hear, "Oh, what a handsome boy!" If we are females, we hear, "Oh, what a pretty girl!" The list goes on and on. Males are told: "Big boys don't cry" and "Don't act like a girl!" Girls hear: "Act like a lady!" and "Don't be a tomboy." Other people try to shape us into masculine (for boys) or feminine (for girls) social roles.

These pressures are even greater during puberty. Suddenly our bodies are growing in masculine and feminine ways. We may begin to feel that since we look like a man or a woman, we should act like one! But we may find that although we are a male, we don't want to take on all of the characteristics usually associated with men. The same can be true for females. This difference between what is expected of us and what we want can confuse us. Each of us must find a satisfying social and sexual role. Unfortunately, this is far easier to say than it is to do.



What Causes Puberty?

In both males and females, the onset of puberty is controlled by the **pituitary gland**. The pituitary gland is a kind of master gland that releases hormones into our bodies. One function of hormones is to set certain



pituitary gland

The pituitary gland is located almost at the center of the skull and hangs from the base of the brain.

processes in motion.

Hormones act as messengers or timekeepers that flow towards various parts of our body and trigger other activities. One of the hormones released by the pituitary gland travels to the female's ovaries to produce the hormones estrogen and progesterone. Estrogen and progesterone will then set off the physical and emotional changes that are part of puberty.

A similar process occurs in males. One of the hormones released by the pituitary gland travels to the testicles. The testicles will then release the hormone testosterone. Testosterone then flows through the bloodstream and triggers the changes males will experience during puberty.

The Biological Clock: The Body's Timetable

Each of us has a biological clock, a kind of body clock, that sets our development in motion. No person's clock is right or wrong. We have no control over our biological clocks, just as we do not choose whether our eyes are brown or blue, or whether our hair is straight or curly. Learning to appreciate this fact can help us make our way through puberty. No one is better or worse because he or she matures sexually at an earlier or later age.

So simply appreciate the differences among us. A hundred years ago people often began puberty at a much later age. Some males did not complete their growth until their mid-twenties, and females often did not begin puberty until well into their teens.



In our present culture, there are still great differences in our biological clocks. The start of puberty can vary as much as five years or more from one person to another. Once puberty begins, the rate of growth can also vary greatly. Some people will develop quickly, some slowly. Some people will go through rapid growth periods. They may develop at a fast rate for a time and then suddenly their development will slow. Whether you are a late bloomer or an early bloomer, try not to judge yourself and try not to judge others. We neither choose nor control when we begin puberty, or when we finish maturing.



The start of puberty can vary in each teen.

Summary

During *puberty* males and females become sexually developed and able to produce offspring. As they become sexually developed, they go through many physical and emotional changes.

Changes in the female's body include development of the breasts, growth of body hair, change in body shape, and growth of the genitals.

During puberty females become capable of releasing egg cells. If these egg cells are *fertilized* by a male's *sperm*, a pregnancy may begin. If fertilized, an egg cell may begin growing into an *embryo*—the first stages of a baby.

During puberty girls begin *menstruation*. Menstruation is a monthly cycle during which the lining of the *uterus* is passed. This lining helps the embryo, as it develops into a fetus, survive during pregnancy.



During puberty muscles grow in males and they begin to take on a masculine appearance.

Males also go through many body changes during puberty. Their genitals grow and develop the ability to produce and *ejaculate* sperm. Their bones, hair, and muscles grow as they take on a masculine appearance. And their voice will deepen.

Both males and females may begin experiencing *nocturnal emissions*, or orgasms while they sleep. These are natural occurrences. Males and females also may experiment with *masturbation*, or self-stimulation to reach orgasm.



Puberty can also affect the emotions of both males and females. They may experience wide swings of emotion—feeling happy one moment and sad the next. During puberty, they may also experience social growth. They may find a new interest in romantic relationships and begin to develop new social roles and identities. They may develop responsible adult-like relationships with others. And they may begin to think more for themselves and work out their own values.

Although everyone goes through puberty, each of us develops at different rates. One person may begin puberty at an early age, and another person may not reach puberty until the middle or late teens. There is no right or wrong age at which to begin or end puberty.



Practice

Read each phrase below. If it describes a **problem** that should be **watched or checked** by a doctor, put a **check (✓)** on the line provided.

- _____ 1. Sudden growth in height.
- _____ 2. Slight difference in the size of the breasts.
- _____ 3. Not beginning the menstrual cycle until the age of 21.
- _____ 4. Irregular periods at the beginning of adolescence.
- _____ 5. Foul-smelling odor from the genital area.
- _____ 6. Young children learning to imitate adult behaviors.
- _____ 7. Emotions changing rapidly during puberty.
- _____ 8. Extreme worry about one's appearance during adolescence.
- _____ 9. Growing hair in the genital area.
- _____ 10. Teenagers experiencing a "chubby" phase.
- _____ 11. Embarrassment or shyness about one's body during puberty.
- _____ 12. Males who don't experience puberty until age 15.
- _____ 13. A testicle that hangs slightly lower than the other one.
- _____ 14. A penis that has been circumcised.
- _____ 15. Having nocturnal emissions or "wet dreams."
- _____ 16. A feeling of guilt after masturbating.
- _____ 17. A teenage girl wanting to play predominately male sports such as basketball, baseball, etc.
- _____ 18. Not menstruating at the same time one's friends have started their menstrual cycles.



Practice

Use the list above each section to complete the statements in that section.

clock
clitoris
emotions

feminine
masculine

menstruation
puberty

1. From birth, people tend to prepare males to behave in a _____ way and females to behave in a _____ way.
2. Each of us has a biological _____ which determines the rate of our development.
3. The hormones that cause changes in our physical bodies also cause changes in our _____ , or feelings.
4. The period when we become sexually mature is called _____ .
5. _____ is a monthly cycle females experience once they reach puberty.
6. The _____ is the extremely sensitive part of the female genitalia that is associated with sexual arousal.



erection masturbation nocturnal emission or wet dream	orgasm pituitary testosterone
--	--

7. The peak of sexual excitement in males and females is called _____ .
8. _____ is the male hormone that triggers growth.
9. During a(n) _____ , blood fills the penis and it becomes stiff.
10. A(n) _____ is an orgasm that both males and females may have during sleep.
11. _____ is a form of self-stimulation for pleasure.
12. In both males and females, the onset of puberty is controlled by the _____ gland.

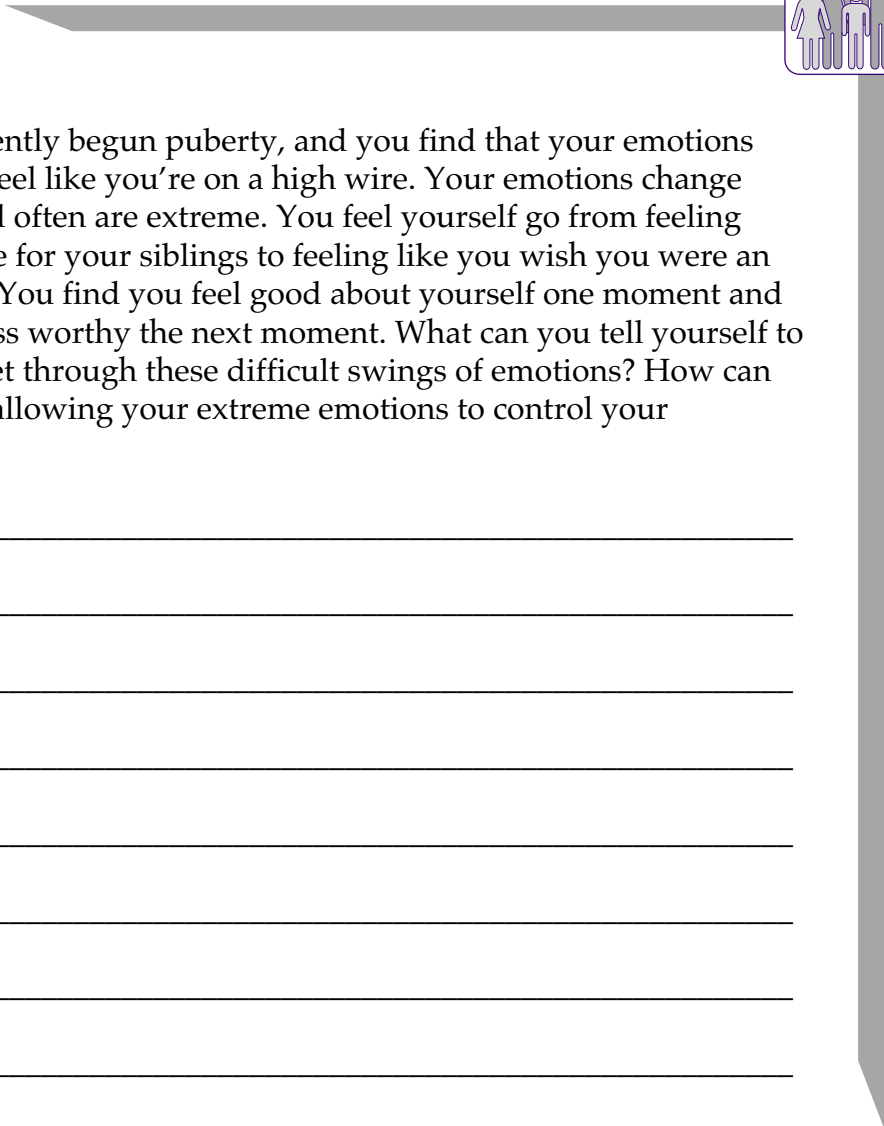


Practice

Answer the following using complete sentences.

1. Imagine that you find yourself beginning your teen years but not beginning to show many signs of puberty. Your friends, however, are growing quickly. Their bodies are changing shape, and they are beginning to take on adult-like features. What can you tell yourself to feel less self-conscious?

2. Why might teenagers find cliques particularly attractive to join?



- [illegible]



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. *Adolescence* describes the period of our lives when we make the transition from infants to teenagers.
- _____ 2. Adolescence includes the stage known as *puberty*.
- _____ 3. During puberty we become sexually developed.
- _____ 4. During puberty a girl cannot become pregnant.
- _____ 5. All girls begin puberty at age 13, and all boys begin puberty at age 14.
- _____ 6. *Menstruation* is the sign that a woman is pregnant.
- _____ 7. At birth the *ovaries* contain all of the eggs a woman will ever have.
- _____ 8. When egg cells combine with *sperm*, menstruation begins.
- _____ 9. It is normal for one breast to grow slightly faster than the other breast.
- _____ 10. During puberty, many girls gain body fat, especially around the hips.
- _____ 11. Another name for female genitals is *vulva*.
- _____ 12. *Menstruation* is the passing off of the lining of the uterus.
- _____ 13. Most females only pass about one to eight or more tablespoons of blood each menstrual period.
- _____ 14. Young girls often experience irregular periods.
- _____ 15. Sanitary napkins are inserted into the vagina during menstruation.



- _____ 16. Toxic shock syndrome is a form of cancer.
- _____ 17. If a female notices an unpleasant odor from the genital area, she should simply use feminine spray every day.
- _____ 18. Males usually begin puberty a few years later than females.
- _____ 19. Males begin to produce sperm cells during puberty.
- _____ 20. Males tend to gain extra body fat around their hips and legs during puberty.
- _____ 21. The male genitals include the *testicles*, *scrotum*, and *penis*.
- _____ 22. During puberty boys and girls grow hair under their arms and around their genitals.
- _____ 23. *Ejaculation* is not possible during puberty.
- _____ 24. *Sexual intercourse* always involves both the penis and vagina.
- _____ 25. Only males *masturbate*.
- _____ 26. The external female genitals are called the vulva.
- _____ 27. When a girl begins puberty, she will develop body hair around her genitals called *pubic hair*.
- _____ 28. Menstruation usually takes place about every 28 days or once a month.
- _____ 29. Social growth refers to the ways we grow in our interactions with others.
- _____ 30. During puberty females experience changes in their breasts, shapes of their body, and vulva.



Practice

Use the list below to write the correct term for each definition on the line provided.

ejaculation
erection
masturbation
nocturnal emissions

orgasm
penis
pituitary gland

scrotum
sexual intercourse
testosterone

- _____ 1. ejaculations that take place during sleep;
also called *wet dreams*
- _____ 2. the penis in a rigid or stiff state
- _____ 3. the stimulation of one's own genitals to
reach an orgasm
- _____ 4. the discharge or ejection of semen from
the penis
- _____ 5. the master gland that releases hormones
- _____ 6. the external organ of the male
reproductive system
- _____ 7. genital contact between individuals;
sexual contact with vagina, penis, anus,
or mouth
- _____ 8. the male sex hormone
- _____ 9. the physical and emotional sensation
felt at the peak or the end of a sexual act
- _____ 10. the external sac in males that holds the
testicles



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|----------------|
| _____ 1. the two reproductive glands in females that produce egg cells and female sex hormones | A. adolescence |
| _____ 2. the period of life during which a person changes from a child to an adult | B. circumcise |
| _____ 3. the external female genitals | C. embryo |
| _____ 4. the male reproductive cell; fertilizes a female egg cell | D. estrogen |
| _____ 5. an organism in the early stages of development | E. ovaries |
| _____ 6. the period of life during which males and females become sexually developed and able to produce offspring | F. puberty |
| _____ 7. a female sex hormone | G. semen |
| _____ 8. to remove the skin covering the head of a penis | H. sperm |
| _____ 9. the whitish mixture of sperm and fluids from the male reproductive glands | I. testicles |
| _____ 10. two small reproductive glands in males that produce sperm and the male hormone testosterone | J. vulva |

Unit 9: The Reproductive System

This unit provides accurate information pertaining to the functions of the male and female reproductive systems and how fertilization occurs. The unit also discusses diseases and disorders that males and females can face. Finally, the unit covers methods and myths of birth control.

Unit Focus

- parts and functions of the female reproductive system
- disorders and diseases of the female reproductive system and how to detect them
- parts and functions of the male reproductive system
- disorders and diseases of the male reproductive system and how to detect them
- importance of prenatal care in the health of a developing embryo and fetus
- different methods of birth control





Vocabulary

Study the vocabulary words and definitions below.

Female

- cervix** the neck of the uterus; connects the uterus and vagina
- endometriosis** abnormal growth of the lining of the uterus
- estrogen** a female sex hormone
- Fallopian tubes** a pair of tubes through which a mature egg released from the ovaries travels to the uterus, or womb
- mammogram** an X-ray photograph of the breast used to detect cancer
- ovaries** the two reproductive glands in females that produce egg cells and female hormones
- ovulation** the release of a mature egg cell from an ovary
- Pap test** a test used to check for cervical or uterine cancer
- premenstrual syndrome (PMS)** .. a variety of symptoms that some females experience before their menstrual periods, including nervous tension, anxiety, irritability, bloating, depression, mood swings, and fatigue



- trichomoniasis** a vaginal infection; signs include an odorous discharge, genital itching, and burning sensation during urination
- uterus** a hollow, muscular, pear-shaped organ in females where a fertilized egg will grow; also called a *womb*
- vagina** a muscular, very elastic tube in females that serves as a passageway for childbirth, semen, and menstrual flow; also called the *birth canal*
- vaginitis** common vaginal infections in females that can be caused by a fungus, bacteria, or protozoa
- yeast infection** a vaginal infection; signs include a thick, white discharge and genital itching



Male

ejaculate	to release suddenly—specifically seminal fluid during orgasm
epididymis	a large coiled tube in males that is located at the outer surface of each testicles; stores sperm after they are produced
penis	the external organ of the male reproductive system
prostate gland	the gland in males that secretes a fluid that mixes with sperm to form semen
scrotum	the external sac in males that holds the testicles
semen	the whitish mixture of sperm and fluids from the male reproductive glands; also called <i>seminal fluid</i>
sperm	the male reproductive cell; fertilizes a female egg cell
testicles	two small reproductive glands in males that produce sperm and the male hormone testosterone; also called <i>testes</i>
testosterone	the male sex hormone
vas deferens	a long tube in males that connects the epididymis to the urethra



Female and Male

asexual	having no gender; formed without sexual action
birth control	methods of avoiding pregnancy
cancer	a disease that causes cells in the body to grow abnormally
conception	union of egg cell and sperm; <i>fertilization</i>
condom	covering worn over the penis or in the vagina during sexual intercourse to trap sperm; a method of birth control and disease prevention
contraception	birth control
contraceptives	devices or methods for avoiding pregnancy and disease
discharge	a substance that has been released from the body—especially from the vagina or penis
embryo	an organism in the early stages of development
family planning	deciding if and when to have children
fertilization	the union of an egg cell from the female and a sperm cell from the male
fetus	the developing individual after two months in the uterus



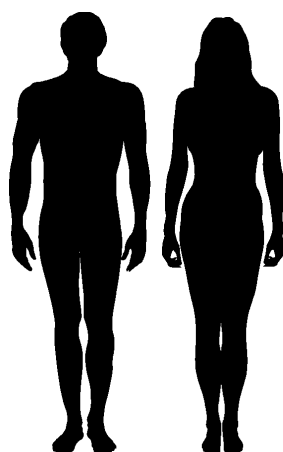
- hernia** a pushing out of a part of the body through a weakened area in the muscle; also called a *rupture*
- prenatal care** care for a fetus before it is born
- reproductive system** the body systems in the male and female that are responsible for the production of offspring
- sexual abstinence** not having sexual contact; a method of birth control and disease protection
- sexual intercourse** genital contact between individuals; sexual contact with vagina, penis, anus, or mouth
- sterility** inability to reproduce
- urethra** a narrow tube leading from the bladder through which urine passes out of the body; in the male, it also connects with the vas deferens
- virgin** a person who has never had sexual intercourse



Unit 9: The Reproductive System

Introduction

The list of all the similarities between males' and females' bodies would fill page after page. They both breathe and use oxygen in the same way. Their stomachs digest food in the same way. Both males' and females'



What is it that makes boys males, and girls females?

bodies have hearts that pump blood. Their bodies fight diseases and grow tissues and bone in exactly the same way. So what is it that makes boys and men *males*, and girls and women *females*? It's obviously more than just the masculine or feminine names we were given at birth.

It is our **reproductive system** that makes us either a male or female. Our reproductive system includes all the parts in our body we use to create life—our children. Each sex has different reproductive parts. The female produces the egg cell and carries the growing **fetus** until she gives birth. The male adds the

sperm, or male reproductive cell, that joins with the egg cell. Once a sperm cell and egg cell join, the female will usually begin pregnancy.

This joint contribution of the male and female to produce life is called *sexual reproduction*. Some insects and animals reproduce **asexually**. That is, they produce life without sexual action. *Asexual* reproduction has some drawbacks. The single parent can only produce exact copies of itself. In sexual reproduction, the children get traits from both the mother and father. This mix of the parents' traits creates a baby that is unique from all other babies. Even identical twins have some differences.

Why Study the Reproductive Systems?

Anyone can have sex. During vaginal **sexual intercourse** a male inserts his **penis** into a female's **vagina**. However, educating ourselves about sex and the reproductive systems will help us be responsible about sexual activity. Anytime a male and female have vaginal sexual intercourse, there is a chance of pregnancy. Unless we understand reproduction, we cannot choose if and when to have children. Choosing when we will try to have



children is called **family planning**. Family planning also means choosing when and how to take precautions *not* to have children. *Family planning* is the responsibility of both males and females. Couples who are most successful in family planning are educated about the reproductive systems. Males need to understand both the male and female reproductive systems. Females also need to understand the systems of both sexes.

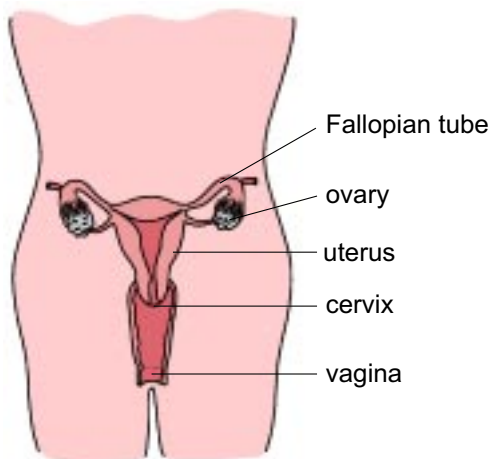
Ignorance often leads to unwanted pregnancies. Unwanted births usually interrupt the parents' plans for their futures. It's not easy for teenage parents to finish school or find a satisfying job. Caring for and supporting a baby can be a full-time job. And many babies whose parents are teenagers end up as victims of a bad situation. Parenthood is for mature adults. Counselors in family planning help teenagers and adults learn about the body and decide if and when to have children.



Caring for and supporting a baby can be a full-time job.

The Female Reproductive System: Parts and Organs

The female reproductive system accomplishes three key steps in creating new life. First, the female's system *produces an egg cell* that can develop into a baby if it is fertilized by a male's sperm. If the *egg is fertilized*, it begins to divide and grow. The female's system protects and feeds the egg until it grows into a fully formed fetus. And finally, the woman's reproductive system will *give birth* to this new life.



Female Parts and Organs

Fallopian tubes descend from the ovaries to the point where the two arms intersect. At this point they join into the **uterus**. Just below the uterus is the **cervix**, the neck of the uterus. And at the base of the Y is the *vagina*.

The female reproductive system is shaped like the letter Y. The tips of the two arms that point in different directions represent the **ovaries**. The



The Vagina

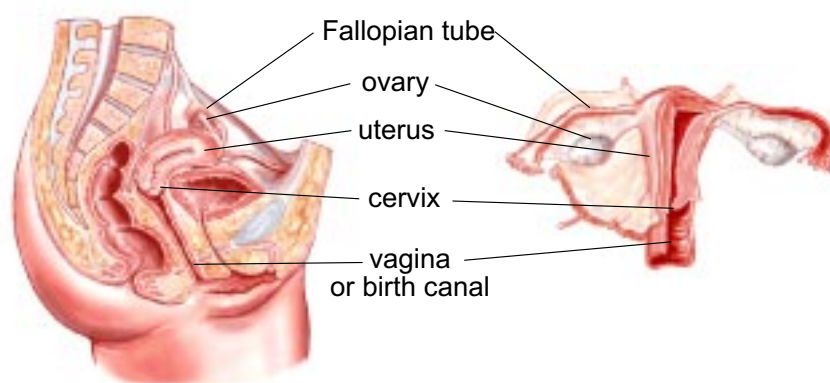
Most of the female reproductive system is within the body and not visible. Only the vaginal opening can be seen from the outside. The *vaginal opening* leads to the rest of the reproductive system, including the vagina.

The vagina plays a key role in the beginning and end of the reproductive cycle. It is the vagina that first receives the male's sperm. It is also the vagina, often called the *birth canal*, from which a fetus exits the uterus during birth.

The Ovaries: Storehouse of Egg Cells

Ovaries are two reproductive sex glands in the female. They are located on each side of the body below the waist. Ovaries have two functions. They produce the hormone **estrogen**. Estrogen triggers development of the female reproductive system. As her system develops, the female becomes capable of having children.

Ovaries also contain hundreds of thousands of eggs. If fertilized, each egg could develop into a baby. At puberty, the ovaries will begin to release one mature egg each month. In most cases, the ovaries will alternate. One month the left one will release an egg. The next month the right one will release an egg. This process is called **ovulation**. Mature eggs will travel from the ovaries to the Fallopian tubes.



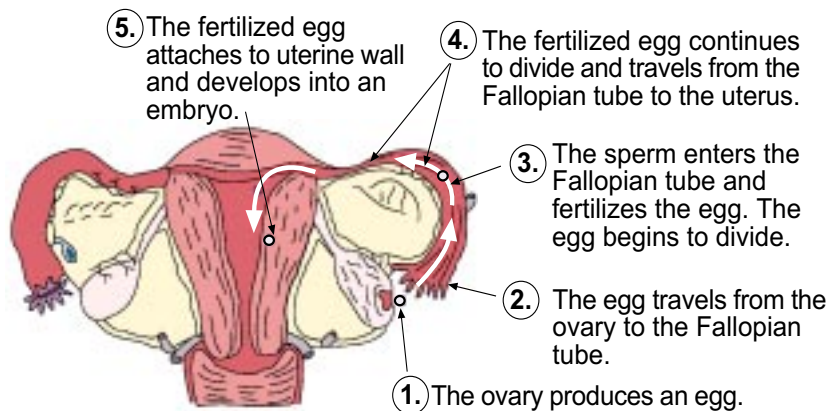
Female Parts and Organs



The Fallopian Tubes: The Place of Fertilization

The Fallopian tubes lead away from the ovaries. One of the tubes will draw the mature egg inside itself. If a sperm cell meets the egg cell in a Fallopian tube, **fertilization** may take place. *Fertilization* is the joining of the egg cell and a sperm cell. This joining of the egg and sperm is also called **conception**.

The fertilized egg begins to divide and develop. It then travels down the Fallopian tube. This journey from the Fallopian tube to the uterus takes about three days. The fertilized egg may then attach itself to the wall of the uterus.



The Fallopian Tubes: The Place of Fertilization

The Uterus: Home to the Fertilized Egg

The uterus, also called a *womb*, becomes the home of the fertilized egg. Here the egg will be nourished and grow. Through the second month, this dividing and developing fertilized egg is called an **embryo**. From the third month on, this life form is called a *fetus*. The fetus has the beginnings of its vital organs. In about nine months a baby will be born. A baby may exit through the vagina, or *birth canal*. If delivery through the birth canal is considered to be risky, an operation called a *Cesarean section* is performed.

Each time the ovaries release an egg, the uterus prepares itself to carry a fertilized egg. The uterus does this by lining its walls with nutrient-rich blood and tissue that can protect the embryo and fetus.



Personal Health Issues and Prevention: Females

Breast Cancer: Look for Lumps, Knots, and Thick Tissue

Cancer is a disease that can attack any part of the body. Cancer causes cells in the body to grow abnormally. If left unchecked, cancer can spread through the body quickly. About one woman out of eleven will get breast cancer. Male breast cancer is not common, but males can also get breast cancer. For every 100 women who get breast cancer, one man will, too.

In all forms of cancer, early detection can often lead to a cure. This is especially true of breast cancer. If breast cancer is detected early, most females will go on to live normal lives.

The American Cancer Society suggests that women do self-examinations of their breasts. The best time for self-examination is one week after the menstrual period ends. At that time, a woman's breasts are the least tender and swollen.

Self-examination is quite easy. Raise the hand nearest the breast you're examining over your head. Using the other hand, begin at the outer edge of your breast. Move your finger tips in a circular motion over every area of the breast. Look especially at the area of the breast nearest the armpit. Feel for any lumps, knots, or thick tissue. Look for any changes in the skin or nipple.

How to Do a Breast Self-Examination

1. Raise the hand nearest the breast you are examining over your head.
2. Using the other hand, begin at the outer edge of breast. Move your fingertips in a circular motion over every area of the breast.
3. Look especially at the area of the breast nearest the armpit.
4. Feel for any lumps, knots, or thick tissue.
5. Look for any changes in the skin or nipple.

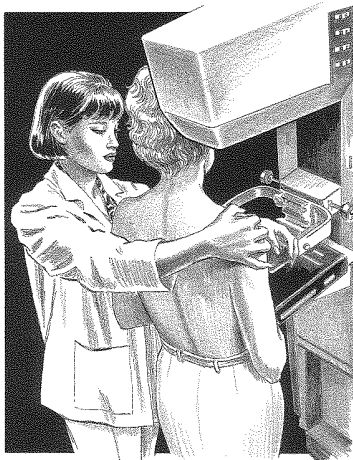
Additional examination - Look in mirror and look for anything unusual, such as a discharge from the nipples, or scaling or puckering of the skin.



If any hard tissue or changes are discovered, contact your doctor immediately. Fortunately, 80 percent of all suspicious lumps found in breasts are benign, or harmless.

Some women put off seeing a doctor because of what they fear. They are afraid of losing a part of a breast, or even of losing the entire breast. This fear is natural. Few of us can say that our appearance isn't important to us. Many of us fear medical procedures. But with early detection and new methods, we can limit the effects of breast cancer. **Remember:** Ignoring

cancer will not make it go away—only treatment can.



The mammogram is an X-ray of the breasts.

Doctors recommend that all women after about age 40 have a yearly test called a **mammogram**. The mammogram is an X-ray of the breasts. It is quick and painless. If your family has a history of breast cancer, your doctor may request that you begin having mammograms at an earlier age or more than once a year.

For more information on breast cancer, phone your local American Cancer Society or talk to your doctor or nurse.

Cervical and Uterine Cancer

These diseases occur when cancerous cells begin growing in the cervix or uterus. Early detection is the key to treating and curing cervical and uterine cancer. The American Cancer Society recommends that all women over 20, and sexually active women of any age, have a yearly pelvic examination. During this exam, the doctor will do a **Pap test** to check cells from the cervix.

During a Pap test, the female will lie down. A doctor will insert an instrument called a *speculum* into the vagina. With this instrument, a doctor can see inside the vagina up to the cervix. The doctor will scrape cells off of the cervix to be tested. A Pap test is usually painless. A female might feel some slight discomfort—and perhaps some embarrassment. Results are usually available in a day or two.



Disorders of the Female Reproductive System

Premenstrual Syndrome (PMS): Discomfort before Menstrual Periods

Premenstrual syndrome (PMS) is a disorder some women experience from several days to two weeks before their menstrual period. The majority of women never experience PMS. PMS includes many different symptoms: bloating, weight gain, fatigue, mood swings, nausea, and nervousness.

Scientists don't know what causes PMS. Some believe PMS is caused by hormonal imbalance. Most doctors do agree, however, that most females experiencing the symptoms of PMS can lessen their discomfort. Regular exercise and reducing stress are two ways to help reduce some or all of the symptoms of PMS. Other ways include eliminating or reducing sugar, caffeine, nicotine, and alcohol.

If PMS becomes severe, a female may need to see a doctor. Extreme discomfort may be a sign of something that needs medical treatment. A female should always consult a doctor if she is uncertain about health problems.

Vaginitis: Infections in the Vagina

Vaginitis. **Vaginitis** refers to a variety of infections that occur in the vagina. Most women have vaginitis at some time in their lives. Most forms of vaginitis can easily be treated by a doctor. Vaginitis can be caused by a fungus, bacteria, or protozoa. Each vaginitis requires a different kind of treatment. The earlier the treatment begins, the easier it is to cure any of these infections. Although two forms of vaginitis are described below, there are many "nonspecific" forms. Any time that a woman experiences itching and unusual **discharge** from the vagina, she should see a doctor or nurse.

Yeast infections. Signs of a **yeast infection** include a thick, white discharge from the vagina and genital itching. It is a common infection and easily treatable by a doctor.

Trichomoniasis. Women tend to be most vulnerable to this infection near the end of their menstrual period. The signs of **trichomoniasis'** symptoms include an odorous discharge, itching near the genitals, and a burning sensation during urination.



Sterility: An Inability to Reproduce

A common cause of **sterility** in women, or the inability to reproduce, is **endometriosis**. This disorder is an abnormal growth of the lining of the uterus. Surgery can often correct this problem. Endometriosis can cause extremely painful menstrual periods.

Another common cause of sterility in females is the inability to ovulate, or successfully release egg cells. Another cause of sterility is a blocked Fallopian tube. If a Fallopian tube is blocked, the egg cell cannot pass to the uterus.



Practice

Use the list below to complete the following statements.

asexual	fetus
cancer	Pap test
estrogen	vagina
fertilization	

1. The hormone that triggers the female body to mature sexually is called _____.
2. An organism in the early stages of development is an embryo; from the third month on, this life form is called a(n) _____.
3. The part of the female body from which the baby makes its final exit during birth is the _____, or *birth canal*.
4. _____, or *conception*, is the joining of the egg cell and the sperm cell.
5. _____ reproduction takes place without the opposite sex and produces exact copies of the parent.
6. Early detection is the best cure and treatment for _____ of the breast, uterus, and cervix.
7. The _____ is a part of the female's annual checkup to detect cervical and uterine cancer.



endometriosis
Fallopian
mammogram
ovaries

ovulation
sterile
uterus

8. To be _____ is to be unable to have children.
9. Women over age 40 should have a yearly test called a _____ to check for breast cancer.
10. One sign of _____ is extremely painful menstrual periods.
11. The fetus is nurtured and grows in the _____ , or *womb*, until birth.
12. Fertilization may take place in the _____ tubes.
13. The two reproductive glands of the female where eggs are stored are called the _____ .
14. During _____ the female reproductive system releases an egg cell.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|---|------------------------|
| _____ 1. the body systems in the male and female that are responsible for the production of offspring | A. conception |
| _____ 2. genital contact between individuals; sexual contact with vagina, penis, anus, or mouth | B. discharge |
| _____ 3. the external organ of the male reproductive system | C. embryo |
| _____ 4. deciding if and when to have children | D. family planning |
| _____ 5. union of egg cell and sperm; <i>fertilization</i> | E. penis |
| _____ 6. an organism in the early stages of development | F. reproductive system |
| _____ 7. a substance that has been released from the body—especially from the vagina or penis | G. sexual intercourse |
| _____ 8. the male reproductive cell; fertilizes a female egg cell | H. sperm |
| _____ 9. common vaginal infections in females that can be caused by a fungus, bacteria, or protozoa | I. vaginitis |



Practice

Match each set of **symptoms** with the correct **disorder** or **disease**. Write the letter on the line provided.

	symptoms	disorder/disease
_____	1. bloating, mood swings, weight gain	A. uterine or cervical cancer
_____	2. odorous discharge, genital itching, burning during urination	B. PMS
_____	3. inability to get pregnant; blocked Fallopian tube	C. breast cancer
_____	4. painful menstrual cycles	D. sterility
_____	5. lumps, knots, or thick tissue	E. trichomoniasis
_____	6. thick, white discharge from vagina and genital itching	F. yeast infections
_____	7. none; detected by Pap test	G. endometriosis



Practice

Match each **female reproductive function** with the correct **female body part**.
Write the letter on the line provided.

function	part
_____ 1. connects uterus and vagina; the neck of the uterus	A. ovaries
_____ 2. develops into embryo	B. vagina
_____ 3. contains the egg cells	C. uterus
_____ 4. provides a home for the developing fetus; womb	D. Fallopian tube
_____ 5. path for the egg from the ovary to the uterus	E. cervix
_____ 6. birth canal	F. fertilized egg cell



Practice

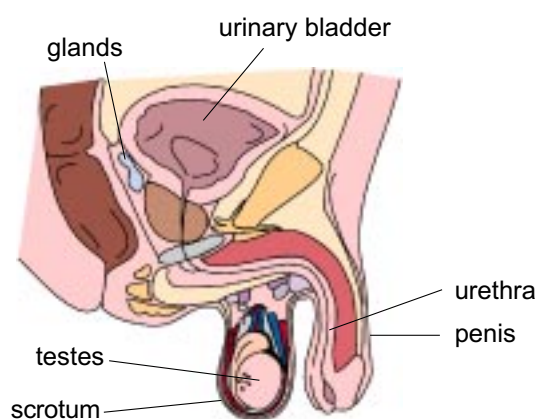
Number these **steps in the development of a human baby** in the correct **order** that they occur. Write the number on the line provided.

- _____ 1. In the uterus, the fertilized egg cell develops into an embryo and then a fetus.
- _____ 2. The baby exits from the vagina, or birth canal.
- _____ 3. The fertilized egg travels from the Fallopian tube to the uterus.
- _____ 4. The fetus is nourished and develops until ready for birth.
- _____ 5. The mature egg travels from the ovary to the Fallopian tube.
- _____ 6. The ovaries release an egg during ovulation.
- _____ 7. The sperm cell meets the egg cell in a Fallopian tube and fertilization takes place.



The Male Reproductive System: Parts and Organs

The entire male reproductive system functions to produce *sperm*, the male reproductive cells, and **ejaculate** them into the female's vagina. Sperm, which look much like tiny tadpoles, will attempt to swim through the vagina. The head of the sperm has the actual male reproductive cell. The tail of the sperm whips back and forth and moves the sperm forward. The



Male Parts and Organs

sperm swim through the cervix, through the uterus, and finally to the Fallopian tubes. Sperm travel at about one-half inch a minute. There are 300 million to 400 million sperm in each ejaculation, but only one can fertilize an egg cell. If a sperm is strong enough to reach the female egg in the Fallopian tube, fertilization may occur. The egg cell will then begin to divide. A single sperm cell is very small. Lined up end-to-end, 500 sperm would only measure one inch.

The male reproductive system is made up of glands and a series of tubes. As sperm travel through these tubes, they mix with different fluids that will help them in their journey.

The Testicles

The **testicles**, or *testes*, are two small reproductive glands in males. These glands have two important functions. Testicles produce the male hormone **testosterone**. Like estrogen in girls, *testosterone* begins to change boys into sexually mature adults.

Testicles also produce millions of sperm. In fact, healthy testicles will produce about 100 million sperm a day. Sperm will only survive at a constant temperature of 98.2 degrees Fahrenheit (°F), slightly below the normal body temperature of 98.6°F. If the testicles become colder or hotter, the sperm will die. The **scrotum** is the external sac that holds the testicles and keeps them at the right temperature. When the body is cold, the scrotum will pull the testicles into the body for warmth. When the body is hot, the scrotum will drop a bit to move the testicles away from the body's heat.

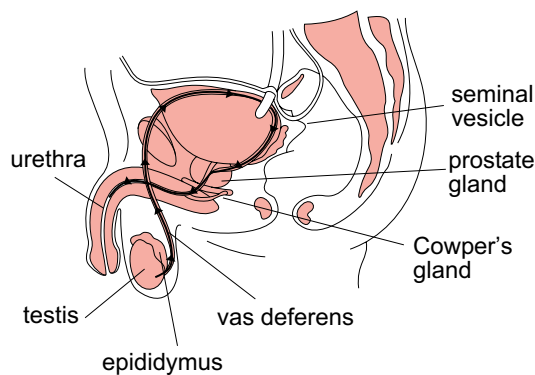


The Epididymis: Storehouse for Sperm

Connected to the outer surface of the testicles are large coiled tubes called the **epididymis**. The epididymis functions as a kind of storage house for sperm. Sperm remain there about two to 10 days, until they mature and are ready to be ejaculated.

The Vas Deferens: Passageway for Sperm

When the sperm leave the epididymis, they swim through another long tube. This tube is called the **vas deferens**. Next, the sperm enter the *seminal vesicles*, where they mix with fluid. This fluid both nourishes sperm and helps them continue swimming on their journey.



Passageway for Sperm

From the seminal vesicles, sperm travel through the ejaculatory ducts. Sperm then enter two different glands where they are mixed with two important fluids. The **prostate gland** adds fluid to the sperm that helps them continue moving. The Cowper's gland adds a fluid to clear the urethra of any acidity. If the sperm were to contact acidity, they would die. This new mixture is called **semen**, or *seminal fluid*.

The Urethra: Passageway for Sperm and Urine

The **urethra** is a narrow tube that passes through the *penis*. It has two important functions. Males and females pass urine through the urethra. In males, seminal fluid also passes through the urethra and out of the penis. The male cannot, however, release semen and urine at the same time. When the male ejaculates semen, a muscle blocks the bladder from releasing urine. The high acidic content of urine would kill sperm.



The Penis

During most times, the penis remains soft and hangs down. But when the penis fills with blood, it becomes erect. When erect, the penis can ejaculate semen. As you can see, the reproductive system, in both males and females, is kind of like a factory. First the reproductive system produces a sperm cell or egg cell. Then the system moves the cell through tubes and organs towards its destination.

Caring for the Male Reproductive System

Daily cleaning will help keep the genitals—the penis and scrotum—free of rashes and infections. While playing sports, males should support and protect the genitals with athletic supporters or “cups.” If a male is hit in the testicles and pain or swelling develops, he should see a doctor.

Diseases of the Male Reproductive System

Testicular Cancer: The Most Common Cancer of Young Males

Testicular cancer is probably the most common cancer in younger males. Early detection almost insures the patient’s survival. All males should do a self-examination at least once a month. After a warm bath or shower, the male should roll each testicle between his thumb and fingers to check for any hard lumps or nodules. He should become familiar with the shape and feel of his testicles so he will notice any changes. If a male detects any growths, he should see a doctor.

How to Do a Testicular Self-Examination

1. The best time to do a testicular self-examination is after a warm bath or shower, when the scrotum is relaxed.
2. The male should roll each testicle between his thumb and finger to check for any hard lumps, nodules, enlargements, or changes in texture.

Additional examination - Look in mirror and look for anything unusual, such as enlargements or swelling.



Cancer of the Prostate Gland: Curable Cancer in Older Males

Cancer of the prostate gland tends to develop in older males. Finding the cancer early can mean the difference between life and death for a patient. If discovered before the cancer spreads from the prostate gland, most patients will survive this disease. At about the age of 40, men should be checked each year for prostate cancer.

Disorders of the Male Reproductive System

Hernia: A Rupture

Hernias happen when a part of the body actually pushes through the wall holding it in place. Hernias are also called *ruptures*. The most common hernia in men is an *inguinal hernia*. An inguinal hernia is a weak spot in the lower abdomen wall near the top of the scrotum. Sometimes straining the abdominal muscles can cause a tear in this spot. A part of the intestines can then push through the scrotum. An inguinal hernia can usually be repaired in out-patient surgery.

Sterility

Sterility in males is caused by weak or poorly formed sperm. These sperm cannot fertilize a female's egg. Sterility can also be caused by too few sperm being produced. Sterility is often caused by smoking; certain sexually transmitted diseases; and problems with the urethra, vas deferens, or epididymis.



Practice

Use the list below to complete the following statements. **One or more terms will be used more than once.**

ejaculates	semen	testicular
hernias	sperm	testosterone
penis	temperature	urethra
scrotum	testicles	

1. The male reproductive system produces _____ and _____ them into the female's vagina.
2. The mixture of sperm and fluids from the prostate gland is called _____, or seminal fluid.
3. The male reproductive cell that may unite with the female egg cell is called _____.
4. A narrow tube in the penis through which urine and semen pass is the _____.
5. The _____, one of the male's external sex organs, ejaculates semen.
6. The _____ are the small reproductive glands that produce sperm and the hormone _____.
7. The _____ is the external sac that holds the testicles.
8. The scrotum helps control the _____ of the testicles and their sperm.



9. The most common cancer found in younger males is _____ cancer.
10. _____ happen when a part of the body actually pushes through the wall holding it in place.

Use the list below to complete the following statements.

acid	prostate	swim
epididymis	prostate gland	vas deferens
million	sterility	

11. _____ cancer tends to develop in older males.
12. The storehouse for sperm is a large coiled tube known as the _____ .
13. Sperm travel from the epididymis through the long tube called the _____ to the seminal vesicles.
14. The _____ produces fluid that helps the sperm continue to move.
15. The Cowper's gland helps clear the urethra of any _____ , which would kill sperm.
16. _____ may be caused by weak or malformed sperm.



17. Healthy testicles can produce sperm at the rate of 100 _____ per day.
18. Sperm attempt to _____ through the female's reproductive system to fertilize an egg cell.



Practice

Number these **steps of the journey of the male sperm cells** in the correct order that they occur. Write the number on the line provided.

- _____ 1. From the ejaculatory ducts, the sperm travel through the urethra and penis.
- _____ 2. In the seminal vesicles, the sperm mix with fluid.
- _____ 3. Sperm are released from the epididymis and travel through the vas deferens.
- _____ 4. Sperm arrive at the seminal vesicles from the vas deferens.
- _____ 5. Sperm are produced by the testicles.
- _____ 6. Sperm remain in the epididymis until maturity.
- _____ 7. Sperm travel from the testicles to the epididymis.



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. The male reproductive system produces eggs.
- _____ 2. Each *sperm* is about the size of a quarter.
- _____ 3. *Vas deferens* is a form of cancer that affects the male reproductive system.
- _____ 4. *Testicles* produce sperm.
- _____ 5. Healthy testicles will produce about 100 million sperm per day.
- _____ 6. Sperm cannot survive in extreme cold or heat.
- _____ 7. The external sac that holds the testicles is called the *scrotum*.
- _____ 8. The *scrotum* helps keep sperm at the right temperature.
- _____ 9. When the body is hot, the scrotum will drop a bit to move the testicles away from the body's heat.
- _____ 10. The *epididymis* is where urine is stored.
- _____ 11. The *prostate gland* adds fluids to the sperm.
- _____ 12. The *urethra* carries urine out of the body.
- _____ 13. During male *ejaculation*, urine is sometimes released.
- _____ 14. Most of the time, the male's *penis* hangs downward and is relatively soft.
- _____ 15. While playing sports, it is important for males to wear supportive cups in order to avoid strain and injury to their testicles.



- _____ 16. Bone cancer is probably the most common cancer in young males.
- _____ 17. Most males do not survive *testicular cancer*.
- _____ 18. Males can perform self-examinations of their testicles to look for unnatural lumps or hard spots.
- _____ 19. If caught early enough, prostate cancer usually isn't fatal.
- _____ 20. *Hernias* are usually fatal; there is no cure.



Pregnancy, Birth Control, and Prenatal Care

As human beings, we share similarities with many other animals. Humans and many other animals have similar reproductive systems. Humans and many other animals sexually reproduce.

Humans and other animals also have the desire to have sexual intercourse. But unlike other animals, we have one important ability. We can choose *not* to have sexual intercourse. And if we do have vaginal sexual intercourse, we can take precautions to avoid a pregnancy.

Any time a male and female have vaginal sexual intercourse, there is a chance of pregnancy. In fact, there is a 90 percent chance that a couple practicing sex without any form of **birth control** will produce a pregnancy within one year. Anyone who has reached sexual maturity is physically able to have sex. However, most teenagers are not ready to bring a baby into the world and care for it. They are not mature enough or financially ready.

Too often love is used as the test for whether people should have sex. If two people love each other, they sometimes believe that they are ready for sexual intercourse. But there are other questions to be asked and answered. For instance, are they able to be responsible for another life? Could they devote every hour of the day to taking care of a baby? Are they willing and able to give up the free time they now enjoy? Would they be able to complete their education and begin a career? Raising a baby can be a very satisfying experience—if a couple is ready.

Birth Control: Avoiding Pregnancy

Birth control, or **contraception**, includes all the methods a couple can use to avoid pregnancy. Devices for preventing pregnancy are called **contraceptives**. Many people who have sex use birth control. They may want to see a doctor, nurse, or family planning counselor for information and guidance concerning contraception. When a couple is ready to begin a family and are able to be parents, they stop using birth control. Contraceptives only work when used correctly!

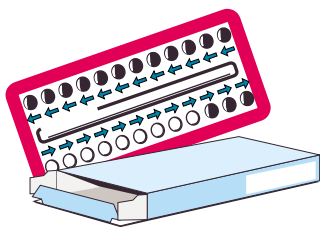


Sexual abstinence. The only contraceptive that is 100 percent effective at preventing pregnancy is **sexual abstinence**. *Sexual abstinence* is not having sex. Practicing abstinence can be difficult. A boyfriend or a girlfriend may pressure his or her dating partner to have sex to show he or she really cares. In addition, many people have a natural desire to enjoy the pleasure of sex. But mature and responsible teenagers do practice abstinence. And remember this: Even if a person is not a **virgin**, he or she can still begin to practice abstinence right now.

Barrier methods of contraception. Some methods of birth control are called *barrier methods*. Like a barrier, they block the sperm from uniting with an egg cell.

One barrier method is the **condom**. A *condom* is a covering the male wears over the penis. A condom is also a covering the female wears in the vagina. Sperm are trapped in the condom. Latex condoms are the most effective condoms. Condoms can be effective as a contraceptive only if they are used every time and used correctly.

The *female condom*, *diaphragm*, *cervical cap*, and *contraceptive sponges* are barrier methods worn inside the female's vagina. They block sperm from fertilizing an egg. When used along with *spermicidal jelly*, diaphragms and cervical caps are very effective at blocking pregnancy. The female condom is slightly larger than the male condom. The cervical cap is a smaller version of the diaphragm. The contraceptive sponge is a small, disposable sponge that already contains spermicide.



Hormonal contraceptives. Hormonal contraceptives use hormones to prevent pregnancy. The *birth control pill* is called an *oral contraceptive* because the female swallows it. This method is nearly 100 percent effective if taken every day. The pill, however, does have possible side effects. Contraceptive injections, skin patches, implants, gels, intrauterine devices (IUDs), and vaginal rings also use hormones to prevent pregnancy.

Contraception that doesn't work. At certain times during her menstrual cycle, a female is less likely to become pregnant. People sometimes plan to have sex only during those times to avoid pregnancy. This method of birth control is called the *rhythm method*. The rhythm method *often fails for teenagers*. Teenage girls rarely have regular cycles. It's almost *impossible* for them to know when they are not likely to become pregnant.



Another sure-to-fail method is *withdrawal*. The male will try to pull his penis out of the female's vagina just before ejaculating. Often he fails. And even if he succeeds, sperm often enter the vagina before ejaculation.

Prenatal Care: Caring for the Baby during Pregnancy

Caring for a baby begins the instant a female becomes pregnant. The pregnant female should practice **prenatal care**. *Prenatal* means *before birth*. A pregnant female should begin prenatal care by seeing a doctor often. A doctor will check the mother's and fetus's condition. The doctor will also give the pregnant mother information to help her keep the fetus healthy.



· Caring for a baby begins the instant a female becomes pregnant.

Pregnant females need to eat the right food. They are eating for two: themselves and their fetuses. Poor eating habits can lead to low-birth weight or deformed babies.

Pregnant females need to avoid alcohol, smoking, and drugs. If females drink alcohol during pregnancy, then their fetus takes in the alcohol. Smoking cigarettes and using drugs during pregnancy means the fetus takes in the smoke and drugs, too. Any of the three can cause premature, ill, or even deformed babies.

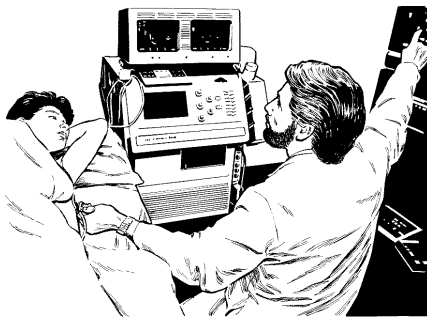
Pregnant females need to exercise and rest. Exercise and rest will help the fetus's health. They will also help the mother be strong during birth.



Summary

Our *reproductive system* makes us either a male or female. The male's and female's reproductive systems come together in sexual reproduction to produce a life—a baby.

The female reproductive system is capable of producing an egg cell. If the egg cell is *fertilized*, the female may become pregnant. Once she is pregnant, her system nurtures the egg. In the fertilized egg's earliest stage, it is called an *embryo*. In the egg's later stage, it is called a *fetus*. Finally, the female will give birth to a baby.



Once someone becomes pregnant, she should begin prenatal care.

Once she becomes pregnant, she should begin *prenatal care*. She needs to eat nutritious foods and not drink alcohol, smoke, or do drugs. She also needs to exercise and rest.

Several diseases and disorders can affect the female reproductive system.

Diseases include breast *cancer*, and cervical and uterine cancer. Disorders include *premenstrual syndrome (PMS)*, any of the infections generally called *vaginitis*, and the many causes of *sterility*.

The male reproductive system is a series of glands and tubes that produce *sperm cells*. The male reproductive system also makes it possible for sperm to swim to and fertilize the egg cell. Diseases and disorders of the male reproductive system include *testicular cancer*, cancer of the *prostate gland*, *hernias*, and many causes of sterility.

As humans, we have the ability to use *family planning*. We can choose whether and when to reproduce. *Birth control* can help us to avoid pregnancy. The only 100 percent effective method of birth control is *sexual abstinence*. Sexual abstinence, or not having *sexual intercourse*, is recommended for anyone who is not emotionally and physically ready to raise a child.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|----------------------|
| _____ 1. birth control | A. condom |
| _____ 2. devices or methods for avoiding pregnancy and disease | B. contraception |
| _____ 3. not having sexual contact; a method of birth control and disease protection | C. contraceptives |
| _____ 4. a person who has never had sexual intercourse | D. prenatal care |
| _____ 5. covering worn over the penis or in the vagina during sexual intercourse to trap sperm; a method of birth control and disease prevention | E. sexual abstinence |
| _____ 6. care for a fetus before it is born | F. virgin |



Practice

Answer the following using complete sentences.

1. Both human beings and other animals have the desire to have sexual intercourse. What is one important ability we have that other animals don't? _____

2. Why aren't most teenagers ready to have children? _____

3. What is the only 100 percent effective method of preventing pregnancy? _____

4. How do *barrier methods* of contraception work? _____



5. What are two barrier methods of contraception? _____

6. What two forms of birth control *do not* work? _____

7. When should a woman begin prenatal care? _____

8. Why should a pregnant woman eat the right foods? _____

9. When a pregnant woman smokes, drinks, or takes drugs, who else
feels the effects of smoking, drinking, or taking drugs? _____



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. The *withdrawal method* of birth control is particularly effective for teenagers.
- _____ 2. *Sexual abstinence* is the only 100 percent effective method of birth control.
- _____ 3. The diet of a pregnant female will not affect the health of the fetus.
- _____ 4. Most couples who practice sex *without birth control* for one year will not produce a pregnancy.
- _____ 5. *Contraception* can cause pregnancy.
- _____ 6. *Prenatal care* is a good way to prevent a pregnancy.
- _____ 7. The *condom* is a nonbarrier method of birth control.
- _____ 8. The *pill* is not effective at preventing pregnancy.
- _____ 9. A pregnant woman should never exercise because it is unhealthy for the fetus.
- _____ 10. If a pregnant woman drinks alcohol, smokes, or takes drugs, it will *not* affect the health of the fetus.



Practice

Read each description below. If it describes a **problem** that should be **checked by a doctor**, place a check (✓) on the line provided.

- _____ 1. Hard lumps in the breasts.
- _____ 2. Severe cramps during menstruation.
- _____ 3. Pain when urinating.
- _____ 4. Bloating during menstruation.
- _____ 5. Pain or swelling in the testicles.
- _____ 6. Constant itching in the genital area.
- _____ 7. Sudden stopping of menstruation.
- _____ 8. A discharge and itching in the vagina.
- _____ 9. Ejaculating semen from the penis.
- _____ 10. Burning during urination.



Practice

For each term below **decide** if it **refers to males, females, or both**. Place a **check (✓)** in the correct box.

Term	Male	Female	Both
1. Fallopian tubes			
2. uterus			
3. testicles			
4. scrotum			
5. premenstrual syndrome			
6. sterility			
7. prostate gland			
8. sexual abstinence			
9. ovulation			
10. urethra			
11. ovary			
12. penis			
13. discharge			
14. testicular cancer			
15. fertilization			
16. cervix			
17. Pap test			
18. cervical cancer			
19. egg			
20. vagina			
21. menstruation			
22. reproductive system			
23. family planning			
24. estrogen			
25. sperm			
26. epididymis			
27. vaginitis			
28. endometriosis			
29. vas deferens			
30. seminal fluids			



Practice

Read each **situation** described in the paragraphs below. Write a brief answer to **describe** how you would respond.

1. Anna and Lee have just gotten married. They have decided to wait a few years before having a child. Anna asks Lee to join her for a counseling session with a *family planning* counselor. Lee says there isn't any reason for him to go. After all, it is Anna who is at risk for getting pregnant. So it is her responsibility to use *birth control* and to take the necessary precautions not to get pregnant. How would you respond to Lee?

2. You have just found a lump in your breast. You are too afraid to see a doctor. After all, it could be something serious, and you don't want to have any kind of surgery or medical procedure. What should you do and why?



- [illegible]



Practice

Use the list below to write the correct term for each definition on the line provided.

embryo

Fallopian tubes

family planning

fertilization

fetus

mammogram

ovaries

Pap test

reproductive system

uterus

vagina

- _____ 1. a pair of tubes through which a mature egg released from the ovaries travels to the uterus, or womb
- _____ 2. a hollow, muscular, pear-shaped organ in females where a fertilized egg will grow; also called a *womb*
- _____ 3. a test used to check for cervical or uterine cancer
- _____ 4. an organism in the earlier stages of development
- _____ 5. an X-ray photograph of the breast used to detect cancer
- _____ 6. deciding when to have children
- _____ 7. the developing individual after two months in the uterus
- _____ 8. the two reproductive glands in females that produce egg cells and female hormones
- _____ 9. the body systems in the male and female that are responsible for the reproduction of offspring



- _____ 10. the union of an egg cell from the female and a sperm cell from the male
- _____ 11. a muscular, very elastic tube in females that serves as a passageway for childbirth, semen, and menstrual flow; also called the *birth canal*



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|-----------------------|
| _____ 1. inability to reproduce | A. asexual |
| _____ 2. the male reproductive cell; fertilizes female egg cell | B. birth control |
| _____ 3. two small reproductive glands in males that produce sperm and the male hormone testosterone; also called <i>testes</i> | C. condom |
| _____ 4. methods of avoiding pregnancy | D. endometriosis |
| _____ 5. the external sac in males that holds the testicles | E. ovulation |
| _____ 6. covering worn over the penis or in the vagina during sexual intercourse to trap sperm; a method of birth control and disease prevention | F. prenatal care |
| _____ 7. care for a fetus before it is born | G. scrotum |
| _____ 8. not having sexual contact; a method of birth control and disease | H. sexual abstinence |
| _____ 9. abnormal growth of the lining of the uterus | I. sexual intercourse |
| _____ 10. genital contact between individuals; sexual contact with vagina, penis, or anus | J. sperm |
| _____ 11. the release of a mature egg cell from an ovary | K. sterility |
| _____ 12. having no gender; formed without sexual action | L. testicles |



Practice

Use the list above each section to complete the statements in that section.

ejaculate
estrogen
ovaries

Pap test
testosterone
vagina

1. The female reproductive system is shaped like the letter Y. The tips of the two arms that point in different directions represent the _____ .
2. It is the _____ , often called the *birth canal*, from which a fetus exits the uterus during birth.
3. Ovaries are two reproductive sex glands in the female and produce the hormone _____ .
4. The American Cancer Society recommends that all women over 20, and sexually active women of any age, have a yearly pelvic examination during which the doctor will do a _____ to check cells from the cervix.
5. The entire male reproductive system functions to produce *sperm*, the male reproductive cells, and _____ (release suddenly) them into the female's vagina.
6. Testicles produce the male hormone _____ .



contraceptives
epididymis
hernia

prostate gland
semen

vas deferens
virgin

7. Connected to the outer surface of the testicles are large coiled tubes called the _____, that function as storage for sperm.
8. When the sperm leave the epididymis, they swim through another long tube. This tube is called the _____.
9. The _____ adds fluid to the sperm that helps them continue moving.
10. The male cannot release semen and urine at the same time. When the male ejaculates _____, a muscle blocks the bladder from releasing urine.
11. A _____ happens when a part of the body actually pushes through the wall holding it in place.
12. Devices for preventing pregnancy are called _____.
13. Even if a person is *not* a _____ (has never had sexual intercourse), he or she can still begin to practice abstinence right now.



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. The female produces sperm cells.
- _____ 2. The female reproductive system is shaped like a Y.
- _____ 3. The ovary is also called the *birth canal*.
- _____ 4. Most women are born with three ovaries.
- _____ 5. *Testosterone* is produced in the ovaries.
- _____ 6. During *fertilization* the egg and the sperm unite.
- _____ 7. A baby is born at *conception*.
- _____ 8. A *fetus* is a newborn baby.
- _____ 9. During pregnancy, the female will continue *menstruation*.
- _____ 10. *Cancer* causes cells in the body to grow abnormally.
- _____ 11. Ignoring cancer will make it go away.
- _____ 12. After age 40, it is recommended that all women have a yearly test for breast cancer called a *mammogram*.
- _____ 13. A *Pap test* requires at least one night in the hospital.
- _____ 14. *Sterility* is an inability to produce children.
- _____ 15. The joint contribution of the male and female to produce life is called *sexual reproduction*.
- _____ 16. At about the age of 40 men should be checked each year for *prostate cancer*.
- _____ 17. There is a 20 percent chance that a couple practicing sex without any form of *birth control* will produce a pregnancy within one year.



- _____ 18. Ovaries produce the hormone *estrogen*.
- _____ 19. *Endometriosis* is a disorder of an abnormal growth on the lining of the prostate gland.
- _____ 20. In males, *semen* passes through the Fallopian tubes and out of the penis.
- _____ 21. The male cannot release *semen* and *urine* at the same time. When the male *ejaculates* semen, a muscle blocks the bladder from releasing urine.
- _____ 22. Pregnant females need to avoid alcohol, smoking, and drugs.
- _____ 23. Sperm will only survive at a constant temperature of 98.2°F.

Unit 10: Sexually Transmitted Diseases

This unit defines sexually transmitted diseases and explains how they are passed from one person to the next. The unit also discusses how to determine if you have an STD and where to go for treatment.

Unit Focus

- what sexually transmitted diseases (STDs) are
- the different STDs and their symptoms
- the test and treatment for each STD
- identify ways to protect against getting each STD
- identify the benefits of abstinence





Vocabulary

Study the vocabulary words and definitions below.

acquired immunodeficiency

syndrome (AIDS) HIV infection combined with severe immune deficiency; also written as *acquired immune deficiency syndrome* and as *acquired immunodeficiency virus syndrome*

antibiotics drugs that destroy some disease-producing organisms in the body

antibodies cells that destroy certain disease-causing organisms

bacteria one-celled organisms that can be good or bad for the health of the body

casual sex having sex with someone you do not know very well or having sex with someone just for the physical pleasure; there is no attachment or commitment between the two people

condom covering worn over the penis or in the vagina during sexual intercourse to trap sperm; a method of birth control and disease protection

contraceptives devices or methods for avoiding pregnancy and disease

ectopic pregnancy abnormal condition that occurs in the female when a Fallopian tube becomes blocked and an embryo begins to grow there



- heterosexual** a person who feels sexual desire for the opposite sex
- homosexual** a person who feels sexual desire for the same sex
- human immunodeficiency virus (HIV)** organism that causes AIDS
- immune system** system in body that helps protect us from disease and infection
- infectious** describes a disease that can be caught or spread
Example: any STD
- monogamous** describes a relationship in which two people are sexually faithful to each other
- noninfectious** describes a disease that cannot be caught or spread from one person to another
Example: cancer
- parasites** organisms that live off living cells
- pathogens** very small organisms that cause diseases
- precautions** steps taken to reduce risks
Examples: using condoms and being monogamous to prevent the spread of STDs
- sexual abstinence** not having sexual contact; a method of birth control and disease protection



- sexual intercourse** genital contact between individuals;
sexual contact with vagina, penis, anus
or mouth
- sexually transmitted
diseases (STDs)** diseases that are caught or spread
through sexual contact
Examples: acquired immunodeficiency
syndrome (AIDS), chlamydia,
gonorrhea, syphilis, genital herpes,
genital warts, trichomoniasis, scabies,
pubic lice
- symptom** a sign of a particular disease or illness
Examples: fever, sore throat, headache
- transmitted** passed from person to person
- virus** a tiny disease-causing organism
Example: human immunodeficiency
virus (HIV)



Unit 10: Sexually Transmitted Diseases

Introduction



Sexually transmitted diseases can happen to anyone who has unprotected sexual intercourse.

Sexually transmitted diseases can happen to anyone who has unprotected **sexual intercourse**. It doesn't matter whether a person is clean or does not engage in **casual sex**. It doesn't matter if a person is in love with the person with whom he or she had sexual intercourse. It doesn't matter whether a person is **heterosexual** or **homosexual**. It doesn't matter if a person abstains from drinking or smoking or doing drugs. It doesn't matter whether a person does well in school or keeps physically fit. None of these things keep people safe from **sexually transmitted diseases (STDs)**.

Sexual intercourse includes oral intercourse, anal intercourse, and vaginal intercourse. Any one of us who has had sexual intercourse may have a *sexually transmitted disease (STD)*. There are more than 25 diseases spread primarily through sexual activity.

If a person has never had sexual relations but plans to in the future, then he or she will also be at risk of getting an STD. So everyone needs to know the facts about STDs. Knowing the facts will help people take **precautions** against getting an STD. Knowing the facts will help people recognize when they have gotten an STD. Knowing the facts will tell people when and how to get checked for an STD. It's that simple.

Sexually Transmitted Disease—The Words Say a Lot

The phrase *sexually transmitted disease* says it all. Study this phrase in reverse order, from the last word to the first. A *disease* is a sickness. There are many different kinds of diseases. Some diseases are **noninfectious**, or cannot be caught. Cancer, for example, is a *noninfectious* disease. So is sickle cell anemia, a blood disease.



STDs, however, are diseases that are **infectious**—they do not come from within the body. STDs are **transmitted**, or passed, from one person to another. STDs can be passed to us, and we can pass them to others. There is no other way to get an STD than to catch it from someone who already has it. An estimated 200-400 million people worldwide are affected. In the United States, more than 65 million people have an incurable STD. Each year an additional 15 million people become infected with one or more STDs. Approximately one-fourth of these new cases of STDs in the United States will be teenagers. More than three million teenagers a year are infected with an STD.

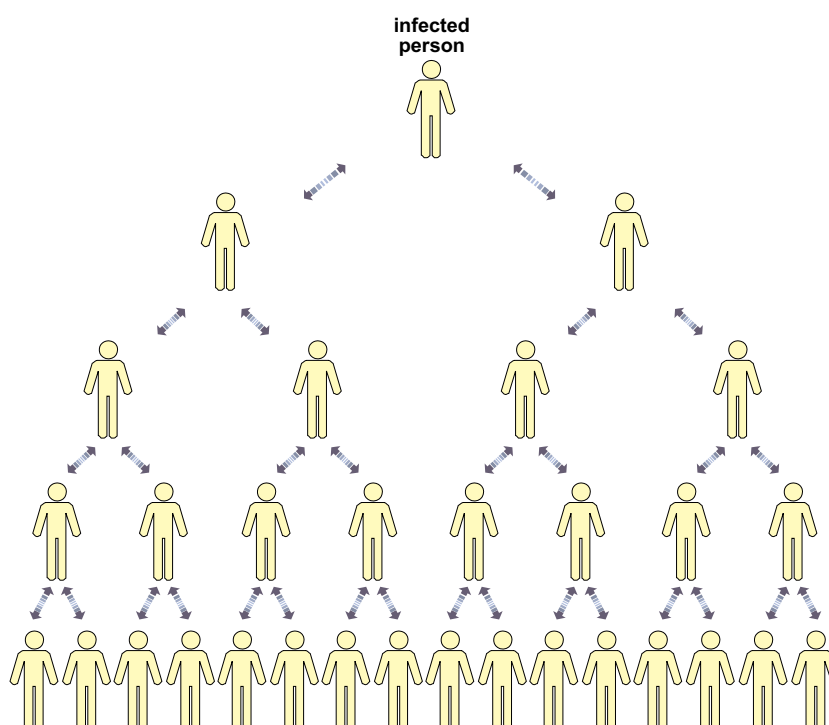
The first word in the phrase sexually transmitted disease, *sexually*, refers to sexual intercourse. Most STDs are passed from one person to another during oral, vaginal, or anal sexual intercourse. Most STDs are passed when the body fluid of a person who has an STD enters another person's body during sexual intercourse.

New Cases of Sexually Transmitted Diseases in the United States	
Sexually Transmitted Disease	Estimated Number of New Cases Every Year
Chlamydia	3,000,000
Gonorrhea	650,000
Syphilis	70,000
Herpes	1,000,000
Human Papillomavirus (HPV)	5,500,500
Hepatitis B	120,000
Trichomoniasis	5,000,000



STDs: How They Grow

STDs travel from an infected person to another person through **pathogens**. *Pathogens* are very small organisms that cause diseases. They are so small that they can only be seen with a microscope. Once inside a body, these organisms begin growing. If left unchecked, some of these organisms can cause damage to parts or organs in the body. Some pathogens may attack the reproductive system. Others may attack the skin, the brain, or the heart. Some will eventually cause death. Pathogens occur in three different forms: *bacteria*, *viruses*, and *parasites*.



Remember factor trees in math—suppose this was the “factor tree” of an infected person who had two sexual partners, and those two sexual partners had two sexual partners, and Notice how rapidly the STD can spread from one infected person to many infected people.

Bacteria: The Winnable War in Our Body

Bacteria are one-celled organisms. Some bacteria in our bodies are good. They actually help us fight diseases. Good bacteria also help to digest food in our stomach. Bad bacteria, however, work in our bodies in ways



that cause disease. Bad bacteria may enter a body as a single cell. This single cell then divides into two cells. Those two cells divide into four cells, then eight, then 16, and on and on into the millions! As these bacteria grow, they damage or destroy healthy cells in our bodies.

Some bad bacteria can be destroyed by our bodies. However, STDs that are bacterial cannot be fought off by our bodies. These bacteria can only be destroyed by **antibiotics**. When we take antibiotics in a pill or as an injection, an amazing activity begins in our bodies. Antibiotics are actually very small organisms. Once in our bodies, they begin to fight and destroy bacteria. Antibiotics are a kind of very small army that we send into our bodies to do war. STDs caused by bacteria are curable. Bacterial STDs include chlamydia, gonorrhea, and syphilis.

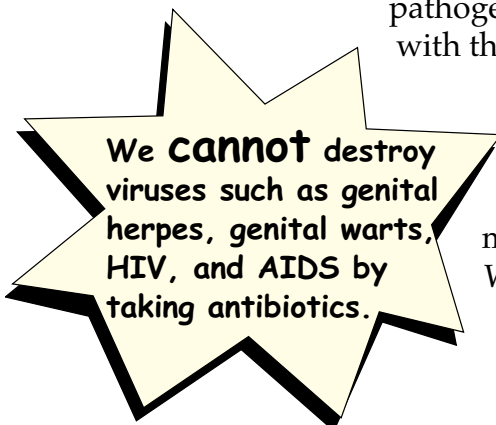


When we take antibiotics in a pill or as an injection, they begin to fight and destroy bacteria.

Viruses: Tiny but Destructive Sources of Disease

A **virus** is a very small pathogen, or source of disease. Unlike bacteria, viruses are not even considered to be living things because they cannot exist on their own. Viruses are not even made up of cells. A virus is only a piece of genetic material in a protein coating. Viruses survive and multiply by hijacking cells. They force cells to use their reproductive equipment to make more viruses.

We cannot fight and destroy viruses by taking the antibiotics we use against bacteria. Viruses can only be destroyed by **antibodies**. Antibodies are substances that the body's disease-fighting cells make in response to pathogens. For example, when we come down with the mumps, our bodies produce antibodies. These antibodies cannot destroy the mumps virus when we are first infected. But they help the body's disease-fighting system recognize the mumps virus if it tries to infect us again. With this early warning system, the body can fight off a second mumps infection. This is why most people only get the mumps one time.





Unfortunately, once people are infected with a viral STD, the virus remains in their bodies throughout life. People do not have a chance to recover from them and develop antibodies that would help fight them off. Viral STDs include genital herpes and genital warts and the **human immunodeficiency virus (HIV)** that causes the **acquired immunodeficiency syndrome (AIDS)**. AIDS is also commonly written as *acquired immune deficiency syndrome* and as *acquired immunodeficiency virus syndrome*.

Parasites: Living off Other Living Cells

Parasites are tiny animals. They live off our living cells. STDs caused by parasites include trichomoniasis, scabies, and pubic lice. They are curable when treated with medications.

STDs Caused by Bacteria

Chlamydia: The Most Common STD in the United States

Other than the common cold, *chlamydia* is the most common infectious disease in the United States. Over three million people a year become infected with chlamydia. Forty percent of chlamydia cases occur in sexually active teenagers who are 15-19 years old. Chlamydia is passed on from one person to another during sexual intercourse.

Symptoms. Most often, people become aware of diseases in their bodies when **symptoms** appear. A *symptom* can be as slight as a runny nose or as great as paralysis. A symptom is a sign that the body has a disease or illness. Symptoms are very helpful in alerting us to problems in our bodies. Unfortunately, chlamydia may show no symptoms in our bodies, or it may show only very slight symptoms.

Seventy-five percent of women and 50 percent of men have no symptoms. Although males are more likely to experience symptoms from chlamydia than females, males may experience only mild symptoms. Males may feel a burning during urination. They may see a milky or clear discharge from their penis.



Chlamydia is the most common infectious disease in the United States.



Females may experience stomach pain and vaginal discharge. Females, however, are likely to have no symptoms until chlamydia has already caused damage in their bodies. For this reason, anyone who has ever had sexual intercourse either with or without using a latex **condom** may have been exposed to chlamydia or another STD and not even know it.

A latex condom is a **contraceptive**, or a device used to avoid getting or passing an STD. If used correctly, a latex condom can make sex safer, but condoms cannot prevent infection 100 percent of the time. Sometimes condoms break and some infections, such as *genital warts*, can be transmitted if the condom does not completely cover the area. Anyone who has had unprotected sexual intercourse should be tested for STDs at their doctor's office or a health clinic.

Risks. The medical complications of chlamydia can be serious. If it spreads to a male's testicles, he may become sterile.

If chlamydia spreads to a female's reproductive system, she can develop pelvic inflammatory disease (PID). PID can be dangerous to a woman's health and life and can lead to sterility. Untreated chlamydia can also cause cervical cancer in women. Chlamydia can cause an **ectopic pregnancy** in women. An ectopic pregnancy occurs when a Fallopian tube becomes blocked and an embryo begins to grow there. This kind of pregnancy can cause the tube to rupture, a very serious, even fatal, condition. If an infected woman gives birth, her newborn may be born blind or with pneumonia—a difficult disease for a newborn to survive.



If an infected woman gives birth, her newborn may be affected.

Test and Treatment. There is a simple test done in a doctor's office to check for chlamydia. Chlamydia can be cured with antibiotics.

Gonorrhea: Causing Sterility If Untreated

Gonorrhea, also known by the common slang term *clap*, is the second most common STD. There are an estimated 650,000 new cases a year in the United States. Gonorrhea rates are highest among females ages 15-19 and males 20-24. Gonorrhea is passed on during oral, vaginal, or anal sexual intercourse.



Symptoms. Like chlamydia, gonorrhea may show only a few or even no symptoms in females and males. In fact, 80 percent of all infected females have no early symptoms. By the time some females develop any symptoms, some damage to their bodies may already have happened. This is why it is essential that males who discover they have the disease inform their sexual partners. Males can help protect females from the damage of this disease simply by alerting them.

Some symptoms that both sexes may experience from two to nine days after exposure are painful urination and a yellowish discharge from the penis or vagina. Infected persons may feel a sore throat or rectal pain and itching. Males may experience tender testicles. Females may see some bleeding after intercourse. Their menstruation following exposure may be more uncomfortable than usual.

Risks. If untreated, gonorrhea can spread through the reproductive system. Both males and females can become sterile if gonorrhea isn't treated. If a woman with gonorrhea gives birth, the infection may cause blindness in her newborn.

If the disease is not treated in its early stage, both sexes can also develop arthritis and heart problems.

Test and Treatment. A simple test of fluid from the male's penis or female's cervix can detect the disease. It can be cured with antibiotics.

Syphilis: A Silent Killer

Syphilis is a particularly devastating STD. If undetected and untreated, it can spread throughout the body and destroy many organs. About 70,000 people a year still contract this preventable disease in the United States. Syphilis is passed on during sexual intercourse or when one person's infected sex organ contacts an open cut in another person.

Symptoms. Symptoms from syphilis may not appear for 10-90 days after exposure to an infected person. The most obvious symptom is the appearance of a *chancre*. A chancre is a painless sore that appears on the genitals, rectum, or lips, or in the mouth. Chancres usually disappear within a week or two.

Some weeks or even months after chancres have disappeared, the infected person may develop a rash over the body, swollen joints, and flu-like illness.



Risks. After these symptoms disappear, an infected person may feel fine. Syphilis may then become a silent killer. He or she may experience no other symptoms, sometimes for years. Then, in the final stage of syphilis, devastation to the body begins. There can be damage to the nervous system, to the brain, and to the heart. If left untreated for many years, syphilis can cause insanity, paralysis, or even death.

If an infected woman gives birth, her baby could have severe birth defects, including bone deformities and blindness. The baby could even die.

Test and Treatment. A simple blood test can spot the disease. Antibiotics can cure syphilis.

STDs Caused by Viruses


Genital Herpes: The Blister Disease


The numbers surrounding the STD called *genital herpes* are shocking. More than one in five people in the United States—45 million people—are infected with genital herpes. Each year another one million people get genital herpes. Herpes is more common in females than males. The herpes simplex virus that causes genital herpes has different forms. Scientists


used to identify the virus that causes cold sores on the mouth and lips as *Herpes Simplex I* and the virus that causes genital herpes as *Herpes Simplex II*. Now doctors and scientists know that both kinds of herpes virus can infect the mouth and lips and the genital area.

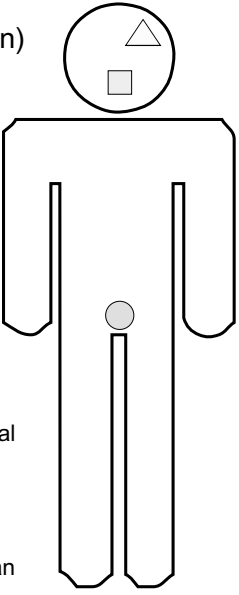
Genital herpes is passed from one person to another during oral, vaginal, and anal sexual intercourse. A person with the disease

Common Sites and Treatment of Herpes

 Ocular herpes (eye infection)

 Cold sores or fever blisters

 Blisters on thighs, buttocks, and genitals



Aspirin

Common medication that decreases pain and inflammation that accompanies herpes

Acyclovir

Creamy salve used to treat genital herpes by reducing viral growth

Soap and Water

Common toiletries used to keep infected body parts dry and clean



will experience *outbreaks*. During outbreaks, sores and blisters will appear on the genitals. During these outbreaks, an infected person can pass the disease on to another person during sexual intercourse.

Symptoms. The symptoms of genital herpes vary greatly. They all appear as some type of blister, sore, or red bumps on the skin that may appear as tiny clusters of fluid-filled blisters. They can, however, appear inside the vagina and anus, or on the thighs and lower abdomen. They can also appear in the mouth. If symptoms occur, they often show up between two and 20 days after sexual contact with an infected person.

However, some people may not experience symptoms. Or the signs may be very slight, such as a mild skin irritation in the form of skin bumps. Anyone who has sexual intercourse needs to be very aware of any changes in the skin around the genitals, anus, and mouth. Other symptoms include aching muscles, fever, and swollen glands.

Herpes sores last from one to three weeks and then go away. The person is still infected with herpes, though, and about two-thirds of those people will continue to have outbreaks of the sores from time to time.

Risks. Pregnant mothers with genital herpes can pass the disease on to their babies. In rare instances, the babies may be born blind or with encephalitis—a swelling of the brain. Recent studies have shown that babies are most at risk when they are born vaginally while the mother is having an outbreak.



Pregnant mothers with genital herpes can pass the disease on to their babies.

Test and Treatment. There is a simple test that can be done in a doctor's office to check for genital herpes. Genital herpes is a virus—it is incurable. There are, however, treatments available that can lessen and in some cases even eliminate the outbreaks. The antiviral prescription drug *acyclovir* can reduce the frequency of outbreaks.

Genital Warts: The Dangerous Wart

Human papillomavirus (HPV) is a virus that sometimes causes *genital warts*. In many cases, it infects people without noticeable symptoms. There are 30 types of HPV that can effect the genital area. Some types cause genital



warts; others cause infections that are invisible or cannot be seen. Genital warts is the third most common STD in the United States. An estimated 20 million people in the United States are infected with HPV that causes genital warts. More than 5.5 million new people a year become infected. Genital warts are extremely contagious, or easily spread. If you have sexual intercourse you can become infected with one or more of the many kinds of genital warts.

Symptoms. Genital warts usually appear on the vulva, vagina, cervix, penis, anus, or throat between three to four months after exposure. Warts are raised bumps that are cauliflower-shaped and the color of skin. They may itch or irritate. Warts can multiply quickly! They also can be treated, so it is essential that as soon as one genital wart is noticed, the person sees a doctor.

Many people who have the virus that causes genital warts do not develop the warts themselves. In fact, only about 10 percent of those people who have the virus ever develop warts they can see. Most women only discover they have this STD when they have a Pap smear. It is essential that males who spot warts on their genitals alert their sexual partners so they can be checked.

Risks. There are several different types of genital warts. A few of those types are associated with cancer of the penis, cervical cancer, and anal cancer. Genital warts in pregnant women can also threaten the health of the baby.

Test and Treatment. Women can be tested for genital warts with a Pap smear. Men are tested by a doctor simply checking for any visible warts or hard-to-see warts. Genital warts are a virus. The warts can be treated, but there is no treatment to cure HPV. Once the virus is on or in the body, it will remain. Doctors can, however, remove the warts. This procedure lessens the chance that the disease will spread or be passed to sexual partners.



Myths and Facts about STDs	
Myth	Fact
1. It is easy to tell if a person has an STD.	1. Some people will show no outward signs they have an STD.
2. Washing genitals after sex will prevent STDs.	2. Washing is <i>not</i> an effective method to prevent STDs.
3. Birth-control pill will prevent STDs.	3. Birth-control pills offer no protection against STDs.
4. If the STD symptoms go away—do <i>not</i> go to the doctor.	4. If symptoms go away, it does not mean the STD is gone—STDs do <i>not</i> go away on their own.
5. Only one sex partner needs to be treated for an STD.	5. Sex partners must both be treated for an STD so they do <i>not</i> reinfect each other.
6. One medicine for an STD will cure any STD.	6. Consult a doctor for proper treatment—each STD requires different treatment.
7. Stop taking the medicine if feeling better.	7. Finish all medicine prescribed.



Practice

Use the list below to complete the following statements.

antibiotics	precaution
casual sex	sexually transmitted disease
contraceptives	symptom
ectopic pregnancy	viruses
parasites	

1. A burning sensation while urinating may be a(n) _____ of a sexually transmitted disease.
2. Sexually transmitted diseases caused by bacteria can usually be cured by _____.
3. Certain types of STDs, such as chlamydia, can cause a(n) _____.
4. Birth control pills do not block the exchange of body fluids during sexually relations; therefore, they are *not* an effective _____ against sexually transmitted diseases.
5. _____ are tiny animals that live off our living cells.
6. Having sexual intercourse with someone you barely know is a high-risk behavior. It is also called having _____.



7. A disease that is contracted through sexual intercourse is called a(n) _____ .
8. _____ are devices or methods for preventing pregnancy and STDs.
9. We cannot fight and destroy _____ by taking antibiotics, which we can use against bacteria.

Use the list below to complete the following statements.

antibodies	infectious
bacteria	noninfectious
condom	sexual intercourse

10. Viruses are destroyed by _____ , which are produced by the body.
11. A(n) _____ disease is contagious.
12. Sexually transmitted diseases can happen to anyone who has unprotected _____ .
13. Wearing a latex _____ is one kind of precaution against catching or spreading an STD.
14. _____ can be bad or good. The bad ones make us ill.
15. Cancer is an example of a(n) _____ disease.



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|--|
| _____ 1. passed from person to person | A. acquired immunodeficiency syndrome (AIDS) |
| _____ 2. organisms that live off living cells | B. heterosexual |
| _____ 3. a person who feels sexual desire for the opposite sex | C. human immunodeficiency virus (HIV) |
| _____ 4. very small organisms that cause diseases | D. homosexual |
| _____ 5. a person who feels sexual desire for the same sex | E. parasites |
| _____ 6. organism that causes AIDS | F. pathogens |
| _____ 7. HIV infection combined with severe immune deficiency | G. transmitted |
-
- | | |
|--|--|
| _____ 8. steps taken to reduce risks | A. antibiotics |
| _____ 9. drugs that destroy some disease-producing organisms in the body | B. bacteria |
| _____ 10. describes a disease that can be caught or spread | C. infectious |
| _____ 11. one-celled organisms that can be good or bad for the health of the body | D. precautions |
| _____ 12. genital contact between individuals; sexual contact with vagina, penis, anus, or mouth | E. sexual intercourse |
| _____ 13. diseases that are caught or spread through sexual contact | F. sexually transmitted disease (STDs) |



STDs Caused by Parasites

Trichomoniasis: *Trich*

Trichomoniasis is an infection in the vagina of females and in the urethra of males. It is caused by a protozoa—a tiny parasite that lives on and in the body. *Trich*, as it is sometimes called, is usually passed on from one person to another through sexual intercourse. It can also be caught by using another person's damp washcloth, towel, or bathing suit. There are about five million new cases reported each year in the United States.

Symptoms. Symptoms will usually appear about four to 20 days after exposure to this parasite. Females will get a greenish or yellowish, foul-smelling discharge from the vagina. The vagina may itch. They may have pain when urinating, and they may have to urinate often. They may notice that their vulva is swollen. Males may experience only slight symptoms. They may have some mild discomfort in the penis.

Risks. Trichomoniasis may make women more likely to develop cervical cancer. Unborn babies may be infected by their mothers.

Test and Treatment. A simple test at a doctor's office can check for trichomoniasis. Antibiotics will cure the disease. Both partners must be treated at the same time to stop the disease from coming back.

Scabies and Pubic Lice: The Itching Diseases

Both *scabies* and *pubic lice* are parasites. They can be passed from one person to another through sexual contact and through infected bedding, clothing, towels, and even toilet seats.

Anyone with either of these diseases needs to be sure not to share clothing or any other item that will touch the skin of another person.

Symptoms. Both of these diseases cause intense itching. Scabies will burrow under the skin of the genitals, buttocks, breasts, elbows, and hands. Pubic lice, also called *crabs*, will live in and lay small eggs on pubic hair.

Risks. Both of these diseases will cause skin irritation that is very uncomfortable. Both are very contagious.



Test and Treatment. Any trained professional can identify these diseases. Both scabies and pubic lice can be killed by using prescription creams. All infected clothing, bedding, towels, etc., must be washed in very hot water to kill the parasites.

AIDS: The Deadly Disease

AIDS is similar to some of the other STDs described in this unit. Like genital herpes and genital warts, AIDS is caused by a virus and cannot be cured. Like genital herpes and genital warts, AIDS is most often passed on from one person to another through sexual intercourse. However, unlike

genital herpes and genital warts, AIDS is fatal. At this time, doctors and scientists think that anyone who has AIDS will eventually die from the effects of the disease.

Through the year 2000, more than 770,000 people were diagnosed with AIDS in the United States. Of these 770,000 people, almost half have already died from the disease. In Florida, more than 80,000 people were diagnosed with AIDS, and almost half of them have already died from the disease. In the same time period, more than 8,900 AIDS cases were reported in children under age 13.

Age	Cases of AIDS as of December 2000
Under 5	6,872
Ages 5 - 12	2,036
Ages 13 - 19	4,061
Ages 20 - 24	27,232
Ages 25 - 29	101,494
Ages 30 - 34	172,310
Ages 35 - 39	173,512
Ages 40 - 44	128,177
Ages 45 - 49	74,724
Ages 50 - 54	39,625
Ages 55 - 59	21,685
Ages 60 - 64	12,023
Ages 65 or older	10,711

AIDS is caused by a virus that was only discovered in the early 1980s. Because the virus was only recently discovered, many myths, or untrue stories, surround AIDS. The most important way to stop the spread of AIDS is to learn the facts.



AIDS—The Words Say a Lot

AIDS stands for **acquired immunodeficiency syndrome**, also written **acquired immune deficiency syndrome** and as **acquired immunodeficiency virus syndrome**. *Acquired* means that “our bodies do not produce the disease.” It comes from outside the body. As with other STDs, AIDS is caused by pathogens from other persons entering the body.

Immune means “protected from.” The body has an **immune system** that helps protect it from disease and infection. The AIDS virus attacks the immune system.

When the AIDS virus attacks the immune system, it begins to destroy it. The virus causes a *deficiency*, or lack, in the immune system. The immune system is then no longer able to protect the body from certain diseases and infections.



A *syndrome* is a “group of signs or symptoms that indicate a disease or illness.” AIDS—acquired immunodeficiency syndrome—describes an illness caused when the immune system cannot fight or protect the body against certain infections and diseases.

How AIDS Works

To understand how AIDS works, we need to understand the basics of the immune system. The immune system has two kinds of cells that fight disease. *T cells* fight and destroy pathogens when they enter the body. T cells also trigger *B cells* to produce antibodies. These antibodies stay in the body and fight a specific disease. For example, if you have a cold, T cells will fight the cold germs. T cells will also signal B cells to produce antibodies that will recognize those cold germs and fight them in the future.

AIDS is caused by a virus known as **human immunodeficiency virus (HIV)**. HIV attacks the T cells in the immune system. HIV stops T cells from fighting pathogens and from triggering B cells to produce antibodies. In time, HIV destroys so many T cells that the immune system begins to fail. In the earlier stages of the disease, an infected person is called *HIV positive*. That means that he or she has the virus that causes AIDS. In the final stages of the disease, the person has AIDS.



The Symptoms of HIV and AIDS

The symptoms of HIV may not appear in an infected person for more than 10 years. However, during those years when a person shows no visible signs of the disease, he or she can still pass the disease on to others. Researchers believe that many people who are infected with the AIDS virus, HIV, do not even know it.

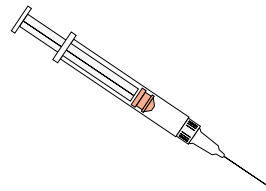
There are many different symptoms of HIV. These include a persistent fever, a nagging dry cough, frequent diarrhea, weight loss, reddish or purplish blotches on the skin, and minor illnesses and diseases.

In the latter stages of the disease—known as AIDS—the infected person often comes down with one or more *opportunistic diseases*. These are diseases that a healthy immune system would protect against. The immune system of a person with advanced HIV can't protect the person because so many T cells have been destroyed. These diseases include a rare form of pneumonia called *Pneumocystis carinii* and a rare form of cancer called *Kaposi's sarcoma*. AIDS can also cause severe mental disorders. The infected person may develop mood swings, depression, and even hallucinations.

How HIV, the AIDS Virus, Is Transmitted

How HIV is transmitted is the most misunderstood topic surrounding AIDS. You cannot get HIV from someone who is coughing or sneezing. You cannot get HIV from hugging or kissing someone with AIDS. Nor can you get the disease from sharing a bathroom with someone who has the disease. HIV, the virus that causes AIDS, does not survive well once exposed to air.

You can get HIV from passing semen, vaginal fluids, or blood with a person who is infected. This means that you can get HIV by having oral, vaginal, or anal sexual intercourse with an infected person. You can get HIV by sharing a needle used for drugs with an infected person. A pregnant mother with HIV or AIDS may pass the virus on to her newborn.



You can get HIV by sharing a needle used for drugs with an infected person.



It only takes one encounter in which semen, vaginal fluids, or blood are passed to get HIV. **And remember:** You can't tell by looking at someone whether he or she has HIV or AIDS. Because the symptoms often do not appear for several years, teenagers rarely show symptoms.

Myths and Facts about HIV and AIDS	
Myth	Fact
1. You can get HIV from hugging or shaking hands.	1. You can get HIV from passing semen, vaginal fluids, or blood with a person who is infected.
2. Birth-control pills or a diaphragm can prevent getting HIV or AIDS.	2. It only takes one encounter in which semen, vaginal fluids, or blood are passed to get HIV.
3. Washing the genitals after sex prevents you from getting HIV from an infected person.	3. You can get HIV by having oral, vaginal, or anal sexual intercourse with an infected person.
4. You can take an antibiotic if you are infected with HIV by sharing a needle.	4. You can get HIV by sharing a needle used for drugs with an infected person.
5. A pregnant mother has natural antibodies that will prevent the newborn from getting the virus.	5. A pregnant mother with HIV or AIDS may pass the virus to her newborn.
6. It is easy to look at someone and tell if he or she is infected with HIV or AIDS.	6. You can't tell by looking at someone whether he or she has HIV or AIDS.

Who Is at Risk?

Everyone who has had unprotected oral, vaginal, or anal sexual intercourse without using a latex condom or who has shared needles to shoot drugs or steroids has placed themselves at risk for HIV infection. At one time, male homosexuals were the largest group of people infected by HIV or AIDS. Presently, however, heterosexuals are just as likely to contract HIV as homosexuals. The only 100 percent safe sexual activity is sexual intercourse with only one uninfected, **monogamous** partner for



Ten States/Territories Reporting the Highest Number of AIDS Cases

State/Territory	Cases of AIDS as of December 2000
1. New York	142,164
2. California	119,826
3. Florida	80,416
4. Texas	53,987
5. New Jersey	42,143
6. Illinois	25,009
7. Puerto Rico	24,883
8. Pennsylvania	24,660
9. Georgia	22,837
10. Maryland	21,691

Doctors test for the existence of the HIV antibody to determine whether someone has been infected. This test is called the Enzyme-Linked Immunosorbent Assay (*ELISA*) test. The HIV antibody will usually show up on this test within six months after infection. If this test is positive, the patient is given a second test called a *Western blot* test. This test may confirm that the patient has HIV, or this test may show that the ELISA test was wrong.

Only a few drugs are available at this time to treat HIV and AIDS. One of these drugs is called Azidothymidine (*AZT*). AZT cannot cure AIDS, but it can slow the development of AIDS in some patients. There is no cure for AIDS. Researchers continue to look for a cure and have very recently had some promising results.

Protecting against STDs

Reducing the Risk of STDs

If we talk to enough people who have had a curable STD, we are likely to hear: "I was lucky. Very lucky. Maybe next time I won't be so lucky." If we ask practically anyone who has an incurable STD, we'll probably hear: "I was stupid. I didn't know what the risks were, and my lack of knowledge led to an incurable STD." Or we might hear this: "I only had sex once. Just

one's whole life. *Safer sex* refers to sexual intercourse using latex condoms consistently and correctly every time a person has sexual intercourse. Safer sex does not guarantee that a person won't get an STD or HIV, but it does make sexual intercourse less risky.

Test and Treatment for HIV and AIDS

Once HIV enters the bloodstream, the body begins to produce an HIV antibody.



once! I loved my partner, and so I did it. But that's all it took!" Or we might hear this: "I thought I was indestructible. I thought it couldn't happen to me. I took chances, and now I've got a problem."

We know of several ways to decrease the risk of catching an STD. Lifetime **sexual abstinence** from sexual intercourse eliminates the chance that a person will get HIV sexually. *Sexual abstinence* means not having oral, vaginal, or anal sexual intercourse. If a person does not ever have sexual

intercourse, he or she can eliminate almost completely the risk of ever getting a *sexually transmitted disease*.



The way to greatly reduce nearly all risk of STDs is to practice lifetime, mutual monogamy.

Abstinence can be practiced by anyone. A person who has had sexual intercourse can choose to become abstinent at any time.

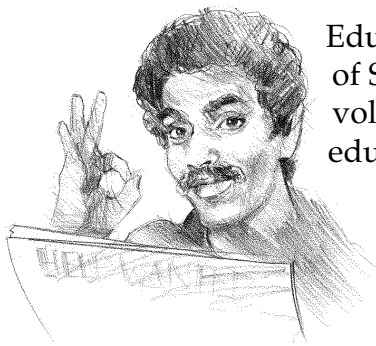
The way to greatly reduce nearly all risk of STDs is to have sexual intercourse with only one uninfected partner who has sex only with you for your whole lives. This is called *lifetime, mutual monogamy*.

If a person does have sexual intercourse outside of a lifetime, mutually monogamous relationship, there is no such thing as 100 percent safe sex. People can, however, have *safer sex*.

Most important in having safer sex is avoiding the body fluids of another person. To have safer sex takes thought and discipline. People who are sexually active should use a latex condom with an approved spermicide, and they should use the latex condom correctly each and every time they have sexual intercourse. (**Remember:** Condoms are not perfect; they are only helpful if the person using them uses them correctly each and every time he or she has sex.)

Responding to STDs

If you have any symptoms of any STDs, take action at once. Talk to a parent, or see a counselor, nurse, or doctor at your school. Go to a public health department or an STD clinic, or see your doctor. STDs never get better by themselves. Many of them are easily cured, particularly when treated early.



Education is the best tool for preventing the spread of STD's and HIV.

Education is the best tool for preventing the spread of STDs and HIV. Teenagers are encouraged to volunteer with school and local agencies to help educate as many people as possible throughout their areas. Many towns and cities provide local nonprofit organizations to benefit the public. Healthy communities are ones that work together to eliminate disease and other health problems. Talk with your school counselor if you are interested in joining a community service group in your area.

Notify Partners

If a person is diagnosed with an STD, he or she should notify all sexual partners. This can be done on the phone or in person and only when there is no one else who can hear the conversation. This is a strictly private matter! Anyone who is infected needs to be honest and up-front. The person should tell his or her partner what STD he or she has and encourage the other person to see a doctor.

All people are responsible for their bodies. When people discover a disease in their bodies and don't tell those they may have infected, they are being irresponsible and dishonest. They are letting others suffer potentially devastating diseases because they are not strong enough to face the truth.

STDs and Love

There are some ways to (nearly) eliminate the risk of getting an STD. There are some ways to reduce the chances of getting an STD. And there are some STDs that can be cured by antibiotics and special creams. But what if you or someone you love gets an incurable STD? What if you or someone you love has genital herpes, genital warts, or AIDS? What do you do then?

If a person has an incurable STD, the first responsibility is to learn everything about the disease. Finding out how to practice safer sex can reduce the chance of passing the disease to someone else. Using a latex condom can reduce the chances of passing on all STDs, including genital herpes, genital warts, and AIDS.



Education is the first line of defense. Local health clinics or health departments can provide the most recent information on living with an STD.

Telling a potential sexual partner about any STDs is each person's responsibility. This can be difficult. It will make a person feel vulnerable. Learning *how* to tell someone about an STD will help a person who is infected get through this difficult experience. Local health clinics or health departments can provide names of *help groups*. In these groups, infected individuals can learn how to talk to someone about STDs.

Always ask a potential sexual partner about his or her sexual history. Does he or she have an STD? Has he or she been checked recently? Does he or she engage in high-risk behavior? **Remember:** Some people may not be honest about their past or their diseases. More and more people have decided to wait until they have known someone for a long time and have married that person before having sex.

Not having sex is the one sure way to prevent a sexually transmitted disease.

Summary

Anyone who has *sexual intercourse* can be *infected* with an *STD* (*sexually transmitted disease*). STDs are *transmitted*, or passed, through *pathogens* from one person to another during sex or while sharing needles.

STDs are caused by three different kinds of pathogens. STDs caused by *bacteria* include chlamydia, gonorrhea, and syphilis. Bacterial STDs can be cured by *antibiotics* if treated early enough.

STDs caused by *viruses* include genital herpes, genital warts, and *AIDS*. These STDs are incurable. The body cannot produce *antibodies* that can kill these viruses. *AIDS* (acquired immunodeficiency syndrome) is also fatal. *AIDS* can be passed through semen, vaginal fluids, and blood.

STDs caused by *parasites* include trichomoniasis, scabies, and pubic lice. All three can be cured with medication.



Unborn babies may be infected by their mothers with HIV.



Most STDs produce *symptoms*, or signs, that indicate an illness or disorder. Whenever there is a change in a person's body, no matter how slight, the person should see a doctor. Even a nagging, dry cough can be a symptom of an STD. Early treatment is always helpful. Some STDs produce no symptoms or symptoms that are hard to recognize. For this reason, teenagers who have had sexual intercourse should see a doctor for tests.

We can protect ourselves from STDs by practicing *sexual abstinence*, or not having sex. Abstinence is the only 100 percent effective way of not getting a viral or bacterial STD. Practicing *monogamy* with a spouse who has tested negative for STDs is also a good way to avoid STDs.

There is no such thing as "safe sex." We can practice "safer sex," however. Avoiding the body fluids of another person during sexual intercourse is the most important *precaution*. Using a latex *condom* is an effective, but not perfect, practice for avoiding STDs.

Remember: Education is the best defense against STDs.



Practice

Match each **description** with its correct **term**. Write the letter on the line provided.

	description	term
_____	1. most common STD in the United States	A. STDs
_____	2. fight bacteria	B. AIDS
_____	3. human immunodeficiency virus; causes AIDS	C. clap
_____	4. slang term for gonorrhea	D. HIV
_____	5. acquired immune deficiency syndrome	E. AZT
_____	6. sexually transmitted diseases	F. pathogens
_____	7. viruses, bacteria, and parasites	G. chlamydia
_____	8. treatment for AIDS	H. symptom
_____	9. change in the body that is a sign of a disease or illness	I. antibodies
_____	10. fight viruses	J. antibiotics



Practice

Write the **type of pathogen**, **symptoms**, and **treatment** for each **sexually transmitted disease (STD)** on the chart below.

	Pathogen	Symptoms	Treatment
AIDS			
Trichomoniasis			
Genital herpes			
Genital warts			
Chlamydia			
Gonorrhea			
Syphilis			
Scabies			
Pubic lice			



Practice

Read each **situation** described in the paragraphs below. Write a brief answer to **describe** how you would respond.

1. Maria is 16 years old. She has had *sexual intercourse* twice in her life. Although Maria was on birth control pills, neither she nor her partner used a latex *condom*. She feels perfectly fine. She has not experienced any *symptoms* that might indicate a disease. Should she see a doctor and be tested for an *STD*? Why or why not?

2. Tasha has been seeing Robert for two months. Robert is a new student at Tasha's high school. She finds him attractive and kind. His family is smart and polite. Tasha wants to have sexual intercourse with Robert. What are some points she should consider before deciding what to do?



3. Yusef is considering having sexual intercourse with Trish. Trish is a star athlete on both the track team and the basketball team. She keeps herself in very good shape and is always healthy. Yusef has decided that she is too healthy to have AIDS. What's the problem with Yusef's thinking?



Practice

Match each definition with the correct term. Write the letter on the line provided.

- | | |
|--|----------------------|
| _____ 1. abnormal condition that occurs in the female when a Fallopian tube becomes blocked and an embryo begins to grow there | A. antibodies |
| _____ 2. describes a relationship in which two people are sexually faithful to each other | B. casual sex |
| _____ 3. devices or methods for avoiding pregnancy and disease | C. condom |
| _____ 4. not having sexual contact; a method of birth control and disease protection | D. contraceptives |
| _____ 5. system in the body that helps protect us from disease and infection | E. ectopic pregnancy |
| _____ 6. a sign of a particular disease or illness | F. immune system |
| _____ 7. covering worn over the penis or in the vagina during sexual intercourse | G. monogamous |
| _____ 8. describes a disease that cannot be caught or spread from one person to another | H. noninfectious |
| _____ 9. cells that destroy certain disease-causing organisms | I. sexual abstinence |
| _____ 10. a tiny disease-causing organism | J. symptom |
| _____ 11. having sex with someone you do not know very well or having sex with someone just for the physical pleasure; there is no attachment or commitment between the two people | K. virus |



Practice

Write **True** if the statement is correct. Write **False** if the statement is not correct.

- _____ 1. If you are in love with a person, you cannot catch a *sexually transmitted disease* from him or her.
- _____ 2. *Cancer* is an example of a sexually transmitted disease.
- _____ 3. *Sexual intercourse* includes oral intercourse, anal intercourse, and vaginal intercourse.
- _____ 4. An example of a good precaution against *syphilis* is the birth control pill.
- _____ 5. You can catch *Herpes Simplex I* from kissing someone.
- _____ 6. All *bacteria* in our bodies are bad and require medication.
- _____ 7. *Antibiotics* will cure AIDS and genital herpes.
- _____ 8. Some sexually transmitted diseases can be passed from an infected mother to her newborn.
- _____ 9. The number one sexually transmitted disease in America is AIDS.
- _____ 10. All persons with sexually transmitted diseases show *symptoms*.
- _____ 11. Most symptoms of sexually transmitted diseases will show up within 24 hours of sexual intercourse.
- _____ 12. *Syphilis* can do serious damage to your body if it is not treated.
- _____ 13. *Genital herpes* is not curable.
- _____ 14. *Scabies* and *pubic lice* can be caught by sleeping on infected sheets or using infected towels.



- _____ 15. One kind of condom is as good as another in reducing the risk of catching a sexually transmitted disease.
- _____ 16. If you find that you have a sexually transmitted disease, you should always contact the people with whom you have had sex.
- _____ 17. A person can catch genital herpes from oral sex.
- _____ 18. Only *homosexuals* and drug users are at risk of getting AIDS.
- _____ 19. A healthy person is not likely to get AIDS.
- _____ 20. *Sexual abstinence* and *monogamy* with an uninfected partner are the only two ways to eliminate any risk of being infected with a sexually transmitted disease.
- _____ 21. Our bodies do not produce the AIDS disease; it comes from outside the body.
- _____ 22. Knowing the facts will help people take precautions against getting an STD.
- _____ 23. Untreated *chlamydia* can also cause *cervical cancer* in women.
- _____ 24. Scabies and pubic lice is not curable.
- _____ 25. *Trichomoniasis* is an infection in the vagina of females and in the urethra of males.

Appendices

Index

A

A-B-C-S checklist 227, 232
 abdominal thrust 227, 229
 abusive 3, 12
 acknowledge 31, 36
 acquaintance 31, 48
 acquired immunodeficiency
 syndrome (AIDS) 405, 413
 addict 155, 167
 addiction 155, 167
 addictive 155, 169
 adolescence 315, 317
 adrenaline 77, 82
 advertising 273, 296
 aggressive 31, 55
 alcohol 155, 159
 allergic 155, 163
 amotivational syndrome 155, 198
 annual percentage rate (APR) 273, 286
 anorexia nervosa 111, 143
 antibiotics 405, 412
 antibodies 405, 412
 anticipate 77, 88
 anxiety 77, 80
 areola 313, 319
 asexual 356, 359
 assertive 31, 55, 77, 90

B

bacteria 405, 411
 balance 273, 284
 balanced diet 111, 128
 birth control 356, 383
 blood alcohol level (BAL) 155, 179
 body composition 111, 131
 body language 31, 42
 budget 273, 278
 bulimia 111, 144

C

calories 111, 116
 cancer 356, 363
 cannabinoids 155, 196
 carbohydrates 111, 116
 cardiopulmonary resuscitation
 (CPR) 227, 229

carotid pulse 227, 233
 casual sex 405, 409
 cervix 353, 360
 chemical dependence 155, 167
 chest compression 227, 246
 circulation 227, 233
 circumcise 314, 331
 clique 3, 13
 clitoris 313, 321
 communication 31, 41
 conception 356, 362
 condemn 3, 7
 condom 356, 384, 405, 414
 conflict 31, 56
 conformity 3, 13
 confrontation 31, 57
 conscious 227, 232
 consequences 77, 92
 consumer 273, 277
 consumerism 273, 277
 contentment 3, 6
 context 32, 38
 contraception 356, 383
 contraceptives 356, 383, 405, 414
 contract 273, 286
 credit 273, 284
 credit card 273, 284
 criticism 3, 12
 criticize 3, 5
 culture 3, 12

D

depressants 155, 178
 depression 77, 86
 designer drugs 156, 167
 diet 111, 115
 discharge 356, 365
 discretionary 274, 280
 distorted 3, 7
 dosage 156, 162
 drug abuse 156, 167
 drugs 156, 159

E

ectopic pregnancy 405, 414
 ejaculate 355, 373
 ejaculation 314, 332
 embryo 315, 319, 356, 362

emergency medical
 service (EMS) 227, 230
 endometriosis 353, 366
 engage 32, 38
 environment 77, 80
 epididymis 314, 331, 355, 374
 erection 314, 332
 estrogen 313, 318, 353, 361
 euphoria 156, 160

F

fallacy 111, 141
 Fallopian tubes 353, 360
 family planning 356, 360
 fat 112, 116
 fertilization 356, 362
 fertilize 315, 319
 fetal alcohol syndrome (FAS) 156, 182
 fetus 356, 359
 fiber 112, 117
 fiction 3, 8
 finance charge 274, 286
 first aid 228, 229
 fixed expense 274, 280
 fraud 274, 287
 frustrate 77, 81

G

genuine 32, 39
 give up the floor 32, 45
 glucose 112, 117
 goods 274, 277

H

hallucination 156, 171
 hallucinogens 156, 196
 hernia 357, 376
 heterosexual 406, 409
 homosexual 406, 409
 hormones 315, 318
 human immunodeficiency
 virus (HIV) 406, 413

I

immune system 77, 86, 406, 425
 imperfections 4, 6

infectious 406, 410
 inhalants 156, 196
 inhibition 156, 178
 installment loan 274, 290
 interest 274, 284
 internalize 4, 12
 intimate 32, 36
 intoxicated 156, 171
 isolation 32, 37

L

labia majora 313, 321
 labia minora 313, 321
 late fee 274, 287
 lender 274, 280
 look-alike drugs 156, 208

M

mammogram 353, 364
 masturbation 315, 332
 medical emergencies 228, 229
 membership fee 274, 286
 menstrual cycle 313, 321
 menstruation 313, 318
 minerals 112, 116
 minimum payment 275, 284
 misuse 157, 167
 mixed message 32, 43
 monogamous 406, 427

N

narcotics 157, 196
 needs 275, 279
 nervous system 157, 160
 nicotine 157, 168
 nocturnal emissions 315, 332
 non-infectious 406, 409
 nonverbal communication 32, 41
 nutrients 112, 116
 nutritionist 112, 123

O

obesity 112, 132
 orgasm 315, 332
 ovaries 313, 318, 353, 360
 overdose 157, 159

overfat 112, 132
over-the-counter drugs 157, 161
ovulation 353, 361

P

Pap test	353, 364
parasites	406, 413
passive	32, 55
pathogens	406, 411
penis	314, 331, 355, 359
physical dependence	157, 169
pituitary gland	315, 338
positive self talk	4, 16
precautions	406, 409
premenstrual syndrome (PMS)	353, 365
prenatal care	357, 385
prescription drugs	157, 161
progesterone	313, 318
prostate gland	355, 374
protein	112, 116
psychoactive drugs	157, 196
psychological	77, 86
psychological dependence	157, 169
puberty	315, 318

R

rapport.....	32, 49
RDA	113, 123
regulate	78, 89
reproductive system.....	357, 359
rescue breathing	228, 229
revolving credit account	275, 284
role	32, 35

S

sarcasm33, 42
 satisfy4, 14
 savings account275, 280
 scrotum314, 331, 355, 373
 self-concept4, 8
 self-disclosure33, 47
 self-esteem4, 5
 self-ideal4, 8
 self-image33, 37
 self-satisfaction4, 5
 semen314, 332, 355, 374
 services275, 277

sexual abstinence 357, 384, 406, 429
sexual intercourse 315, 332, 357,
..... 359, 407, 409
sexually transmitted diseases
(STDs) 407, 409
shock 228, 229
side-effects 158, 163
solitude 33, 35
sperm 314, 319, 355, 359
sterility 357, 366
stimulants 158, 188
stress 78, 79
stressors 78, 80
suicide 78, 102
symptom 407, 413

T

tar	158, 189
techniques	78, 80
testicle	314, 330, 355, 373
testosterone	314, 330, 355, 373
tobacco	158, 159
tolerance	158, 169
transmitted	407, 410
trichomoniasis	354, 365
trust	33, 39

U

unconscious 228, 232
undemanding 4, 12
underfat 113, 133
urethra 315, 321, 357, 374
user 158, 160
uterus 313, 321, 354, 360

V

vagina 313, 321, 354, 359
vaginitis 354, 365
values 33, 39
vas deferens 314, 331, 355, 374
verbal communication 33, 41
virgin 357, 384
virus 407, 412
vitamins 113, 116
vulnerable 4, 6
vulva 313, 321

W

wants 275, 279
withdrawal 158, 172
worthy4, 5

Y

yeast infection 354, 365

Help Agencies

Agency for Health Care
Administration
Consumer Complaints/ Assistance
2727 Mahan Drive, Room 351
Tallahassee, FL 32308-5403
1-800-342-0828
www.fdhc.state.fl.us

Alateen/ AL-ANON Family Groups
P.O. Box 862
Midtown Station
New York, NY 10018-0862
1-800-344-2666
www.al-non.alateen.org

Alcoholics Anonymous
P.O. Box 862
Midtown Station
New York, NY 10018-0862
1-212-683-3900
www.alcoholics-anonymous.org

American Cancer Society
3710 West Jetton Avenue
Tampa, FL 33629
1-800-227-2345
www.cancer.org

American Lung Association
1740 Broadway
New York, NY 10019
1-800-586-4872
www.lungusa.org

American Red Cross
Look in phone book to call
your local chapter.
www.redcross.org

Centers for Disease Control and
Prevention
1600 Clifton Road
Atlanta, GA 30333
1-800-311-3435
www.cdc.gov

Florida Abuse Hotline
Child Abuse
Florida Department of Children
and Families
2729 Fort Knox Boulevard
Tallahassee, FL 32308
1-800-962-2873
www.myflorida.com

Florida Alcohol and Drug Abuse
Association
1030 E. Lafayette Street, Suite 100
Tallahassee, FL 32301
1-904-878-2196
www.fadda.org

Florida Department of Financial Services
200 East Gaines Street
Tallahassee, FL 32399-0300
1-800-342-2762
www.fldfs.com

Florida Network of Youth and
Family Services
820 East Park Avenue, Suite D-100
Tallahassee, FL 32301
1-800-733-8988
www.floridanetwork.org

Florida Runaway Hotline
P.O. Box 13087
St. Petersburg, FL 33733
1-800-786-2929
[www.floridanetwork.org/
NatSwitch.htm](http://www.floridanetwork.org/NatSwitch.htm)

Narcotics Anonymous
P.O. Box 2665
Tallahassee, FL 32315
1-904-599-2876
www.wsoinc.com

National Clearinghouse for Alcohol
and Drug Information
11426-28 Rockville Pike
Rockville, MD 20852
1-800-729-6686
www.health.org

National Institutes of Health
9000 Rockville Pike
Building 1 #126
Bethesda, MD 20982
1-301-496-2433
www.nih.gov

Truth Tobacco Campaign
www.thetruth.com

WebMD Corporation
669 River Drive
Center 2
Elmwood Park, NJ 07407
1-201-703-3400
www.webmd.com

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Adobe Photoshop 5.0. Mountain View, CA: Adobe Systems.

Macromedia Freehand 8.0. San Francisco: Macromedia.

Microsoft Office 98. Redmond, WA: Microsoft.

