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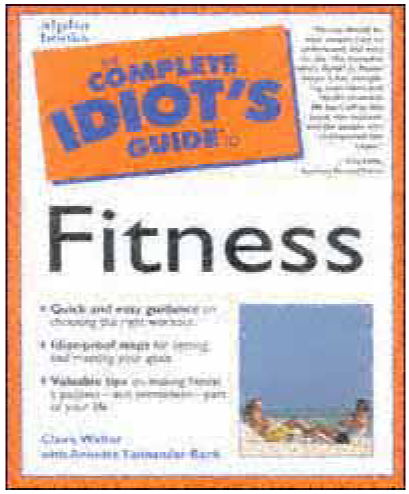
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THE COMPLETE IDIOT'S GUIDE to
Fitness
Quick and easy guidance on choosing the right workout

THE COMPLETE IDIOT'S GUIDE® TO

Fitness

by Claire Walter
with Annette Tannander Bank

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DEAR READER

Dear Reader,

We can make an educated guess about what brought you to this book. Perhaps you recently had to buy a pair of slacks that were larger than any you had ever worn before—and now it's difficult to zip them up.

If you are a woman, you might have put on pounds gradually and are now wearing muumuus and oversized T-shirts in a vain effort to disguise your bulk. Or maybe you woke up one morning with the realization that your *baby* is entering elementary school, and you still haven't gotten rid of your pregnancy fat.

If you are a man, you might no longer be able to fasten the top button of a dress shirt, your gut might be hanging over your pants, and you might keep buying bigger belts. Maybe you're about to celebrate a big birthday or attend an upcoming high school reunion. Maybe the doctor has shocked you with news about your blood pressure, your cholesterol level, or some other potentially serious condition. Perhaps your wake-up call has been the preventable illness of a loved one, a friend, or a co-worker. Or it could simply be that you bow out of many interesting and fun recreational activities planned by your children, your mate, or your friends because you're "not up to it."

You probably have known for a long time that you really need to do *something* to lose weight, to get back on track, and to get control of your life. You might have tried many diets, bought some exercise gadget you saw advertised on television (or maybe someone else's cast-off exercise gear at a garage sale), or made an effort in some other way to shape up. If you were not successful, you probably became discouraged—or at least resigned yourself to being out of shape and sedentary.

If you are fortunate, you are still in good health even though you may have been making some bad lifestyle choices. You certainly should consult your physician before radically changing your lifestyle and plunging into an exercise program. Still, while you are waiting for your appointment, you can start by going for a walk every day, laying off fried foods, and substituting a piece of fresh fruit for a rich dessert. No one needs a doctor's approval to begin getting into healthier habits.

We promise no quick fixes because there are none. You've put on weight and lost strength and muscle tone, and it will take some time to get them back. Perhaps dieting didn't work because it was too harsh, because you expected too much too fast, or because it was unhealthy. Perhaps you didn't trim down because you were trying an exercise program that wasn't right for you. This book introduces you to many options so you can find the right combination for you to become healthier and fitter. Becoming active is a means to this end and also is an end unto itself—and it can open a whole new world of satisfying and pleasurable physical activity that can improve your life and your outlook forever.

Good luck!

Claire Walter

Annette Tannander Bank

The Complete Idiot's Reference Card

Ten Risk Factors Reduced by Regular Exercise

1. Premature death
2. Cardiovascular disease
3. Coronary heart disease
4. High blood pressure
5. Colon cancer
6. Obesity
7. Osteoarthritis
8. Osteoporosis
9. Non–insulin-dependent diabetes mellitus
10. Mood disorders

Ten Activities That Burn the Most Calories

1. Bicycling more than 20 miles per hour
2. Running at a seven-minute-mile or faster pace
3. Vigorous cross-country skiing, including uphill
4. Bicycling 16 to 19 miles per hour
5. Playing handball
6. Swimming (crawl, butterfly, or treading water vigorously)
7. Vigorous stationary bicycling (for example, spinning)
8. High-impact step aerobics
9. Martial arts
10. Rope jumping

Ten Common Fitness Mistakes

1. Not stretching enough before and after a workout
2. Lifting too much weight too soon
3. Running too far too soon
4. Not warming up before and cooling down after a workout
5. Exercising too intensely for weight loss to occur
6. Not drinking enough water
7. Leaning heavily on the stairstepper
8. Not working out within the target heart rate range
9. Not using controlled movements during weight training
10. Consuming too many high-calorie energy bars and sports drinks

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Ten Fitness Web Sites

1. American Council on Exercise (ACE), www.acefitness.org
2. Aerobics and Fitness Association of America (AFAA), www.afaa.com
3. *Prevention* magazine, www.healthyideas.com
4. Fitness Partner Jumpsite, www.primusweb.com/fitnesspartner/
5. FitNews, www.fitnessworld.com
6. Physical Activity and Health News (PAHNet), www.pitt.edu/~pahnet/
7. iVillage Better Health, www.betterhealth.com
8. ThriveOnLine, www.thriveonline.com
9. National Strength and Conditioning Association, www.nsca-lift.org
10. Women's Sports Foundation, www.gogetfit.com

*From IDEA, a trade organization of training professionals

Ten Secrets for Successful Strength Training

1. List your goals and plan to achieve them over time.
2. Don't try to do too much, too soon.
3. Change your exercise program every four to six weeks.
4. Change your exercise order.
5. Change the number of sets.
6. Vary your recovery time between sets.
7. Change the combination of reps and sets.
8. Keep a log and evaluate your progress every four to eight weeks.
9. Be flexible with your training.
10. Give purpose to every workout.

To my son, Andrew Cameron-
Walter, whose dedication to strength and fitness has helped the
New Hampton School football team to a championship season. Go Huskies!

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INTRODUCTION

Fitness means different things to different people. For some, it means running a marathon or having a buff, muscular bodybuilder's physique to show off at the beach. For others, it's just the ability to carry a baby or a bag of groceries up a flight of stairs without panting. For the purposes of this book, fitness means having a healthy, *functional* body-one that enables you to lead a comfortably active life. The book also will touch on activities such as Tae Bo, tai chi, yoga, and advanced training tips that might not interest you now, but they might gain new appeal as you get into shape.

Fitness is not only an end unto itself. It also is a major component of wellness, which includes physical and mental health and emotional well-being. A physically active child can be on the right road to a lifetime of fitness. A fit teenager will have a wholesome body image, an ability to compete in sports, and enhanced self-esteem. An adult with a workout program can better combat work-related stress, and fit women usually have more comfortable pregnancies, easier childbirth, and quicker recovery than out-of-shape women.

Fit people are more likely to stay well, active, and productive through their middle years when heart disease, cancer, cardiovascular problems, and other health issues begin to crop up. People who retain, or even build, their fitness late in life can remain active and vital for many years. As we age as a population, such quality-of-life issues are not trivial; they are becoming more important to us as individuals and as a nation and society that is living longer and becoming more conscious of quality of life. Fitness should not be a fling but a lifetime commitment. When you get into a regular program, exercise can become addictive, and it's the best addiction you can have.

Inactivity—a National Crisis

So much has been written about exercise and diet that millions of Americans are quite knowledgeable about these subjects and how they relate to healthy living. But how many people really act on this knowledge? Far too few. Americans are fat and frustrated. According to recent statistics, some 34 percent of the adults in this country are overweight and close to 20 percent are dangerously obese. At the same time, about half of them are trying to reduce. They'd better.

In 1996, the U.S. Surgeon General issued a massive report that concluded, among other things, that inactivity kills about a quarter of a million Americans every year-far more than automobile accidents, shootings, and AIDS combined. The results of inactivity and obesity creep into many corners of our collective life. Ferry boats across Washington State's Puget Sound used to carry 250 passengers; these days, only 230 commuters can scrunch their posteriors onto each boat. Airlines are required to carry seat-belt extenders on every plane, and many are raising the tray tables to fit over passengers' tubby tummies. Even toilet seats are getting bigger-by customer demand!

The national standard for public seating space used to be 18 inches. Now, some sports stadiums and theaters are installing 24-inch seats. Isn't it pathetic that the stands are full of overweight people who fuel up on fatty foods and beers as they watch millionaire sports stars play games? People also sit in movie theaters and ingest buttered popcorn, humongous sodas, and brick-size boxes of candy as svelte, overpaid movie stars cavort onscreen. What is wrong with this picture? Everything.

We are not the only fat-afflicted society in the industrial world. According to Marks and Spencer, Britain's biggest clothing retailer, the average Englishwoman is now a size 16 as compared to the average size of 12 in the 1950s. Women have steadily added inches to their waistlines and hips. The culprits? A more sedentary lifestyle and fast food—the same as in America.

Many studies have shown that exercise, in combination with a wholesome diet, is the only effective, permanent way to get weight under control—and to enjoy good health and a life of activity and fun. As the baby boom generation continues to bulge, so do the cases of high blood pressure, heart disease, and some kinds of cancer that have been statistically linked to obesity.

Boomer women also are coping with issues ranging from late-life pregnancy and menopause to the specter of osteoporosis. Doctor-sanctioned exercise is now known to be key to an easier pregnancy, quicker postpartum recuperation, milder menopause, and escape from osteoporosis. As life expectancy increases, the quality of life ought to keep up. Who wants to live a long but inactive and perhaps painful life full of restrictions and problems? People who are lean, fit, and flexible live longer and get more out of the long life they live.

Making Fitness an Attainable Personal Goal

People are always making resolutions to get in shape. To lose some weight. To tone up. To firm up. They say they'll start the diet on Monday. After the first of the year. With swimsuit season coming up. They say they'll sign up at a health club next week. Next month. Next time there's a membership special. After the first of the year. Perhaps after Memorial Day. Maybe they've already signed up but have gone only once, a couple of times, or not at all.

Other than sheer procrastination, one of the main reasons many people don't really get started on a program is that they are seeking a sure cure or fast fix for flab—or, at the very least, the most efficient way to get in shape. Others don't work out because they don't believe they can do it; being afraid of failure, they don't start at all. But everyone can get stronger and healthier. This book will compare and contrast what's out there in terms of both targeted workout programs and participant sports.

Diet books and, worse, potentially harmful weight-loss formulas sell like proverbial hot cakes (hold the butter and use low-sugar syrup, of course), but many studies have shown that exercise, in combination with a healthful diet, is the only effective, permanent way to lose weight and keep it off—and also to enjoy good health. This is so true that it cannot be repeated too often. "The only place where success comes before work," Vidal Sassoon once said, "is in the dictionary."

Intake is just part of the answer to the obesity question. Most modern research shows that diet is not the route to long-range success. Diet plus exercise is important in body reshaping, not simply for good looks but, more important, for good health. Specialized books, magazines, and videos abound to help people begin to exercise to get and stay in shape. Not a month goes by without some major women's magazine or general-interest publication doing a cover story on shaping up. Television infomercials promise a sure route to leanness. Common wisdom indicates that yo-yo diets and impulsive, short-lived plunges into workout programs are doomed to fail, yet people keep trying this and that. They spend money, realize disappointing results, and try still another fast fix. The urge for better health resides in many people, however, and this is a good beginning because the seeds of success have to sprout within your mind.

How to Use This Book

Perhaps you are among the people who have gobbled up a great deal of information—so much, in fact, that it's difficult to sort out the promises and decide which ones can work for you. *The Complete Idiot's Guide to Fitness* sorts it out for you. This is not an indepth analysis of any one approach to fitness. Rather, it's a smorgasbord of options so you can decide which ones you can fuse into a program that will make you stronger, more attractive, and above all, healthier.

This book begins with goal-setting, motivational issues, and tips and tricks to start off on the right foot. It lays out the wide array of workout options and how they compare. When picking a program, the important thing is to find something that works *for you*, something that you can stick with. This book covers working out at home, at a gym, and while you're traveling. It outlines a vast array of classes and tools to help you slim down, tone up, increase your strength and endurance, become healthier, and remain happier. It talks about sports and everyday activities that are easier once you are more fit, because strength and fitness are not necessarily ends unto themselves but tools to help you live a better and more fulfilling life.

Each chapter is seasoned with insights, tips, and cautions to light your route to fitness:

Fitness Fact

These boxes contain interesting statistics and researchers' findings about fitness, wellness, and other health issues.

Fit Tip

Here you'll find helpful hints about specific exercises, apparatus, or other steps you can take on the road to getting into shape.

Quote, Unquote

Observations, comments, and inspiration from others about fitness and well-being come in these boxes.

Achtung!

Achtung is a German word signaling an "alert." These cautions and warnings help you avoid injury or other common exercise errors.

Acknowledgments

Immense appreciation goes to all the people who created this book. I am deeply grateful to the valiant warriors on the fitness front who do daily battle to help Americans find their way to fitness and good health—exercise instructors, trainers, nutritionists, authorities in the growing realm of the mind-body connection in being fit and healthy, equipment innovators, physiologists, physicians, and all the others who have shared their knowledge and permitted me to quote their words. Dr. Surasvati Berman of the Rocky Mountain Institute of Yoga and Aryuda cast a knowledgeable eye on Chapter 9, "Other Paths to Stretching and Toning."

My greatest debt of gratitude goes to my three wonderful partners in the project: Annette Tannander Bank, trainer extraordinaire, whose expertise and dedication to this project have been exceptional; photographer Anne W. Krause, who is responsible for the best images in this book; and Lisa DeYoung, a conscientious researcher and fine writer who helped put the pieces together. Without them, this book would not have been possible. Not only has our collaboration been professionally gratifying, but we've become firm friends as well. Thanks also to my careful editors at Alpha Books—Gary Krebs who assigned this book; development editor Nancy D. Warner, production editor Christy Wagner, and copy editor Amy Lepore. Their conscientiousness has enhanced this project, but the responsibility for any errors or omissions is mine.

—Claire Walter

PART 1
START SMART

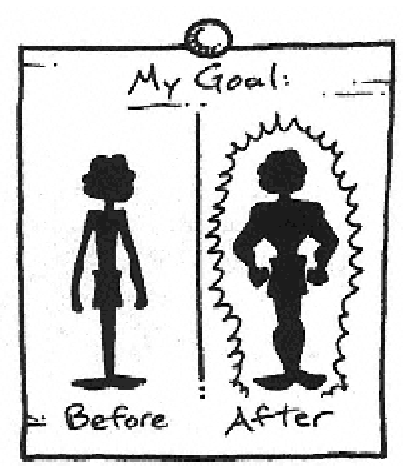
According to an ancient Chinese proverb, "A journey of a thousand miles begins with a single step." And so it is with fitness. To get in shape, drop inches and pounds, and most important, be fit and healthy, you need a plan, steady work, and dedication.

Televiewers who order quick-weight-loss products demonstrate little planning or stick-to-itiveness. Some products might provide fast results, but they usually are not permanent—and some pills and potions eventually prove to be harmful. At best, most of them don't work over the long run, and the only thing lighter is your wallet.

Such a mind-numbing amount of health information and fitness knowledge is out there that some people who want to shape up, who need to shape up, who must shape up for immediate health reasons give up instead. Building the foundation of a solid workout regime requires strategic planning. This means assessing where you are now and what your realistic goals are.

"People are not lazy by choice. They are forced into it by the abundance of fitness information that is available."
—Dr. Ellington Darden, fitness authority and author

Chapter 1
The Name of the Game Is Goals



In This Chapter

- The three basic body types
- Can a person be both fat and fit?
- Fitness and good health—your cheapest health insurance
- How to set fitness goals

"I'm going to lose weight." "I'm planning to get in shape." "I can't stand the way my clothes fit." "I can't zip up my favorite jeans." "My back hurts." "I feel like a slug. I've got no energy. I just have to get up and do something." How many times have you heard these comments? How many times have you said them?

Losing weight, shaping up, looking good, and feeling good are the general goals shared by millions of Americans and others. You probably are one of them, or you wouldn't have picked up this book. Every one of these common resolutions falls into the general category of "getting fit," which includes physical activity, healthful eating, and a commitment to changing the way you've been conducting your life.

Goal-setting gives purpose and direction to any training program and helps promote the motivation, self-confidence, positive attitude, and sense of responsibility to succeed. There's nothing exotic about the means of achieving these goals, but it requires more of a commitment than many people are willing to make. We appear to be a nation of individuals who demand instant solutions to problems, and many of us have the attention span of a flea. Of the top 10 television infomercials, half promote weight-loss or exercise products. Most make grandiose promises of quick, easy results. An old saying that applies here is "If it sounds too good to be true, it probably is."

The truth is that transforming yourself from a sedentary, out-of-shape person to someone fit is not instant. Many people think they can change their bodies quickly, but fitness and good health don't come about overnight. That should be no surprise. After all, we didn't add those extra pounds or become unfit overnight. Shaping up is a process that has to start with a few fundamental steps. Figure out where you are, set realistic goals, and try to determine how you can accomplish them. Then begin.

"Today is the first day of the rest of your life."

This slogan might date back to the era of flower power, smiley faces, and tie-dye shirts, but it's held up better than all those fads. The slogan is as true now as the day it was coined. Make today the day you take charge of your body. Many people play the "tomorrow" tune: *"Tomorrow I'll start working out." "Tomorrow I'll join the gym." "Tomorrow I'll go for a walk at lunch time."* And so on. Quit procrastinating. Don't turn the calendar to any more tomorrows. Start on your fitness quest today. After all, inertia never caused anyone to get thinner or stronger. Details follow, but here's a list of some things you can do right now:

♦ Make a doctor's appointment for a medical evaluation and to get his or her go-ahead for you to start a fitness program.

♦ Sign up for a fitness evaluation with a local gym, community recreation center, or personal trainer.

♦ Go through your refrigerator and pantry and be merciless, discarding high-sugar, high-fat foods.

♦ Go to a gym and sign up for a basic workout program.

♦ Starting today, make a daily walk part of your routine.

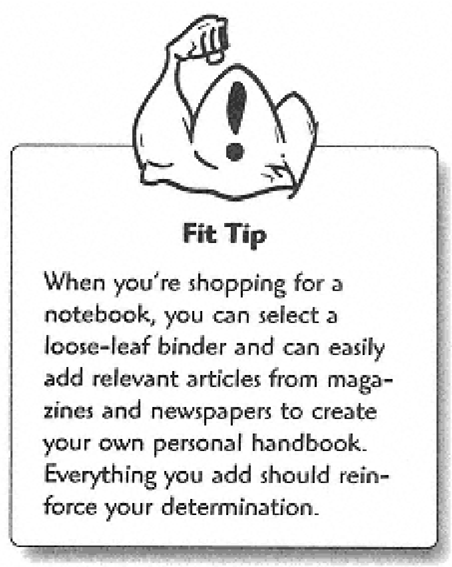
♦ Set your fitness goals.

In addition, buy a specially designed workout planner/logbook or a notebook in which you can log your motivation, your specific goals, your workout routine, your daily eating, and your emotions. Be sure to include the positive feelings you get from exercising, such as feeling strong, relaxed, challenged, slimmer, fitter, or any other. If you skip a day of your workout schedule, mark that down, too, along with the reason why you didn't exercise and how it made you feel, such as tired, lazy, guilty, relieved, or any other.

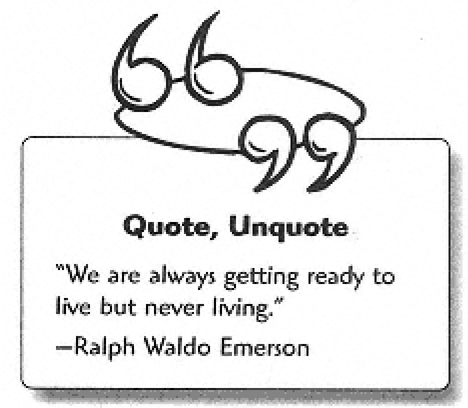
Mark today on your calendar because it is, indeed, the first day of the rest of your new life.

The Big Picture: What's Your Motivation?

You are the general in command of your life. As you embark on your fitness quest, it might help you to think of motivation as the strategy in your battle to become fit forever and to think of your specific goals as the tactics you will have to employ to accomplish what you set out to do. Like all wars, however, you need to know what you are fighting for and keep your goals firmly in sight.



As you begin to plan your get-in-shape program, ask yourself some questions. When you have answered them, jot down those major motivations in your notebook—perhaps in big, bold letters on the first page. You can add your feelings about your "before" self, too. Here are some questions that might help get you started:



♦ Do you want to be fit to live a long, healthy life? You might want to see your grandchildren grow up, enjoy an active retirement, or avoid some of the health problems you see plaguing older relatives.

♦ Do you want to be fit to look better? If you are tired of waddling when you walk, jiggling when you move, and oozing over the chair when you sit, your motivation for slimming down and shaping up might be mainly for aesthetic reasons.

♦ Do you want to be fit to improve your love life? If you believe you haven't found a mate because of your appearance, if you fear your partner is losing interest because you've let yourself go, or if your spouse has left you for someone thinner, you might want to shape up for this most personal of reasons.

♦ Do you want to be fit to take up a sport? Perhaps the ski slopes, the tennis courts, or the golf courses look good to you. You probably feel the need to get in shape to enjoy a new sport and have a reasonable chance of becoming competent.

♦ Do you need to get fit because of serious health concerns? When your doctor tells you that you need to get some exercise and gives you the reasons, it can be a more powerful motivator than your own general notion of being healthy or living longer.

Regardless of which motivations on this list match yours, you'll have to get into gear and change your life to reach them. Keep them in mind as you begin and proceed. Because the most important goals are long-haul, you need to count on a long-range commitment to get there.

Can't Do Much About Biology

Fit Tip

Tell someone important to you what your fitness goals are to help solidify your commitment—to yourself and to that person.

Before you think about what you want your fitness program to do for you, keep in mind what it *can't* do. Genetics play the leading role in creating the basic shape of your body, and you have to start out being realistic so you can do the best you can with what you have. People are programmed from birth to be tall and long-limbed, petite and short-limbed, small-framed or big-boned, or whatever. By adulthood, you've hopefully accepted the immutable things about your body type, even if you don't like them. Genetics also determine where you are likely to gain weight, and you might not be quite as cheerful about accepting that. No matter what you do, you might find that any extra pounds you carry appear around your middle, on your hips and thighs, or below your belt line.

Physiologists have divided people into three basic body types, though most people's bodies are a combination of two:

♦ **Ectomorphs** are lean, long-limbed, and often tall. These reed-like people have long torsos, slim hips and shoulders, and small bones in proportion to their height. They often excel as runners. Guys nicknamed "Stretch" or "Slim" are ectomorphs.

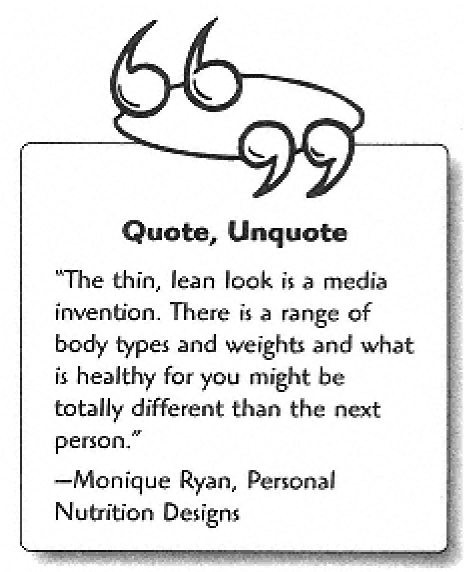
♦ **Endomorphs** are short of limb and torso with more rounded bodies. They tend to store body fat easily and might also be big-boned. When they gain weight, it usually is in the lower body. Endomorph women can be curvaceous like Madonna or Pia Zadora. In reality, many endomorphs spend their lives fighting fat.

♦ **Mesomorphs** have square, sturdy bodies and often are fairly big-boned. They are athletically built and can bulk up their muscles more easily than other body types. When they gain weight, it generally is in the abdomen.

People tend to pack extra weight in specific patterns. The names of these patterns are less Latin-rooted than the three morphs just mentioned. Overweight mesomorphs become "apple people" who carry their extra weight around the midsection. Their problems are big bellies and "love handles" on the sides of their torsos. Endomorphs who put on weight become "pear people" and carry their extra weight below the belt on the hips, abdomen, buttocks, and thighs. Fortunately, ectomorphs don't readily gain weight, but they generally can't gain big muscles either. You won't find many ectomorphs bodybuilders.

Stand Tall, Stand Proud

Remember your mother telling you to sit or stand up straight and not to slouch? She was right. Once you decide to shape up, be conscious of the way you carry yourself. Not only will you look better with your shoulders straight and your head held high, you also can avoid problems of the shoulders and upper spine. The routine of checking and adjusting your posture can be a prelude to the new body awareness you will be developing along with your new workout program.

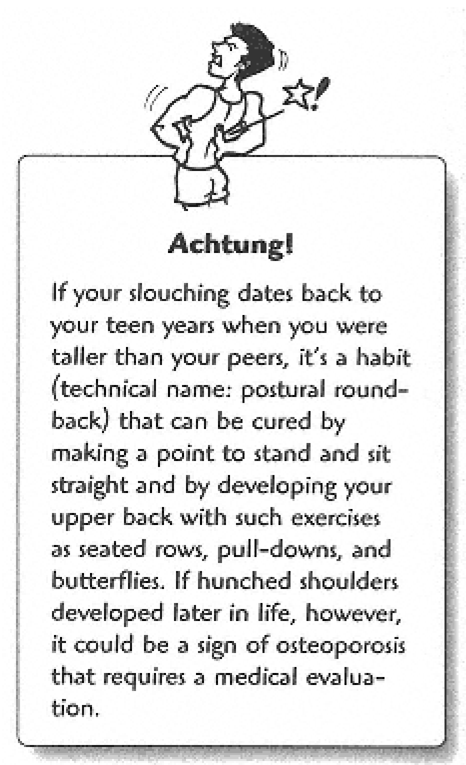


Quote, Unquote

"The thin, lean look is a media invention. There is a range of body types and weights and what is healthy for you might be totally different than the next person."

—Monique Ryan, Personal Nutrition Designs

Rounded, hunched shoulders are said to be "protracted"; when they are pulled back, they are said to be "retracted." Many people who hold down desk jobs and sit at a computer all day lapse into a state of "chronic protraction," which is bad. Debbie Horn, a Boulder, Colorado, fitness instructor with a Master's degree in kinesiology from the University of Colorado, has developed a small program to help with posture and to ward off shoulder problems. She suggests setting a timer or stopwatch to go off every 15 or 30 minutes. When you hear the alarm, check your posture. If you are slouching, retract your shoulders—in other words, sit or stand up straight and pull your shoulders back. After a while, this readjustment will become automatic.



Achtung!

If your slouching dates back to your teen years when you were taller than your peers, it's a habit (technical name: postural round-back) that can be cured by making a point to stand and sit straight and by developing your upper back with such exercises as seated rows, pull-downs, and butterflies. If hunched shoulders developed later in life, however, it could be a sign of osteoporosis that requires a medical evaluation.

Just Weight a Minute

Is it possible to be both fat and fit? Yes, to a limited degree. Five-hundred-pound sumo wrestlers, three-hundred-pound football defensemen, and some long-distance or endurance swimmers are both strong and overweight. However, they cannot be described as completely fit. They are functionally fit for their chosen sports. For most people, balanced fitness leads to a long, healthy life.

Glenn Gaesser and Steven Blair from the highly regarded Cooper Aerobics Center in Dallas studied 20 years of statistics about the relationship between body weight and fitness. Their conclusion was that being active rather than sedentary is the critical factor in health and longevity. This means that naturally thin nonexercisers can be less healthy than overweight people who are physically active. Other studies have backed up these findings. In other words, for most people in the real world, obesity and fitness are mutually exclusive.

The Cooper study ranked physical inactivity and smoking at the top of the list of factors that put people at medical risk. It concluded that men who are the least fit have one-and-a-half times the mortality rate as men who are the most fit, and women who are the least fit have twice the mortality rate of women who are the most fit. It is important to know, however, that the researchers noted that it isn't necessary to be a super athlete to dramatically cut risk factors. Even being moderately fit and physically active can do the trick, and that's what most beginning exercisers are looking for.

The *Journal of the American Medical Association* in late 1999 reported on a government study that underscored the problem and made headlines around the country. Researchers in the Behavioral Risk Factor Surveillance System conducted by the Centers for Disease Control and Prevention announced that the percentage of obese Americans (those who are overweight by 30 percent or more) skyrocketed from 12 percent in 1991 to 17.9 percent in 1999. The biggest change for the worse was among 18- to 29-year-olds and among Hispanics, but this weight increase cut across state lines, age groups, and gender barriers, as the entire country seemed sedentary and to be on one communal eating binge.

Take a Giant Stride Toward Good Health

Fitness and good health are not as instant as boil-in-the-bag meals. There is one thing you can do, however, that will immediately start you on the right road to feeling better, looking better, and becoming healthier: If you smoke, quit. Now. Participate in the Great American Smokeout, an annual nationwide stop-smoking initiative. Do whatever it takes. Plaster a patch on your body, join a support group, undergo hypnosis. Not only will quitting be good for you, it will show you that you can accomplish anything you set your mind to.

Smoking has been proven to be an addiction. You probably know that. If you smoke, you also know that it pollutes your lungs and predisposes you to such horrific diseases as emphysema, cancer of the lung or throat, heart disease, and stroke. Do you realize, however, that young children in a smoking household are more likely to suffer from asthma, bronchitis, pneumonia, and even ear infections than children of nonsmokers? Is that fair?

Even if you and your family dodge the disease bullet, smoking drains your pocketbook, causes wrinkles, stains your teeth, and in the growing community of fit nonsmokers, makes you a social outcast. No other decision, adhered to firmly, can do so much to improve your life. When you begin to reshape yourself by reshaping your life, you will find workouts to be easier and more enjoyable if you become a nonsmoker.

Quick Fix or Fitness Forever?

Sometimes the motivation to lose weight is simply cosmetic because your calendar shows a special occasion coming up for which you want to look trim. Sure, you can go on a crash diet, dump some weight (so that you *look* less dumpy), shine for the special event, and probably feel hungry and horrible. If you do something radical, try using it as a springboard for *real* fitness.

Such quick weight loss has nothing to do with fitness. In fact, virtually all experts agree that people who diet without exercising will quickly regain the lost weight plus some extra. The slow, steady road to fitness and eating sensibly, on the other hand, will result in long-term weight loss and good health. In our fat-obsessed, instantgratification culture, many people would rather take a pill or undergo surgical procedures—risks and all—than set a course to fitness and stick to it.

The key to keeping weight off and staying healthy is activity. Scheduled exercise should be part of the program, but incorporating activity into your life every single day is the not-so-secret route to long-term success. The Centers for Disease Control, the American College of Sports Medicine, and the Surgeon General's office recommend at least 30 minutes of physical activity every day to have a positive impact on health. A "positive impact on health" is not the same as "lean and fit," but it is a start or a supplement to a regular workout program.

Quote, Unquote

"You have to think of physical activity and exercise as being on a continuum. Something is better than nothing. More is definitely better than something. Physical activity is something. Exercise is better."

—Dr. Harold Kohl, Director of Research, Baylor Sports Medicine Institute, Houston

The power of positive thinking also impacts shape-up success. A University of Maryland study followed 54 women who embarked on a nine-month diet and exercise program. Before they started, 28 percent believed they would lose weight and 26 percent did not. At the end of the study period, those who believed lost 30 percent more weight than the doubters. Hallelujah!

The President's Council on Physical Fitness issued five principles to think about when you begin an exercise program and to keep in mind as you embark on it:

1. Success requires commitment.

2. Patience is essential.

3. Don't try to do too much, too soon.

4. Don't quit before you've given yourself the opportunity to experience the benefits of exercise.

5. Stay convinced of the benefits of fitness and the health risks of unfitness.

Fitness: Your Cheapest Health Insurance

The American Heart Association and its affiliated American Stroke Association are worried. Cardiovascular disease, including stroke, is the number-one killer of women over 25-half a million every year. The AHA believes that at least 30 minutes of daily physical activity will reap untold health dividends and shave that dismal statistic.

Recognizing that many people—especially women pressured by family, job, and community demands—find it difficult to make time, the AHA developed the Choose to Move program. This free, 12-week program is like a correspondence course to help you lift yourself from the sedentary lifestyle. It begins with 10 minutes of easy-to-moderate exercises a day and progresses to the half-hour you need. It also offers fitness tips and invites you to submit a biweekly progress report. For more information, contact the AHA at 1-888-694-3278 (toll-free) or www.americanheart.org.

Think about all the problems obesity can cause and exercise can alleviate. As previously noted, excess weight and a sedentary lifestyle are linked with heart disease, stroke, and diabetes in both genders. Women who do not exercise are vulnerable to a host of other chronic problems. From the age of 40 on, most women lose one half to one third of a pound each of muscle and bone every year and often gain body fat in its place. In perimenopause, which precedes menopause, these changes accelerate. More than one third of American women aged 30 to 49 are already overweight, and by age 50, that figure jumps to more than 50 percent. That's half the female American population inviting osteoporosis, broken bones, fatigue, frailty, depression, and more from lack of exercise.

Not only can exercise alleviate many current health problems and ward off future ones, it also can reveal various disorders. (Remember that cardiologists regularly use a stress test to help diagnose heart and lung problems.) Serious athletes, who tend to be in tune with their bodies, often notice changes in their performance that can signal a medical problem. Even casual exercisers and recreational athletes should be alert to such changes. They might be nothing, or they might help pinpoint such problems as anemia, heart problems, and seizure disorders.

Writing in *The Physician and Sportsmedicine*, Dr. E. Randy Eichner of the University of Oklahoma Health Sciences Center and Dr. Warren A. Scott of Kaiser Permanente in Santa Clara, California, reported anecdotal evidence of the diagnostic by-product of exercise. They wrote about a 57-year-old man who reported headaches just five to 10 minutes into vigorous swimming or walking. An angiogram revealed severe blockage in three coronary arteries. A 72-year-old softball player who could no longer make it to first base turned out to have Parkinson's disease. A 25-year-old runner who found his 5-kilometer race times eroding from 15 to 18 minutes was found to be anemic.

No matter where you start, you never know
what you can do until you set a goal and
work toward it.
(Photo: Anne W. Krause)

Fitness Starts with Setting Goals

Would you plan a dinner party without a menu or recipes? Would you begin a woodworking or sewing project without a plan or a pattern? Would you head out on a vacation without an itinerary and some maps? Probably not. You can view your dinner party, your project, or your vacation as your goal.

When you decide that *now* is the time to get fit, set some goals for yourself at the outset. Be realistic and make them achievable. If you are a middle-age woman who has given birth to three children and packed on 40 pounds, it's not realistic to think you'll be a size seven as you were when you graduated from high school. If you are a man with a sedentary job and a lardy middle, it is unlikely that you will become the totally muscular GI you were when you finished basic training. Don't even think you'll look like Vanna White or Arnold Schwarzenegger. In fact, if all you focus on is the number on a scale or being the physical clone of some celebrity, you are doomed to frustration.

Instead of dreaming about the unachievable body, think about improving, not perfecting, the body you have. Here are some examples of goals you can set:

♦ You can set general goals such as slimming down, trimming your belly, toning your thighs, or building your upper torso in relation to your body *now*.

♦ It is even more effective to set a specific goal such as losing 25 pounds, going down two sizes, or fitting into an outfit you outgrew five years ago.

♦ You can set an exercise goal such as being able to do 25 pushups, bench press 50 pounds, sustain an hour on a stationary bike or treadmill, or make it through an aerobics class without having to stop.

♦ You can set a functional goal such as running or walking in a race, hiking up a high mountain, or refereeing your child's soccer game without practically collapsing as the final score is posted.

♦ You can set a health goal such as reducing your blood pressure or lowering your cholesterol level.

♦ You can set a scheduling goal such as working out at least three but preferably four times a week for a month or every other day until you've used up every session on a membership card at the gym.

♦ You can sign up for a class that runs for a certain number of weeks and see it through such as a beginner weight-training course, a low-impact aerobics course, a water fitness course, a beginning yoga class, or planned walking sessions with a coach.

You might do better breaking down your goals into short-, medium-, and long-term goals. Instead of vowing to lose 25 pounds in four months, for example, you might set incremental goals. A man might aim to lose 10 pounds in the first month, another 10 within two months, and five more in the third month. A woman might try for eight pounds in the first month and five to six pounds during each of the next three months. As your long-term goal, you might select a race distance such as 10 kilometers, which is 6.2 miles. To prepare for the race, set a short-term goal of walking or jogging 1 mile around a local school track without stopping. Your medium-term goal could be 3 or 4 miles on the track or on the road, and then you can begin aiming at 5 miles or more to train for that 10-kilometer run.

Fit Tip

Write down your goals and post them in a prominent place such as next to your bathroom mirror, on a door you use daily, or on your refrigerator. Set up your computer's calendar program at work so that your goal flashes onscreen when you start your computer every morning.

Couples or friends often are successful if they embark on a shape-up program together. This can work splendidly for motivation. After all, someone is depending on you for that daily walk or visit to the gym. The goals don't need to be the same. In fact, because men and women lose weight at different rates and build muscle differently, they can't be identical even for the most devoted couple.

Reward yourself for achieving a goal. If you are a woman, when you've succeeded in going down two sizes, buy a sleek new outfit or perhaps a daring swimsuit to show off your new body; or treat yourself to a massage, a facial, or a "day of beauty" at a local spa. If you are a man who has hankered for a particular tool, gadget, or sporting-goods item, buying it is a suitable reward for achieving a goal. If you and your spouse or significant other have both reached some kind of shape-up milestone, reward yourselves with a lovely, low-cal candlelight dinner or a getaway to a romantic inn. The one reward that would be counterproductive is a dinner in your favorite, filling restaurant.

Expect the Start-Up to Feel Strange

The first steps on the road to fitness can be bumpy, but if you know what to expect, you can install some emotional shock absorbers to smooth the way. You can assume that the first few sessions of whatever plan you make will seem really strange and difficult. You also can expect to feel self-conscious, even if you are working out in front of the television in the privacy of your own home. If you join a gym or an exercise class, you very likely will feel as if everybody but you knows what to do and how to do it. Everyone was once a beginner, however, and your fellow exercisers are probably so focused on themselves that they are paying no attention to you. If you register for a class, try to find one aimed at beginners. Not only will everyone be at a similar level, everyone will be equally confused.

Emotions aside, if you haven't been exercising, you might be downright uncomfortable physically. The early sessions can be something of a struggle. After all, getting your rusty body parts moving is an unfamiliar sensation, and you might worry that you are doing too much and straining yourself or doing too little and not benefiting. You will be surprised how quickly the discomfort—both emotional and physical—fades. That's because every time you work out, you are remaking yourself into an exerciser, and you soon will learn how to feel what's right for you.

Be prepared for a new you—not an instant new you but a new you refined over time. You'll notice small changes. At first, you might find yourself having greater endurance or noticing that you no longer get out of breath easily. Your clothes might be looser. It might be easier to get into and out of your automobile. These are better indications of increased fitness than the weight on the scale. With every shred of progress, remind yourself that you are doing the right thing for your health and body shape. Soon, you might also realize that, no matter how much you dread starting to exercise, the negative feeling quickly melts away once you start moving. Be aware that you'll feel physically better very quickly. Note, too, that the feelings of pleasure and satisfaction from a job well done (and a goal that is closer to accomplishment with every workout session) last after you've stopped working out.

The Least You Need to Know

- The first step is figuring out what your motivation is for shaping up.
- When you set your fitness goals, make sure they are realistic.
- If you are a smoker, do whatever it takes to quit—now.
- Be prepared to feel uncomfortable when you first begin working out.

Chapter 2
Laying the Groundwork

In This Chapter

- Taking charge of your body
- Analyzing where you are now
- Determining such a thing as ideal weight
- Consulting your physician first

Once you set yourself up with a slim-down, shape-up goal and decide to get going, it's tempting to join a health club, buy a wardrobe full of cool workout clothes, go on a fast-fix diet, and order exercise videos and gadgets. Some people—okay, women—even use their about-to-start workout program as an excuse to buy a whole wardrobe in the size they plan to be, claiming that the new duds are *incentive* to slim down. Too often, new exercisers tend to start with a burst and get sore or discouraged. The combination of impossible expectations and an out-of-tune body is a formula for fitness failure, and then the expenditure seems like an indictment that deepens the disappointment and discouragement.

Success is not serendipity. It is the result of a good grasp of your starting point, good planning, and a good attitude. Be positive in your approach to sticking with your program, but be realistic about what you can accomplish and in what time frame. Begin with an honest assessment of where you are starting from in order to figure out where you want to go and where you can go. Start modestly and sensibly, remembering to reward yourself as you progress.

Be Your Body's Best Friend

Think of what you do for your friends. You motivate them, encourage them to achieve their goals, support them when they've had setbacks, offer practical solutions for thorny problems, and praise them to the skies for progress and accomplishment. You can apply every one of these supportive actions to yourself as you go through various stages in your quest for fitness. Your friends can help you (perhaps you'll even go at it with a workout buddy), but in the end, no matter how much support you have, no one else can make you get into shape. Only you move your own muscles. Only you control what food you put into your mouth.

Being your own best
friend will help you
through the good times
and the challenging
parts of your new fitness
program.
(Photo: Anne W. Krause)

Look in the mirror. The person looking back at you is your best friend. There's all sorts of help out there for you, but you need to get out and walk. You need to get to the gym. You need to watch your diet. Even if you sign on with a personal trainer or join a support group like Weight Watchers as a motivational mechanism, you have to take charge and get there. *You* are the only constant in your life. If *you* take care of your body and treat it the very best way you can, it will repay you with interest. Encouragement and expertise are available from outside sources, but in the end, only you can set some reasonable goals, monitor your own progress, work through disappointments, and reward yourself for your gains. And wherever you go, you will be with your body's best friend.

Analyzing Where You Are Now

It's one thing to vow to "get in shape" or to "lose some weight" (as discussed in Chapter 1, "The Name of the Game Is Goals") but to be successful, you need to set specific goals and make a real plan. The foundation on which any plan should be built is an evaluation of where you are now, both fitnesswise and healthwise.

Quote, Unquote

"Never underestimate your power to change and improve yourself. You are a good person with wonderful qualities, and you have the ability to reach your goals."

—Denise Austin, television and video fitness host and author of several fitness books

Because you certainly don't want to harm yourself more than help yourself, pay a visit to your doctor before you start your program. He or she might even have some specific workout suggestions for you or point you to a suitable health club or trainer where your needs will be addressed appropriately. In addition to a medical assessment, there are two basic categories of evaluation:

- Where you are now (body weight, body-mass index, and so on)

- What you can do (strength, endurance, and flexibility)

Fitness Fact

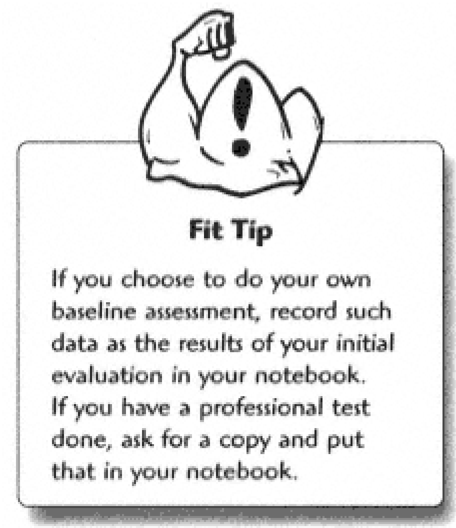
In a recent survey of 20,847 adults in a cardiovascular disease prevention program, nearly 75 percent of those who were advised by their physicians to exercise did so, compared to 55.6 percent of those who did not receive a doctor's counsel.

If you begin your fitness quest by joining a gym or a health club, your current health and physical condition will be evaluated. At the very least, you will be asked to fill out a questionnaire about your age, weight, medical history, tobacco use, eating and drinking habits, and the amount and type of exercise you do. Generally, when you join a gym, you will be offered a fitness test as a routine or optional service for new members. A fitness or spa vacation generally starts with a baseline assessment and gives you and any fitness professional you work with a starting point. Remember, to judge how far you've come once you're on a program, you need to know where you started.

Typically, the tester will put you through several steps. You may have to lift weights to evaluate your strength or use a treadmill or do a step-up, step-down test for a specific amount of time to assess your cardiovascular conditioning. You will be weighed on a medically accurate scale and perhaps be measured for body composition (that is, the percentage of fat mass in your body). Details on various assessments and how to interpret them follow in this chapter.

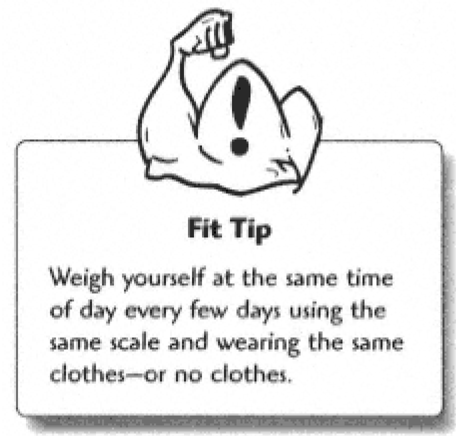
If you decide to embark on your own program, you still can have a professional fitness assessment. If that's not possible, you still should become knowledgeable about areas of concern and should definitely seek medical advice if necessary. No matter what you want to achieve, it is good to get a sense of your starting point. This is true whether you have some identifiable risk factors or are perfectly healthy. Professional fitness testers evaluate several major factors, and you can do some yourself, too.

Weight a Minute



Fitness experts concur that your body-mass index and other factors we've discussed (and will cover in more detail in this chapter) are better indications of fitness than just your body weight, but most of us can't resist stepping on the scale. If you use a scale, you might as well do it right. Take your clothes off, step on the scale, look at the number, and record it in your notebook. It's as simple as that. Your height will remain constant, and your height-to-body-weight ratio is a basic measure of your starting point and your progress. You know what you weigh now, and it's a small matter to reweigh yourself, preferably at the same time every time. Experts suggest weighing in no more than once a week, but many people compulsively do it daily or every few days anyway.

Weight itself should not become a fixation, but having said that, body weight is one significant factor in health. Insurance actuaries and government health officials have calculated healthy body weight/height ratios for adults with small, medium, and large frames. These tables do not take into account body-mass index or other variables, but they are another useful starting point to use as benchmarks if you are trying to lose weight.



The following data is extracted from the Metropolitan Life Insurance Company's height and weight tables (www.metlife.com) for adults aged 25 to 59 with the lowest mortality. Consider these to be normal weight ranges. To see where you fit in, compare your body weight to a recommended range for the same height and build. The weights are given in pounds and include three pounds of indoor clothing and shoes. If you weigh yourself unclothed, subtract about four pounds to match up with the tables that follow.

Male Body Weight Chart

Height	**Small Frame**	**Medium Frame**	**Large Frame**
5'2"	128-134	131-143	138-150
5'3"	130-136	133-143	140-153
5'4"	132-138	135-145	142-156
5'5"	134-140	137-148	144-160
5'6"	136-142	139-151	146-164
5'7"	138-145	142-154	149-164
5'8"	140-148	145-157	152-172
5'9"	142-151	151-163	155-176
5'10"	144-154	151-163	158-180
5'11"	146-157	154-166	161-184

6'0"	149-160	157-170	164-188
6'1"	152-164	160-174	168-192
6'2"	155-168	165-178	172-197
6'3"	158-172	167-182	176-202
6'4"	162-176	171-187	181-207

Female Body Weight Chart

Height	Small Frame	Medium Frame	Large Frame
4'10"	102-111	109-121	118-131
4'11"	103-113	111-123	120-134
5'0"	104-115	113-126	120-134
5'1"	106-118	115-129	125-140
5'2"	108-121	118-132	128-143
5'3"	111-124	121-135	131-147
5'4"	114-127	124-138	134-151
5'5"	117-130	127-141	137-155
5'6"	120-133	130-144	140-159
5'7"	123-136	133-147	143-163
5'8"	126-139	136-150	146-167
5'9"	129-142	139-153	149-170
5'10"	132-145	142-156	152-173
5'11"	135-148	145-159	155-176
6'0"	138-151	148-162	158-179

Body Composition

The body-mass index (BMI) is a number reflecting the percentage of body fat in proportion to lean body mass (bone, muscle, tissue, organs, and blood). Experts say it is a better indication of what shape you're in than simple by-the-scale weight. Tests for BMI can be done in several ways, but it is virtually impossible to do any of them, except the tape-measure test, yourself:

♦ **Pinch test (technically, anthropometric test).** The tester uses a tong-like skin-fold caliper to pinch the skin, fat, and underlying adipose tissue away from your muscles in about half a dozen places on your body. The numbers displayed on the caliper translate into your BMI.

♦ **Tank test.** You sit on an underwater scale in a large tank. You exhale until there is no more air in your lungs and then submerge completely for five seconds until your weight is recorded on the scale. Your underwater weight is plugged into a formula that calculates your BMI.

♦ **Bioelectrical impedance analysis.** Electrodes are attached to your foot and hand. A painless signal between the two electrodes can determine your BMI because the signal travels at different rates through fat and muscle. The margin of error is greatest in people who are very overweight or underweight.

♦ **Analyzer scale.** This calculates various personal data from a statistical input and a 10-second weigh-in. The unit was developed by a Japanese company called Tanita. Input includes your weight, height, gender, clothing weight, and mode (adult, adult athlete, or child). The printout provides your actual body weight, body-mass index, impedance, fat mass, lean body mass, and percentage of body weight from fat and water.

♦ **Tape-measure test.** This does not measure your BMI, but it's an easy way of checking how many inches you've lost. You can do it yourself at home. Use a tape measure on the places where fat is stored: waist, widest part of the hips, chest, upper arm, and thigh.

Another way to evaluate how close you are to a normal weight range is to look at your body-mass index, as expressed in percentage of body fat, and see where it falls. The lower the percentage of body fat, the lower the BMI number.

Body-Mass Index (in percentages)

	Males	**Females**
Slightly underweight	<20.7	<19.1
Normal weight	20.7-26.4	25.8-27.3
Slightly overweight	26.4-27.8	25.8-27.3
Overweight	27.8-31.1	27.3-32.2
Very overweight	31.1-45.4	32.3-44.8
Morbidly obese	>45.5	>44.8

Each body-composition test has a statistical margin for error, so select one test as a baseline. To track your progress over time, have the test done by the same person at the same place to provide the best indication of changes in your BMI.

Fitness Fact

Here's another good health reason to slim down, and it takes just a tape measure to assess your risk. University of Glasgow researchers found that women with waists larger than 34½ inches and men with waists larger than 40 inches are at serious risk of weight-related health problems.

Aerobic and Cardio Fitness

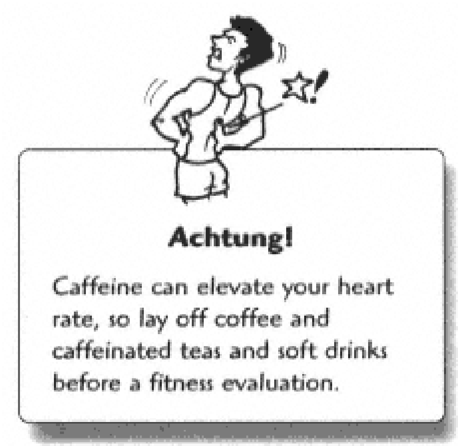
Your aerobic capacity and your cardio conditioning are related because the heart and lungs work together to draw oxygen into the body, to send it out through the blood-stream, and to reprocess it. The cardiovascular system refers to the organs involved in this whole process, and your endurance is a function of your cardiovascular health. The entire heart-lung system is referred to as the cardiopulmonary system. To test the efficiency of your heart and lungs, the trainer will measure your heart rate.

Heart rate is fitness-speak for pulse—in other words, the number of times your heart beats each minute. Your resting heart rate is your pulse before you even get out of bed in the morning. (Because trainers don't make early-morning house calls, they get an approximation by checking clients' heart rates when they are sitting down quietly.) The normal adult heart-rate range is 60 to 90 beats per minute. If you already are in reasonable shape, your pulse probably will be at the lower end of the range. If you are sedentary or over-weight, it probably will be at the upper end of the range. When you begin working out, your heart rate will rise; when you stop, it will return to its resting rate.

Fit Tip

To take your own pulse, rest your middle and index or ring finger on the artery of the other hand (at the base of the wrist) or on the artery in your neck (under the side of your jaw). Count the beats for a full minute.

To determine your aerobic fitness, a trainer or exercise physiologist will put you through a submaximal test, or submax for short. You might use a stationary bicycle or a treadmill for about 15 minutes while your heart rate and blood pressure are monitored. The intensity at which you work will be increased every few minutes until you are working at 75 to 85 percent of your maximum. A simpler test requires you to step on and off a 10- to 12-inch-high step and take your pulse after three to five minutes.



Strength and Power

These two are related. Strength is the muscles' ability to exert force, and power is the time it takes to do the work. Generally, fitness assessments include lifting weights to test both the maximum weight you can lift and your muscular endurance. In other words, the tester will find out how many pounds you can lift and how many times you can lift that weight. You might be asked to do a bench press—lying on your back while lifting and lowering a barbell.

Lower-body strength is similarly evaluated on the basis of how much weight you can lift and how many times you can lift it. A common test uses a leg-extension apparatus, which resembles a narrow, armless chair with a weighted bar at the bottom. You hook your ankles under the bar and straighten your legs to lift the weight attached to the bar. As with the bench-press test for the upper body, the combination of the maximum weight you can lift and the number of repetitions is the indicator of lower-body strength.

Pushups are another common upper-body strength test. The weight you lift is your own. The more pushups you are able to do, the fitter you are. Men usually do full-body pushups, supporting their weight on their toes and hands. Because women have significantly less upper-body strength than men, their standards are lower. They usually do half-pushups, supporting their weight on their hands and knees. Both full-body and half-pushups involve raising and lowering the entire torso. For both genders, the number of pushups a person can be expected to do declines markedly with age.

Males-Pushups*

Fitness Level **Age**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**
<29	<20	20-24	34-44	45-54	>55
30-39	<14	15-24	25-34	35-44	>45
40-49	<11	12-19	20-29	30-39	>40
50-59	<7	8-14	15-24	25-34	>35
>60	<4	5-9	10-19	20-29	>30

**Note that some authorities seal that these standards are somewhat high.*

Females-Pushups*

Fitness Level **Age**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**
<29	0-5	6-16	17-33	34-49	>50
30-39	0-3	4-11	12-24	25-39	>40
40-49	0-2	3-7	8-19	20-34	>35
50-59	0-1	2-5	6-14	15-29	>30
>60	0	1-2	3-4	5-19	>20

**Note that some authorities seal that these standards are somewhat high*

Evaluating mid-body strength also is a counting game. Sit-ups are the key test of the body's core section, and traditional evaluation systems such as the one the YMCA has used for decades require them. Very fit people, especially men, can do the full-body version. The motion starts at the hips, and the entire upper body is lifted from a lying to a sitting position in one fluid motion.

Achtung!

Anyone—especially males—with even an incipient abdominal hernia should probably have surgery before attempting sit-ups or even crunches. In some cases, it is possible to do modified abdominal work, in which the stomach is pulled in instead of pressed out.

Most women and out-of-shape men are asked to do crunches instead, in which the head, shoulders, shoulder blades, and lower back are lifted off the floor. In a crunch, you do not raise your torso to near vertical from the floor. Instead of sitting up all the way, raise your head, shoulders, and upper back but leave your lower back pressed to the floor. In other words, you reach the highest position with your lower back remaining on the floor and your shoulder blades off—that is, in more of a horizontal than vertical plane. Ratings again are related to age and gender.

Males-Crunches

Fitness Level					
Age	**Poor**	**Fair**	**Average**	**Good**	**Excellent**
<29	<20	21-35	36-45	46-70	>70
30-39	<15	16-20	21-40	41-60	>60
40-49	<10	11-15	16-35	36-49	>50
50-59	<5	6-10	11-15	26-39	>40
>60	0	<5	6-15	16-30	>30

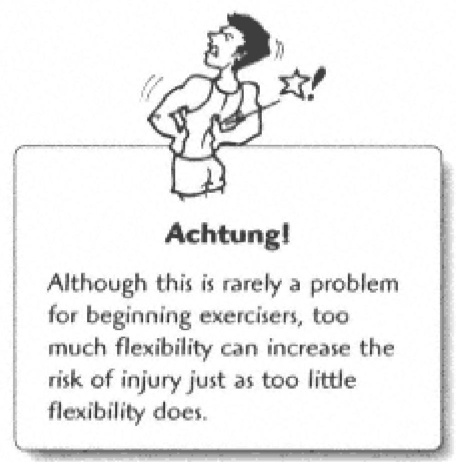
Females-Crunches

Fitness Level					
Age	**Poor**	**Fair**	**Average**	**Good**	**Excellent**
<29	<15	16-30	31-40	41-60	>60
30-39	<10	11-15	16-35	36-50	>50
40-49	<5	6-10	11-30	26-39	>40
50-59	<3	3-5	6-10	21-39	>30
>60	0	1-3	3-5	10-19	>20

Flexibility

This crucial fitness factor often is overlooked or ignored by exercisers who want maximum results in minimum time. As dancers and athletes—such as gymnasts, figure skaters, and high divers—prove, however, flexibility is an important element of being in shape. Runners regularly stretch before a training run or race, and even muscle-sports athletes such as football players and boxers add flexibility training to their regimes. Pilates, yoga, and stretch classes are among the most popular disciplines that focus specifically on helping with flexibility.

You can assess the flexibility of each part of your body by performing a simple motion and seeing how far you can go. If you get into the habit of warming up with light cardiovascular activity for at least five minutes before your new workout and stretching during the cool-down afterward, your flexibility will improve and you will reduce the risk of injury. To check the flexibility of your



♦ **Hamstring and lower back,** stand with your feet shoulder-width apart and your knees slightly flexed. Roll down from the waist, reaching your fingertips toward the floor. If you can easily reach the floor, you have good flexibility in these locations. If you can touch your toes, you are moderately flexible. If you're not even close, you need to work on this. If you have lower-back problems, it's best not to attempt this at all.

♦ **Shoulders and upper back,** raise one arm and reach back behind your shoulder and neck in a downward direction. Then place the other hand behind your back and raise it. With your forearms on a diagonal across your back, try to clasp your hands together behind you. If you can do so easily, you have flexible shoulders. If you can bring your fingertips close without touching, you are moderately flexible. If your hands can't come close, you might experience stiffness and discomfort in your neck and shoulders so you need to work on this.

♦ **Calves,** sit squarely on the floor and extend your legs straight out in front of you. Flex your feet. If your toes exceed the perpendicular angle and point slightly back toward you, you have very flexible calf muscles. If your toes are perpendicular to the floor, your calf muscles are moderately flexible. If you can't get your toes comfortably toward perpendicular, you might be susceptible to ankle problems so you need to work on this.

♦ **Quadriceps and hip flexors,** lie on your stomach with one leg straight and bend the other toward your rear. If your heel easily touches your buttock, you have good quad flexibility. If it comes close but doesn't touch, you are moderately flexible. If you can't even come close, you might be prone to knee problems so you need to work on this.

♦ **Hips and buttocks,** lie on your back and bring up one knee. Keeping your other leg straight on the floor, hug the knee close to your chest. If you can do this but your straight leg rolls toward the outside of the hip, you are moderately flexible. If you can't bring your knee close without your straight leg rising from the floor, you might have hip or back problems so you need to work on this.

A Simple Analysis for Cardio Fitness

Instead of administering a series of exercise tests to measure fitness, some trainers have taken to assessing their clients' fitness by creating simple categories and having their clients assign a number to each category. They refer to this as the PA-R. The higher the number, the fitter the person is. You can use the first part at home to come to a reasonable assessment of where you are on a scale of current activity. Here are the rankings:

0 Avoids walking or exertion

1	Walks for pleasure, occasionally engages in activity that results in elevated breathing, uses stairs instead of elevators
2	Participates in an organized recreational activity or work that requires moderate physical activity (household chores, yard work, weightlifting, golf, and others) for 10 to 60 minutes per week
3	Participates in an organized recreational activity or work that requires moderate physical activity for more than one hour per week
4	Regularly participates in a difficult physical activity (running, swimming, aerobics, tennis, cycling, and others) for less than 30 minutes per week
5	Regularly participates in a difficult physical activity such as running 1 to 5 miles or participating in a similarly difficult activity, for 30 to 60 minutes per week
6	Regularly participates in a difficult physical activity such as running 5 to 10 miles or participating in a similarly difficult activity, for one to three hours
7	

Regularly participates in a difficult physical activity such as running more than 10 miles or participating in a similarly difficult activity, for more than three hours per week

Trainers take another step by plugging this PA-R into a more complicated calculation that also includes body-mass index (BMI) and several other figures to come up with a client's oxygen utilization capacity.

Fitness Fact

Fitness assessment assistance is available on the Internet as well. The Aerobics and Fitness Association of America (AFAA), for example, developed Fitness Triage to help people identify various factors that might have an impact on the safety and effectiveness of specific exercise programs. Upon completion of a registration form and profile, Fitness Triage provides a red, green, and yellow advice screen with go-aheads and cautions based on your profile. To register, log on to www.afaa.com. For other Web sites with fitness assessments, see Chapter 4, "Using All the Help You Can Get."

Another Form of Assessment

How old is your body? You know how old you are. Your chronological age is right there on your driver's license. Depending on how out of shape you are, however, your body might be old beyond your years. When you seriously undertake a fitness program, you will find that your body's age actually gets younger as you progress.

Exercise experts know this in theory, but a company called FitnessAge puts it into easily understandable numbers. This system, introduced in 1999, takes your cardio, BMI, flexibility, and strength evaluations and plugs them into a computer (along with other factors such as your age, height, weight, and medical risk factors). The computer program compares your information to a YMCA national database of 60,000 other evaluations. It determines your body's age, compared to those 60,000 people, in each of the four areas and also as a total.

The program guides you to the area or areas you need to work at most if you want to become functionally younger. A retest every six to eight weeks will show you how well you are doing. Some health clubs offer FitnessAge assessments through their trainers. For information about where to find these, call 1-888-4-FIT-AGE. You also can get information and a do-it-yourself evaluation at www.fitnessage.com.

Medical Caveats

The first stop on your road to fitness needs to be your doctor's office. After all, you want your new program to make you healthier and fitter, not to put you at medical risk. Many gyms require that you see a doctor if they feel there might be a problem. Exercise can help combat these medical conditions, and your physician can prescribe a suitable program for you or send you to a suitable physiologist or trainer.

Every fitness authority, every exercise video, every TV workout show, and every book strongly suggests consulting your physician before starting any new workout program. This not only is the result of our litigious society, it also makes good sense. If you are under 35 and in good health, authorities feel it might not be necessary to get a doctor's okay before you start working out. It is imperative, however, to get a medical exam if you are over 35 and have been inactive, if you have a family history of conditions that might require precautions, or if you yourself have certain medical conditions.

According to the President's Council on Physical Fitness, you should consult with a doctor if you have *any* medical concerns, particularly heart disease, high blood pressure, elevated cholesterol levels, frequent dizzy spells, extreme breathlessness after mild exertion, arthritis or other bone problems, severe muscular or ligament problems, back problems, obesity, or a family history of such diseases.

Take a Before Picture—for After

The day you decide, once and for all, to set out on the path to fitness, put on a leotard or a nonconstricting bathing suit, stand in front of a nondistracting background, and ask someone you know and trust to take a series of photographs from every angle—front, rear, and side views. You also could strip naked, put the video camera on a tripod, and film yourself. Be merciless—no flattering light, no sucked-in gut—and just let it *all* hang out. Take a quick look, which might be all you can stand at the beginning of your fitness quest, date the visuals, and lock them away.

Fit Tip

Instead of photographs, you can take chest, waist, hip, thigh, and upper-arm measurements and record them. When you remeasure, the comparison will help you track your progress.

Later, when you are well on the road to your fitness goal, take another set of photos or a video. In fact, if you have a long way to go and are on a program that will take a lot of time, do so every three months as you progress. When you've reached your goal, look at these visuals and be very proud of what you've accomplished. This optional trick can be either motivational or discouraging. It works wonders for some people but depresses others. The reward can be comparing before, during, and after pictures after you've reached your goal.

The Least You Need to Know

- It's up to you to take charge of your life.
- Check with your physician for medical clearance and advice.
- Get a baseline assessment of your endurance, strength, cardio fitness, and flexibility.
- "Before" photos, videos, or measurements will help you compare your results.

Chapter 3
Drawing Up a Fitness Plan

In This Chapter

- Fitness comes in many forms
- Calories do count in a fitness plan
- Select a program you can live with
- Consistency and motivation are the keys to success

Would you start on a long trip without a destination or a road map? Probably not. The same is true for the road to getting fit. After you've set your goals and looked honestly at your starting point, it's time to draw up a specific plan for reaching them. If you are young, somewhat active, not significantly overweight, and in good health, your ambition might be to run a half-marathon, to participate in a bicycle tour, or to go on a long backpacking trip. You have set a lofty goal, but it is a realistic one, considering that you are taking off from a pretty good starting position. You can probably handle a significant workout to begin with and can build from that quickly. In contrast, if you are not in the first flower of youth, if you are sedentary, overweight, and perhaps have some medical concerns, you must start with a substantially lower level of intensity. On an absolute scale, your goals are more modest, but in relation to where you are now, they are just as ambitious—and your fitness program will be equally challenging.

No matter where you start and where you want to go, the most effective fitness and weight-management program combines aerobic exercise, resistance training, and stretching—and, of course, eating the right kinds of food. Aerobic exercise burns calories, provides cardiovascular and cardiorespiratory conditioning, and improves endurance. Resistance training, primarily working out with weights, builds and tones muscles. Stretching increases flexibility and helps prevent soreness and even injury. There are numerous ways to pursue each of these components. The beauty of a fitness plan is that you can tailor it to your tastes and time frame by mixing and matching the elements in your routine. If something doesn't work for you or you get tired of it, you can change the mix. As you get fitter, you will increase the challenge of your activities, but you will find it easier to add new ones.

"But I just want to lose weight."

Many people think that, if they just want to lose weight, dieting, crash dieting, fasting, or some other reduction of food intake will do the trick. In fact, dieting without exercising can be counterproductive, especially for women, who have less muscle and bone in proportion to their body weight than men have. If you stop eating or take in extremely few calories each day to lose weight, the opposite soon happens. Your body thinks it is starving, reverts to its natural defense against famine, and holds on to what it has as if it's a matter of life or death.

In contrast, exercise helps control weight. Scientists, nutritionists, and physiologists studying the relationship between diet and exercise have drawn conclusions that point to exercise as a weight-loss enhancer, not a detractor. When you exercise, you build muscle and become both fitter and leaner. More on this in Chapter 6, "Tune Up That Muscle Machine."

Fitness Fact

According to a University of Michigan study, when women diet without exercising, 25 to 30 percent of the weight they lose is water, lean tissue, muscle, and even bone. Corroborating the Michigan findings is a Tufts University study, in which 10 overweight women were put on customized food plans. Five did strength training just twice a week; the other five did not. The women who dieted but did not exercise lost an average of 13 pounds during the study period, but 2.8 percent of that was lean muscle mass. The exercisers lost an average of 14.6 pounds, while gaining 1.4 pounds of lean tissue.

Calories Do Count

If you're just out of shape but not overweight, working out to build your strength and endurance might be your formula for fitness. Most people are not only unfit, however; they also are overweight—and losing weight is the number one reason people resolve to get into shape. Landing the one-two punch—weight loss and conditioning—takes a change in eating habits as well as a workout program. Diet plans come and go, but one of the constants in weight management is the principle of burning more calories than you consume. Diet controls caloric intake, but exercise controls how many calories are burned in a process called *metabolism.* This complicated biochemical process sustains life. At its simplest, you can think of metabolism as the process used by your body's engine (your digestive, cardiorespiratory, and circulatory systems) to burn fuel (food or fat) to keep you going. Regardless of the food source (fat, carbohydrate, or protein), when it comes to metabolism, a calorie is a calorie. According to the *Journal of the American Medical Association*, 35 percent of American men and 40 percent of women who said that they are trying to lose weight are not tracking their caloric intake. Although they may be eating less fat, which is, on balance, good, they may be taking in so many calories that weight loss is not possible without a substantial increase in exercise.

The exact number of calories that you, or any other individual, will burn for any given exercise period depends on your body weight, your metabolic efficiency, the intensity of a specific aerobic activity, and even the air temperature during the workout. When you're reaching for that cookie or you decide to skip the walk, figure that a surplus intake of just 100 calories a day can add 10 pounds a year to your body weight. By contrast, a brisk 20- to 30-minute walk can burn 100 calories.

As a guideline when evaluating different activities, you can use the following chart, which compares the number of calories that various fitness activities burn during 45 minutes of exercise. Your caloric burn may, of course, vary. This chart has been adapted from Fitness Partner's Activity Calendar. To calculate your calorie-consumption rate based on your body weight and the time allotted for these and other activities, log on to www.primusweb.com/fitnesspartners/jumpsite/.

In the Gym

	110 lbs	**150 lbs**	**180 lbs**
Stationary bike (vigorous)	416	459	454
High-impact step aerobics	396	540	648
Cross-country ski simulator	376	513	616
Elliptical trainer	356	486	583
Rowing machine (vigorous)	337	459	551
Calisthenics (vigorous)	317	432	518
Circuit training	317	432	518
Stationary bike (moderate)	277	378	545
Low-impact step aerobics	277	378	545
High-impact aerobics	277	378	545
Rowing machine (moderate)	277	378	545
Weightlifting (vigorous)	238	324	389
Stairstepper	238	324	389
Low-impact aerobics	218	297	359

Rider (moderate)	198	270	324
Calisthenics (moderate)	178	243	292
Water aerobics	158	216	259
Stretching	158	216	259
Hatha yoga	158	216	259
Weightlifting (moderate)	119	162	194

Keeping a Workout Log

Remember the notebook that you started after reading Chapter 1? Make the core of it a workout log, which is like an exercise diary. You can track every exercise and sports activity you do, how long your walks or swims are, and anything else regarding physical activity. You can make it as simple or as detailed as you like, but you'll find it both informative and rewarding as you proceed with your program. Having to put pencil to paper often serves as a great motivator when you don't feel like working out. After all, you have that page to fill.

In addition to being motivational, a log helps you track your progress. Even if your scale doesn't show the weight loss you might like, the fact that you can lift heavier weights, do more repetitions, or put another riser under your aerobic step is encouraging.

To get the most out of your workout and your log, be sure to write down everything as soon as you've completed it. If you are working with weights, note each exercise, the number of sets and reps, and the weights. If you are walking, jogging, or cycling, record your distance and time. If you take a class or work out with a tape, put that down, too. You can even jot down your goals in the margins to remind you what you are shooting for.

Workout log.

Finding Activities You Enjoy

Fit Tip

In addition to raw numbers representing time, weight, and the like, you can add a column to the log to note whether a workout was easy or hard for you. This will also help you track your progress.

After you establish where you are (point A) and set your sights on where you want to be (point B), it's time to decide how to get from point A to point B. If you have been inactive and want to begin a workout program, a good way to start is by combining a light weight workout to build your strength, walking and/or using a stationary bike or treadmill in a gym to increase your endurance, and stretching before and after each session to become more limber. Yoga also might be your cup of herbal tea. It can make you stronger and more flexible and can even help your respiratory system through controlled breathing. If you already work out some but want to be more active, you have a greater array of options. Subsequent chapters will tell you more about these forms of conditioning.

Options for Enhancing Your Fitness

There are so many options to help you get in shape and stay that way that sorting through the choices becomes a challenge. To try to sort them out, ask yourself some basic questions to determine what kind of activity might be most suitable:

♦ Do you want a sport or exercise you can do by yourself, as part of a twosome, or with a group? Some solo activities also can be enjoyed with a group of companions, and some group activities also work for lone eagles and couples. These are just examples, not rigid rules:

Solo. Aerobics, running and jogging, in-line and ice skating, bicycling, swimming, kayaking, Alpine and cross-country skiing, snowshoeing, swimming

Twosome. Tennis, badminton, tandem cycling, racquetball, fencing, martial arts, rock climbing

Group. Volleyball, softball, snowshoeing, Ultimate Frisbee, touch football, soccer, ice and roller hockey

♦ Do you prefer indoor or outdoor activities?

Indoors. Dancing, squash, racquetball, aerobics, and other gym activities

Outdoors. Trail running, skiing, bicycling, softball, skiing, in-line skating

Indoors or Outdoors. Tennis, swimming, rock climbing, ice skating

♦ How much risk, or perceived risk, are you comfortable with in sports?

Low. Tennis, dancing, walking, jogging, aerobics

High. Rock climbing, kayaking, in-line skating, downhill skiing, snowboarding

♦ How important are convenience and proximity, especially if you live in a city or a suburb?

Convenient. Tennis, racquetball, handball, dancing, walking, jogging, in-line skating, swimming, bicycling, softball, climbing in a gym, aerobics

Inconvenient. Rock climbing, skiing, mountain biking, kayaking

Fit Tip

Before you sign up for a long-term program, sample what's available. Visit health clubs in your area. Check out the local Y, adult education, and local recreational centers. Take a sample class or buy a punch card. After you've settled into a groove and have made working out a habit, sign on for a longer membership period.

Pace Yourself or Push Yourself?

We all know the fable about the hare and the tortoise, in which the hare bounds from the starting line energetically, hops about erratically, gets distracted frequently, and all but loses interest in the finish line. The tortoise, meanwhile, plods methodically forward, never loses sight of the goal, and eventually wins the race.

Many people who vow to begin working out have all the good intentions in the world but are hares at heart. They purchase a long-term membership at a gym or buy expensive home equipment. They start working out frantically, trying to compensate for a long period of inactivity. Although they start strong, they tend to fade fast. In fact, observers of the fitness scene say that half of all beginners quit within two months. Sometimes they drop out because of injury, sometimes because of exhaustion, sometimes out of boredom, and sometimes because they haven't geared themselves up for the long haul. The goal is to be a tortoise, building your fitness steadily and consistently, step by step, and making it part of your routine.

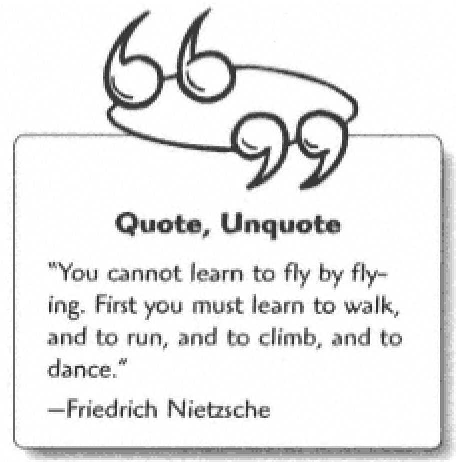
Fitness Fact

According to the Consumers Union, beginning exercisers are the most likely not to use two thirds exercise equipment they buy. Nearly two thirds of fitness-machine purchases are made by people who are not physically active but presumably intend to be, and they are more likely to stop using them.

When the U.S. Surgeon General's office began taking serious notice of the American public's need to exercise, the original modest recommendation for maintaining cardiovascular health was to undertake three high-intensity workouts per week. More recently, the recommendation has changed to daily exercise but on a more moderate level such as a brisk walk, a bike ride, or climbing stairs. Consistency, this medical authority has concluded, is the most important element of a fitness program.

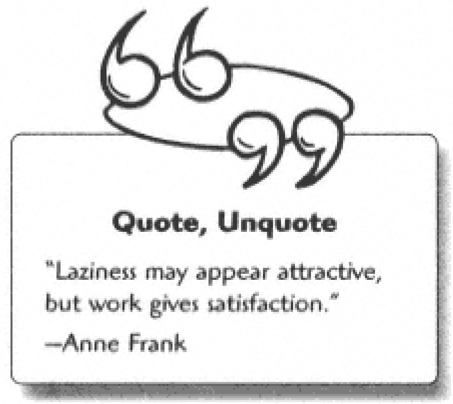
Beyond the Comfort Zone

After you get into workout mode, it's important to keep pushing yourself to reach your goals. If you get to a certain point in your program and don't increase the challenge and/or duration, it's like putting your car into cruise control. You'll make a journey, but you won't be revving up the engine.



Exercise experts have long agreed that revving up the engine is important in getting leaner and fitter, but there have been long-running debates about what type of exercise and what intensity are the most effective at burning fat. Settlement of this issue is on the way. The *Journal of Strength & Conditioning Research* reported on a preliminary study in which eight men and 12 women, aged 18 to 50, completed fitness tests on two different aerobic apparatus, a treadmill and a stationary bicycle.

The test subjects were monitored when they worked out at submaximal and maximal intensity. The researchers found that fat oxidation was virtually identical between the two pieces of equipment for each level of intensity. This is encouraging for exercisers on a weight-loss program who, say, prefer rowing to the stairstepper, prefer riding a stationary bike to running on a treadmill, and so on. If these preliminary findings are correct, it means you can achieve your goals on whatever kind of apparatus you would like to use.



A Wealth of Options

According to the American Council on Exercise (ACE), more people are finally wising up and exercising for health instead of for some kind of ideal or perfect body. At the dawn of the twenty-first century, ACE has identified the following dozen hot trends in getting fit and staying active. Surely, even the most languorous couch potato can find something on this list to love. (This book discusses all of these in subsequent chapters.)

♦ **Personal trainers.** They're not just for the rich and famous anymore. Services are now increasingly available for moderate-income clients, perhaps spreading consultations over a period of several months to help people establish and maintain a safe, effective course of exercise. In addition to working in clubs, trainers make house calls and office visits for client convenience.

♦ **Box-aerobics and kickboxing classes.** Built on a martial arts foundation, these classes emphasize strength and endurance, and they frequently include self-defense training, too.

♦ **Children's fitness.** Gyms and fitness centers are adding programs to get kids moving.

♦ **Body pump.** Group strength-training classes set to music help fight the tedium that some people find in solo weight work.

♦ **Boot camp.** Intense workout sessions are patterned after military fitness training including the awesome Navy Seals. Another type of program is modeled after firefighters' training.

♦ **Studio cycling classes.** Also known as Spinning, the best known program of this kind, this superheated fitness trend of the late 1990s continues into the next millennium with new bike designs and specialty classes for beginners, seniors, and other target groups.

♦ **Outdoor activities.** Hiking, mountain biking, rock climbing, and other adventure sports are high on many people's lists of active sports interests.

♦ **Indoor treadmill classes.** Another ennui-fighter, such classes are modeled after studio cycling classes. They are called trekking or treading. Group rowing classes also are appearing on the fitness horizon.

♦ **Sport-specific workouts.** Get-in-shape-for-skiing classes are a staple on the class calendar of health clubs, Ys, and community recreational centers—ski clubs sometimes offer them for members, too. Now, similarly specialized training programs are designed to increase performance in such sports as rock climbing, tennis, and even golf.

♦ **Programs for older adults.** Senior centers and even nursing homes are offering exercise and strength-training programs designed especially for older people.

♦ **Elliptical trainers.** The longest lines at many top fitness centers are for this new generation of aerobic machine. It combines the benefits of a stairstepper and a treadmill but is easier on the joints.

♦ **Interactive cardio machines and Web-connected interactive fitness machines.** High tech enters the gym with smart workout machines.

♦ **Specialty classes.** No longer is Jazzercise the only class around set to specialty music. Now, aerobic workouts are choreographed to hip-hop, African rhythms, gospel music, and big-band beats.

♦ **Office workouts.** As more employers come to realize the value of fit, healthy employees to their bottom line, state-of-the-art exercise facilities and even classes are popping up in the workplace.

Reality Check

Changing your inactive lifestyle into an active one is not easy, but it is possible. Because so many New Year's resolution-makers and beginning exercisers quit before they see any results, take a look at the pattern of your life and try to start when you'll have the best chance for long-term success in making fitness part of your life. Just as it is important to know your body, it is important to analyze your patterns and see how you can make them work for you.

Does your job have seasonal peaks and valleys? Would a new workout program help you cope with the stress of peaks? Or are you better off starting during a valley when you are less pressured and might also have more time? Are you a procrastinator who needs to schedule an activity specifically? Or can you generally plug it into your day? Would it make sense to start a workout program when your kids start the school year, go off to summer camp, or spend time with the other parent if you are divorced? There are many factors to consider.

Examine your own rhythms. If you are a morning person, schedule your workouts early in the day so you'll have the best chance to succeed. Some people get up early for a walk, run, or swim to jump-start the day. Do you like to load activities at the end of the workday? If so, evening is the time when you can make fitness a habit that will stick. Can you break away at lunch to get some outdoor exercise or to spend time at the gym? It's a more productive way to spend your midday break than chowing down.

When you decide to do something, what's your willpower level? Do you put things off? Or do you easily stick to a plan after you've made it? If you tend to procrastinate, figuring that you'll go for a walk "later," select activities that are scheduled for specific times. These activities might include aerobics and other classes, a regular appointment with a personal trainer, tuning in to a TV exercise program that comes on at a certain time, or making a workout date with a friend. If having a workout log that you *must* fill in every day suffices, you can go for a walk or run at your leisure, plug an exercise tape into the VCR, or go to the gym and lift weights at your convenience.

What about seasons? If you live in the North and love being outdoors when the weather is mild, spring or fall is the ideal time to start walking, jogging, bicycling, or playing tennis. If you live in the sunbelt, outdoor activity might be tolerable only in the winter. Although the weather may be mild, the rainy winters that characterize the climate of the Pacific Northwest inhibit many people from outdoor activities. In any case, joining a gym during the season of maximum outdoor discomfort might work for you. You can take advantage of northern winters and take up snowshoeing or skiing or enjoy sunbelt summers by swimming laps or joining an aqua fitness class at an outdoor pool.

Fitness Fact

Many people make New Year's resolutions to get in shape, and more people join gyms in January than any other month of the year. No matter how long a membership they sign up for, by February, many of them already have dropped out.

The Least You Need to Know

- Dieters who also exercise lose more weight than sedentary dieters.
- A workout log is the best way to track progress and to provide further motivation.
- Moderate daily exercise, done consistently, is the best route to overall good health.
- Exercisers are less vulnerable to a variety of chronic health problems.

Chapter 4
Using All the Help You Can Get

In This Chapter

- Join a gym for classes, equipment, and professional advice
- Exercise videos and TV fitness shows can guide at-home workouts
- Can you afford a personal trainer?
- Exercise with your mate or a workout buddy

"Walk Your Way to Fitness." "Cardio Quickie." "Get Your Body Ready for the Beach." "Trim Your Thighs." "Work Your Abs." "Ten Minutes to a Better Butt." "Punch Away Pounds." "Look Great Naked—Build a Ready-to-Bare Body." "Yoga Shapes You Up and Calms You Down." "Target Those Trouble Zones." "Look Leaner Now." These are the types of messages screaming from magazine covers month after month. Written to lure us to buy new issues, these short, punchy phrases extol this workout or that and make them all seem like quick solutions to your body's shape, weight, or stress problems.

As you embark on your fitness regime, you—like many beginning exercisers before you—might think that someone has developed a magic formula to give you the body you want, the energy you need, or the tranquillity you crave. Magazines, books, and television infomercials abound with promises of magic slimming, toning, weight loss, and more. For every magic exercise, there's also a magic diet plan. By combining magic exercise with magic eating, you think you can create a magic new you quickly, almost automatically. The media, books, and the Internet do provide a lot of good information, and if you use it wisely, you will see good results.

Fitness is so wrapped up in issues of body, mind, and motivation, however, that tapping into personal help might be the most effective way to reach your fitness goals. This includes professional expertise as well as the support of family and friends, supplemented by workout, diet, and general health advice from media sources. Take a sample class at a local health club for a workout that is energetic, motivational, and fun. For effectiveness, however, you have to be conscientious about following a program.

In short, there's a lot of good fitness information. The problem for many beginners—and often experienced exercisers, too—is sorting it all out. Precious few people have unlimited time and resources to do nothing but get in shape. The media, the people who work at the gym, and your personal interaction with a wider support system can help you sort out all this information and hone in on a program that works for you. All these resources can act as a support system, but remember that you are the captain of your workout ship. Think of the other resources as your crew, but only you can actually move your body to make it fit and healthy.

Finding a Workout That Works for You

Even after you've resolved to get in shape, set a realistic goal, figured out your baseline, and started your logbook, you still face a bewildering array of possible activities. Some new exercisers and returnees to the workout world easily find a program they can stick with until they've achieved a goal. Others might try several combinations of aerobic and strength training before they hit on a combination they can live with. Still another type—let's call them "fashion-forward exercisers"—wants only the latest workout trend: Jane Fonda in the '70s, step aerobics in the '80s, studio cycling and Tae-Bo in the '90s. When you are trying to select your workout, shop around, try some options, and then get going. Thinking about exercising doesn't shape you up. You need to start something and stick to it.

Fitness Fact

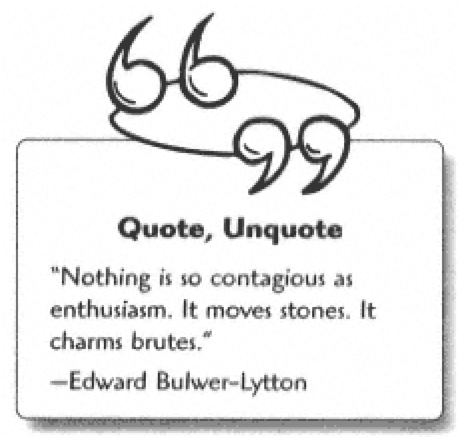
Respondents to a 1999 poll conducted by Fit-Net, an online health and fitness resource, were asked what kind of cardio workouts they do. The most popular cardio workout was treadmill/running (57 percent). This was followed by biking or spinning (37 percent), "sports" (36 percent), stairsteppers (22 percent), cross-training and aerobics (tied at 19 percent each), and step classes (9 percent). "Other" was selected by 18 percent of the respondents.

Joining a Gym

Health clubs and gyms provide not only equipment but also on-staff experts to get you working out and to keep you coming back. In an increasing number of communities, Ys and public recreation centers offer similar facilities and programs. A typical gym offers locker rooms, at least one aerobics room, an array of aerobic apparatus, and a weight room with multifunction weight machines and free weights. Many also have studios for dance, martial arts, or yoga, a swimming pool, and perhaps hot tubs, saunas, or steam rooms. For details about what to expect at a gym, see Chapter 21, "A Primer on Gyms."

This is a good time to remind you that gyms are not just buildings made of brick and mortar and filled with fitness toys. They are places where exercising *feels* right. In addition to equipment and atmosphere, they offer expertise. Someone usually is on duty to teach you how to use free weights, weight machines, and aerobic apparatus such as fitness riders, treadmills, stairsteppers, and so on. These people can show you how to use a specific apparatus and can help you use each device properly. Such basic assistance and advice is part of the fee you pay to use the facility. If you need more guidance, you can book time with the gym's staff of personal trainers, either for an ongoing program or just to help get you started.

Gyms also offer an array of group classes from aerobics to yoga and often at various levels from "fit over 50" to "high-energy steppers" or some comparable range. Some classes are offered for a specific number of weeks and you need to sign up; others are drop-in classes you can take at your convenience. Instructors lead classes with cheerleader-like enthusiasm to motivate you to get moving and to keep you coming back. Don't let classes intimidate you. No one was born knowing all the moves, all the steps, and all the combinations. Everyone was once a beginner.



When you get into a class with the music going, the instructor shouts encouragement as well as directions, and like the other exercisers, you will get into the spirit. When you first join a class, you might not have the stamina to go the distance even in a fairly easy class. The contagious group energy is sure to pump you up, however, and you'll be able to do more than you might have expected. Studies have shown that people feel better and get more out of fitness classes led by an instructor who tries to learn and use participants' names, who provides frequent individual attention, and who gives positive feedback to the class and to individuals.

Videos Can Work

Videos are great for at-home exercisers, especially beginners who might feel selfconscious in a gym. You can pop a tape into the VCR at the most convenient time for you, and it needn't be the same time every day. You can exercise first thing in the morning, before or after work, late in the evening when it's dark outside, on stormy days, while the baby is napping, while older children are at school, or any other time you want.

Hundreds of videos are available, and many of them are moderately priced. Working out with videos presents many options and offers both variety and flexibility. Working out with videos has several other advantages as well. You can do one or more routines a day. You can turn the volume as high or low as you want. You don't have to get dressed to go out, you don't have to figure into your workout schedule the time it takes to drive to and from the gym, and your shower is right there. You can slip a video into your VCR and make it your main exercise routine, or you can use it to supplement walking, running, classes, or a gym membership.

Select your videos as you would classes at a gym. Ask yourself some basic questions. Your answers can help steer you to the appropriate videos.

♦ **What are your goals?** There are videos for general conditioning, aerobic videos for fat-burning, strength-training videos, yoga videos that enhance flexibility and relaxation, tai-chi videos that are ideal for older exercisers, and more.

♦ **Do you like simplicity or glamour?** Videos using simple studio sets and a trainer who is not a star might appeal to some people, while others might prefer to work out with a big-name trainer whose program is captured in a glamorous location.

♦ **Are you a beginner or do you have some experience?** Videos aim at all exercise levels. If you are just starting an aerobics or step program, for instance, you'll want a simple program that you can do easily. If you are intrigued by kickboxing, be sure to start with a basic program to get the moves right and prevent injury.

♦ **What are your musical tastes?** Hip-hop, rock, jazz, New Age? Find a video you can gladly listen to as well as watch.

♦ **How much space do you have for your workout?** If you have a lot of room, you can accommodate an aerobics or dance workout that covers a lot of floor space. If space is a problem, select a workout suitable for a small area.

You can test-drive videos before you buy something you may or may not use. Many video stores stock exercise tapes. Rent the ones that interest you before investing. Also, keep an eye out for used tapes that the video store might be selling.

Achtung!

Videos only work when you use them as regularly as you would a scheduled class. An unplayed or rarely played tape does nothing to enhance your fitness.

Some people play one video day after day. Others have a virtual library of videos for different purposes. Videos run the gamut from general workout tapes to those that help strengthen and tone specific body parts, from easy intro programs to fairly demanding aerobic routines. Certified trainers and all sorts of celebrities have made videos. The most important thing is to *use* the videos you've bought and to follow the instructions as if you were taking an exercise class with a live instructor.

Fitness Fact

Kathy Smith has made more fitness videos than anyone. Her first aerobics video came out in 1980; her twenty-sixth, a kickboxing tape, came out in 1999.

Fit Tip

To combat boredom from an oft-repeated workout, you and your friends can trade or exchange exercise videos.

The Complete Guide to Exercise Videos is a free, comprehensive mail-order catalogue of current exercise videos, as well as motivational tapes for walking, and exercise accessories. It categorizes each offering by length, level, and emphasis, and also summarizes the philosophy and spirit behind each. To order the catalogue, call Collage Video Specialties at 1-800-433-6769 or log on to their Web site, www.collagevideo.com.

Tune Your TV for Fitness

If you like the idea of working out at home, but never seem to put the tape into the VCR, a television exercise show might be just the ticket. It comes on at the same time every day, so you get the same built-in scheduling that a fitness class offers but with the convenience of scheduling it at home. If you like a particular instructor, you can make your own tape and play it whenever you like. A number of half-hour shows can fit on one tape, and you can even pause during the taping to delete commercials. As with other videos, you then can play it at your convenience. If one segment deals with a problem area you particularly want to tone, such as abdominals or glutes, you can work with that show more often than the others.

These television programs are like half-hour, on-air exercise classes. Most programs that focus on aerobics or weight training begin with warm-ups and end with cooldowns, just as a good instructor does in a live class. The shows never repeat the same exercises or sequences two days in a row, so your interest will stay high. Each program tends to remain at the same level, however, and often is geared toward novice exercisers. Some shows include demonstrations at various levels of challenge, but others don't increase the difficulty level. This can stall you as your own level of fitness improves, and you might not continue to challenge yourself if you do nothing but work out with the same TV show. Still, exercise shows are convenient and can be really good for maintaining a fitness routine when you just can't get out to a gym.

In addition to aerobics, weight training, and toning shows, you might find alternatives such as yoga and tai chi on one of your offered channels. Fitness programs are concentrated on weekday mornings, especially on ESPN2 and stations affiliated with the Public Broadcasting System (PBS). You can find a current list of shows on www.thriveonline.com. Some cable and satellite systems also receive a channel that provides nothing but workouts and fitness information. Remember, however, that infomercials for fitness products are not the same thing as instructional shows. Their purpose is not to help people get fit but to sell products.

Teaming Up with a Workout Buddy

Achtung!

When you follow an onscreen instructor, you have no one to watch you and correct your form as necessary. Listen for the instructor's tips on correct form, and work out in front of a mirror to check yourself.

If you have trouble getting to the gym or going out for that walk or run, make a standing date with a friend. It'll be harder to procrastinate or to skip a workout if you know someone is depending on you. If you and a neighbor become workout buddies, you can meet for a walk or a jog every day. You can visit each others' homes to work out with that video or with the television fitness shows. This will provide both of you with companionship as well as a safety element for those short winter days when it might be dark when you get in your exercise. You also can carpool to the gym. This not only helps you both stay on track, it makes environmental and economic sense, too.

Workout partners can keep each other
motivated and have fun together.
(Photo: Claire Walter)

If you and your buddy have similar goals, you also will serve as a mutual support system. You'll be able to notice if your buddy is getting leaner or faster or stronger—and he or she will notice the same about you. You might even have such a revelation about your shared workouts. Complimenting your buddy and hearing compliments about notable progress boosts you both.

Quote, Unquote

"Exercise with a friend. Instead of having a cocktail party and dinner, plan a tennis mixer and picnic with your eight closest friends."

—Denise Austin, television and video fitness host and author of several fitness books

Your spouse or partner can be the ideal workout buddy. It is better for both of you when you share the goal of fitness and good health than when one person is in the mindset and mode of getting fit and the other is "televeging" on the couch munching snacks.

Personal Trainer: Yes or No?

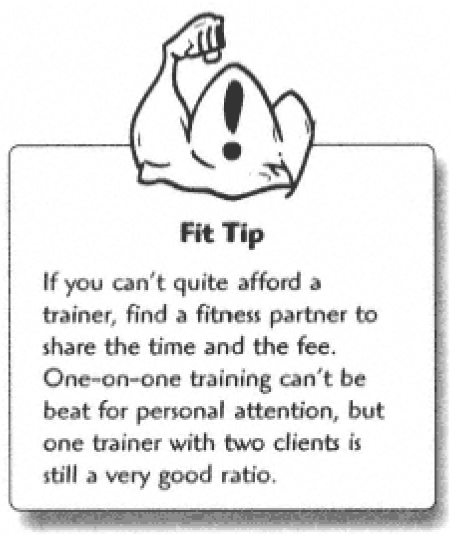
Hiring a personal trainer might seem like the ultimate extravagance, like something only Oprah or Madonna can afford, not you as a beginning exerciser. Beginners and perennial fitness dropouts, however, might need a trainer's help more than experienced exercisers who already are in tune with their bodies and have made a commitment to staying in shape. In addition to offering encouragement, a trainer can make sure you don't overdo the beginning stages in your zeal to get fit and show you proper techniques so you'll remain injury-free.

Such one-on-one training isn't necessary every time you work out. Sure, some people do turn it into a long-term relationship, but more likely, you'll derive sufficient benefits from an occasional session. You can schedule two or three sessions to assess your fitness, to design a program, and to get you started. Then sign up for another session after you've been working out for a few weeks to monitor your progress. You can meet with your trainer again two or three times when you've hit a plateau. If you hit a mental wall because you're bored, the trainer can remotivate you and can suggest another program that will pique your interest again. If you've reached a maintenance level with your routine, your trainer can ratchet it up to an appropriate higher level. Your trainer also can determine whether just one or a combination of these elements built the plateau.

Fit Tip

If you and a friend or mate are thinking about joining a health club, be on the lookout for two-for-one membership offers and other incentives for two people to sign up rather than one.

A personal trainer provides one-on-one guidance for your fitness program. In addition to expertise in designing a program and tweaking it as you progress, a trainer can fulfill other roles that are important to keeping you on track. It's like having a coach, a guru, and a confessor all in one. One Boulder, Colorado, training studio elegantly refers to its services as "personally guided exercise." Your trainer will do initial and follow-up fitness assessments, help you focus your goals, motivate you when you are flagging, cheer your resolve and hard work, and redesign your program when the time comes.



For many people, the bottom line that makes it worthwhile to pay between $25 and $100 for an hour of a personal trainer's time is that a good trainer will figure out what it takes to push you to work harder and more efficiently than you could on your own. He or she also will make sure you have a balanced program to help all aspects of fitness—not just the ones you enjoy most. With knowledge of both the psychology and physiology of exercise, a good trainer will set reasonable limits for you that also are effective in helping you reach your goals—then, he or she will set higher ones.

Keep on stepping with motivational
words from an instructor.
(Photo: Claire Walter)

At one time, becoming a personal trainer was an on-the-job, learning-by-doing career, but now trainers themselves are trained. Education at schools such as the American College of Sports Medicine can be tilted toward personal training, and organizations such as the National Federation of Trainers have set certification standards. In addition to credentials such as education, certification, and experience, important traits in a trainer include enthusiasm, congeniality, and communication skills. It's crucial to the success of your relationship that he or she can get through to *you.*

Quote, Unquote

"You can't give yourself the workout a trainer will give you. When you think you can't do one more [rep], your trainer will say, 'Okay, do three more.' The motivation and the results double—you work harder because the trainer pushes you."

—Cameron Macdonald, Aspen Athletic Club, Colorado

Some people sign up for a preliminary training session at a health club or respond to an ad in a local paper. If there's good rapport, they have found *their* trainer. IDEA, a trade association for fitness professionals, suggests an interview rather than the trial-and-error approach. Here are IDEA's suggestions for questions to ask a prospective trainer to see whether his or her philosophy and approach match your needs:

- What is your exercise and educational background?
- Are you certified by a nationally recognized organization?
- What is your current level of training experience?
- How do you keep current on the latest training techniques, research, and trends?

♦ Will you keep track of my workouts, chart my progress, and make sure my medical history is updated periodically?

♦ Do you carry liability insurance?

♦ Do you provide clear-cut, written policies regarding cancellations, billing, and so on?

♦ What is your rate per session?

♦ Do you offer any discounts or package pricing?

♦ What hours are you available to train?

♦ Will you help me set reasonable goals, not unattainable results?

♦ Do you have a network of physicians, dietitians, physical therapists, and other fitness and health professionals?

Many people who work with a trainer, on whatever schedule and budget they can afford, find it the wisest fitness investment they can make.

Working Out with the Web

The Internet is shaping up and so can you. As with many fields, the astonishing amount of available fitness and health information means that sorting through it can be a Herculean task. Organizations that promote fitness, manufacturers of fitness products, online magazines by recognized fitness authorities, magazines that focus on fitness topics, mail-order sources for fitness products, and medical organizations that do physiological research all have Web sites. In addition, you will find fitness forums and chat rooms where you can do everything from swap training tips to get (or give) recommendations for gyms in your community.

Several Web sites feature quizzes you can take to get an instant fitness program that would be generally suitable for individuals with particular characteristics. Questions include your age, height, weight, specific or general types of activities you enjoy, and/or the time you have available to work out. Enter your answers and a suggested program pops up on your screen, often at no cost. On other sites, you can sign on with a cybertrainer, who tailors a more customized exercise and diet program to your needs. You can e-mail your progress and any questions you might have. Your trainer will send suitable motivational messages via e-mail and will even provide personal responses to your specific questions. Such services run $15 to $20 a month.

TV exercise personality Covert Bailey offers personalized exercise and diet counseling on the Net (or over the phone). The Fitness Quickie is one session designed to jump-start a program and to provide guidelines to follow. Telecoaching is a six-session program in which clients speak to a personal coach once a week to help them stay on track, receive encouragement, and get answers to their questions. You can reach Covert Bailey Fitness at 1-800-657-7571, via e-mail at info@covertbailey.com, or on the Web at www.covertbailey.com.

Fit Tip

Here are some Web sites that currently provide free online fitness quizzes or assessments of some sort: www.afaa.com, www.coryeverson.com/, www.fitnessage.com, www.fitnet.com, www.healthyideas.com, primusweb.com/fitnesspartner/, www.chsnet.com/YourHealth/BodySmart/, www.thriveonline.com/fitness/, www.trulyhuge.com

Interactive CD-ROM fitness information is in its infancy. FitnessAge began with a CD-ROM that was marketed as a fitness-assessment tool but more recently moved over the Web. In 1999, Reebok introduced *Powered by You*, which it bragged is "a bold new fitness initiative: the first interactive CD-ROM featuring detailed, personalized fitness and nutritional information." The CD-ROM was packaged with its top-of-the-line women's training shoe. Undoubtedly, more companies will follow in Reebok's steps.

The Printed Word on Fitness

Bookstores' shelves overflow with books on the topics of losing weight and shaping up. Many are step-by-step workout and eating plans accompanied by instructional illustrations, recipes, and more. Books cover topics from aerobics to yoga, outline specific workouts from organizations as diverse as the New York City Ballet Company and Navy Seals, and offer different philosophies from drill-sergeant regimentation to mind-body-spiritual connections in fitness. If your local bookstore doesn't have enough of a variety, check www.amazon.com or www.barnesandnoble.com.

Although magazine coverlines on fitness are designed to sell magazines, once you open the magazine, you'll find a wealth of information. Many articles feature one specific topic but cover it in depth and offer fine advice. *Fitness, Men's Health, Men's Fitness, Heart and Soul, Muscle and Fitness, Shape, Vim and Vigor*, *Walking*, *Weight Watchers Magazine, Women's Sports and Fitness,* and *Yoga Journal* are just a few of the publications that focus on fitness. Men's and women's general-interest magazines often include a fitness article or two, and sports publications include get-in-shape pieces geared toward that specific sport. You can sample various publications at half off the newsstand price with the Magazine-of-the-Month Club. Through its Female Health and Fitness service, you can try a dozen publications, including *Fitness, Health, Total Health, and Walking.* You can subscribe by calling 1-888-775-6247 or logging on to www.magazineofthemonth.com. You can also find many of these magazines at your local library.

Your local newspaper also probably has a weekly section with fitness, health, and nutrition articles. In 1996, the *Akron Beacon-Journal* of Ohio developed a 26-week exercise and food plan called the Akron Diet, which was widely syndicated to newspapers subscribing to the Knight-Ridder News Service. Thousands of people around the country followed its step-by-step approach to sensible eating and physical activity to shape up.

Free Fairs

Free or low-cost *health fairs* are an annual fixture in many communities. These events often take place on weekends, frequently at local or regional shopping malls. They offer a smorgasbord of health and fitness information and services. For instance, you often can get simple health evaluations, advice about maintaining a healthy lifestyle, recipes and nutrition tips, natural-food samples, and information about fitness equipment and programs. You might have an opportunity to test exercise machines designed for home use or even to take a sample class with an instructor from a local gym. Some local businesses pass out coupons at health fairs or offer good values to attendees who make a purchase at the event. Such health fairs might be of general interest or targeted to the particular needs of women, seniors, or families.

Some retail businesses also get into wellness counseling as a customer service. Wild Oats, a Colorado-based chain of natural-foods supermarkets, for example, has installed "wellness centers" adjacent to some of its stores. They are staffed by acupuncturists, chiropractors, massage therapists, lifestyle counselors, and nutritionists, all of whom offer reasonably priced services. The centers also have lending libraries where customers can check out books, videos, and audio tapes about health and wellness. "We encourage healthy choices that reflect the needs of the whole individual: body, heart, mind, and spirit." This is the Wild Oats' stated motive for creating such centers.

Fit Tip

An experienced salesperson can give you tips about using an exercise machine and a more realistic estimate of what to expect than other information sources. An advertisement or commercial might lead you to believe that anyone can burn, say, 500 or 1,000 calories using a particular piece of equipment. In reality, a well-conditioned athlete using the apparatus at top resistance levels or speed might get that much benefit, but you probably won't.

Store-Bought Help

When you begin to work out and participate in sports activities, you'll probably head straight for the nearest discount store for exercise and sports footwear and clothing. You can get some reasonable values there, especially if you have done your homework and know exactly what you want to purchase. Buying at a big general-merchandise store can sometimes be false economy, however, because you can't be sure of the level of merchandise quality or the expertise of the sales staff if you have questions.

If you are having performance problems, you might be wearing the wrong athletic shoes or using the wrong equipment, and specialists who are knowledgeable about fitness products are more likely to diagnose this. Suppose, for instance, you get into running and find that your running shoes wear out quickly, which in turn can affect your comfort. A running or athletic-footwear store might recommend shoes with a long-wearing polyethylene base, which is said to be more wear-resistant than other materials. If you are experiencing discomfort, orthotics might be in order. A discount store would be less likely to make such recommendations.

If you are investing in a big-ticket item such as a new bicycle or a home-exercise machine, it is even more important to go to a specialty store. A bike should fit you right, stand up to the use you intend to make of it, and be the right kind—mountain bike, road bike, or city bike—for your purposes. If you plan to buy home-exercise equipment, again quality pays off. In such cases, it often is worth the extra money to buy from a specialty store with a reputation that relies on selling quality items and providing a knowledgeable sales staff.

The Least You Need to Know

- There is no such thing as getting fit instantly.
- A lot of good fitness information is available in print, broadcast, and videotape form, as well as on the Web.
- A personal trainer can give you one-on-one attention and push you to achieve your goals faster.
- Gyms, health clubs, and specialty retailers offer equipment and expertise.

Chapter 5
Rules of the Fitness Road

In This Chapter

- Learn to listen to your body
- Drink before you are thirsty to prevent dehydration
- Warm up at the beginning of every workout and cool down afterward
- Flexibility is crucial to fitness, health, and injury prevention
- Efficient breathing can influence the success of your workout program

Being active brings about a different mindset than being the proverbial couch potato. You begin to look at what you consume in terms of food and beverages and how it will affect your workout. You know what goals you are aiming for, and you work toward them, taking care not to do more harm than good when you exercise. You gain a core of general knowledge about the human body, in particular about the musculoskeletal system and how it stores fuel and burns energy, and you get to know your own body in particular. You tap into resources such as those outlined in Chapter 4, "Using All the Help You Can Get," you gain experience as an active person, and you build your own wisdom around it. This chapter is a handbook to some of the things you eventually would learn from other sources.

Myriad combinations of aerobic and strength training can make up the basis of a sound fitness program, but physiology and good sense dictate certain fundamental rules for all exercisers. It is important to fuel the body to be physically active.

Avoiding dehydration is crucial, no matter what mix of fitness activities you enjoy. Experts also agree that warming up, cooling down, and stretching are as important as the aerobic and strength-training components.

What Every Body Knows

"Learn to listen to your body." This piece of sage advice is spoken like a mantra by fitness experts, trainers, and athletes from coast to coast. In the beginning of your new way of life, you will sometimes feel sore and sometimes feel fine, with nary a twinge. Sometimes you will be tired after you've exercised and sometimes re-energized. Sometimes you will almost feel yourself getting stronger or leaner, and sometimes as if you have been working out to no effect at all. Eventually, after you have been working out for a while, you will intuitively be able to determine what message your body is sending you.

You will learn to differentiate the *good pain* that signals your increasing fitness from the *bad pain* that means you've overdone it and could even be an injury alert. You'll discover how to know whether you are tired in a good way because you have pushed your personal envelope or you have worn yourself into dangerous exhaustion, which is a bad kind of tiredness. You will learn what you need to do in terms of warming up and stretching to make your workouts work for you. Perhaps most important, your body will tell you that it is missing something when you skip a workout. As you find yourself developing this sense, you will know that it, too, is one of the important stepping stones on the routeto to fitness.

Keys to Good Health

Think "trim" instead of "thin." Think "healthy" instead of "skinny." Think "health" instead of "fashion." These are the thoughts you should keep in mind when embarking on a fitness or weight-loss program. After all, the mind and the brain have a lot to do with how successful you will be. IDEA, a trade association for fitness professionals, offers the follow eight keys to healthy weight (more detailed information about implementing these concepts appears in subsequent chapters):

- Don't rely on magic.
- Forget the "one-size-fits-all" mentality.
- Develop a positive self-image.
- Set realistic weight goals.
- Learn to play again.
- Get stronger.
- Harness the power of the [food] pyramid.
- Be patient and persistent.

Fueling Up

You wouldn't head out for a drive without gas in the car's tank, so why start your workout when your personal fuel gauge is approaching empty? Because most people work out in the morning, midday, or afternoon, breakfast and lunch are the most important meals of the day, because they provide fuel for the physical exertion to follow. Food fashions ebb and flow, but nutritionists recommend a balanced low-fat diet, high in complex carbohydrates. Nutritionists recommend starting your day with energy-rich complex carbohydrates such as whole-grain bread or hot or cold cereal with fruit rather than sugar if you need a sweetener. Proteins are good, too, but not in the form of fatty breakfast sausages or bacon. At lunch, low-fat bean soups, broth-based soups, sandwiches with a little lean meat and vegetables on whole-grain bread, thick-crust pizza topped with vegetables and reduced-fat cheese, or pasta with fresh marinara sauce are good choices to fuel you through your workout. You'll learn more about eating well in Chapter 20, "You Are What You Eat."

Water, Water, Water

To keep the body humming, drink at least eight glasses of water during the course of a day—more if it's hot or dry, or when you are working out. In fact, it is especially important to drink before you begin exercising, to drink as you go, and to rehydrate after your workout. If you wait until you are thirsty to drink, you have waited too long.

Most experts recommend drinking about 16 ounces of water one to two hours before exercising. One hour is the commonly accepted standard, but if you hydrate two hours before working out, it will allow you to eliminate any excess fluid before you begin, and you won't have to interrupt your workout to use the restroom. (If you work out first thing in the morning, you just have to do the best you can.) You should drink four ounces of water every 15 to 30 minutes while you work out. The harder you exercise and the hotter it is, the more you'll have to drink during your workout. It's a good idea to keep a water bottle handy so that you can sip as you need to.

Achtung!

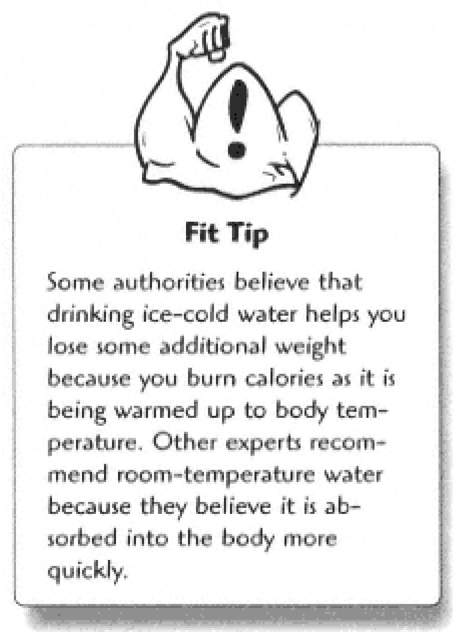
When you exercise outdoors on a hot summer day, drink lots of water but avoid carbonated soda, fruit juices, and caffeinated drinks until you're through working out. Because caffeine is a diuretic, go easy on coffee, caffeinated tea, and cola drinks. In fact, avoid all carbonated beverages before and after a workout. Their acetic acid leaches calcium from bones.

Camelbak was the first hydration system to hold water in a bladder strapped onto the back. A flexible, on-demand drinking tube makes it especially popular with cyclists. HydroSport is a combination of a strap-on wrist weight and a water bottle, and it's convenient for keeping hydrated while running, walking, or taking an aerobics class. Each one weighs a half-pound and holds 4 ounces of water. Call 1-800-HYDRO-95 for information.

If you're new to working out and drinking as much water as you need, you might have to start both slowly. Just as you progress from lighter weights to heavier ones, from less to more time and tension on an aerobic apparatus, and from a short walk or run to a longer one, up your daily water intake. Drink one additional glass each day until eight is your standard—and remember to drink more when you're working hard or in a hot or dry place.

When you get to the point where your workout lasts longer than an hour—especially if you perspire heavily—consider a sports drink. They not only rehydrate your body, they replace electrolytes (sodium and sodium chloride are the most common) and provide carbohydrates to help you re-energize during a long spell of physical exertion. You lose electrolytes through perspiration, and electrolyte-depletion can cause cramping.

Build a Base and Then Get Specific



Fit Tip

Some authorities believe that drinking ice-cold water helps you lose some additional weight because you burn calories as it is being warmed up to body temperature. Other experts recommend room-temperature water because they believe it is absorbed into the body more quickly.

If you've never worked out before, the concept of different kinds of workouts to accomplish different aspects of your goal might seem totally intimidating. Balancing the need for increased endurance, muscle strength, and flexibility is not instinctive to someone breaking out of a no-exercise lifestyle. Good beginning routines are offered at many gyms and also are available on tape. These programs virtually always begin with a warm-up, include a short aerobic section, feature light weight work, and finish with a stretch and cool-down. "You can do it!" is the major motivational theme of entry-level programs that will help you build a base from which to launch a major assault on weight, conditioning, and stamina problems.

Once you have built that base, you will begin making your workouts longer and stronger. If you like, you can begin to divvy them into aerobic and strength-training days. Not only does this add variety to your workout week, it also gives your muscles time to recover. Some people like a two-day cycle; others prefer a three-day cycle. Workout veterans tend to do these categories on alternate days. Some people like to do a full weight workout one day and an intense aerobics workout the next; others prefer one day of lower-body strength training, one day of upper-body strength training, and one day of cardiovascular work.

Warm Up, Cool Down

The warm-up at the beginning of a workout and the cool-down afterward have a couple of things in common. Both involve relatively gentle movements and some stretching. The purpose of both the warm-up and the cool-down is to enhance flexibility, minimize discomfort, and even prevent injury. The warm-up specifically prepares the muscular system for the harder work to come. It helps you loosen up before your aerobic workout to get the blood flowing and to loosen your muscles for the upcoming exercises. The cool-down allows your body to relax, to discard some of the waste products and lactic acid you might have accumulated, and to return to a resting state after you are finished. Begin your workout with a couple of deep breaths, inhaling through the nose and exhaling through the mouth. If you are planning to walk or run, do a few hundred yards at a slower walk or a gentle jog. Start an aerobics routine with a few minutes of light, dance-like motions to bring your heart-rate up slowly and gradually. This warm-up period is vital in increasing the blood flow to your muscles, which in turn makes muscles and connective tissue more elastic. Before you rev into your routine, do a few gentle calf, hamstring, and hip flexor stretches to limber up.

The cool-down routine is similar, but in reverse—slowing the pace from your aerobic walk, run, or choreographed routine—to enable your heart rate to return to fewer than 100 beats per minute. Soon, your breathing and heart rates will return to normal. Your post-aerobic stretches can be stronger, because muscles are more elastic after a workout than before. Done over time, these stretches help lengthen the muscles and make you more flexible.

The Flexibility Factor

Fit Tip

Some trainers now use the phrase "warm-down" instead of "cool-down" because activity is involved. If you are genuinely pressed for time and can only stretch once during a workout, it is better to stretch at the end. Just try not to make a habit of avoiding a gentle warm-up stretch.

Stretching is the unappreciated stepchild of the fitness family, but it can make or break the rest of your fitness program. Workout veterans, athletes, and dancers know the importance of stretching, but it isn't just for jocks and gym rats. It's for everyone. Especially as people get older, regular stretching can help retain flexibility and a good range of motion, not just for exercising but for everyday activities.

Flexibility also has postural benefits. The key to healthy, natural, and functional posture is a balance of strength and flexibility between opposing muscle groups. Interestingly, being too flexible, even double-jointed, is not good either. When ligaments and tendons are too lax, the results can include instability and risk of dislocation and other injuries. Too little flexibility, however, is far more common than too much.

Fitness Fact

The body has several types of joints: ball-and-socket joints like the hips and the shoulders, which are capable of a wide range of motion; hinge joints like the elbows and the knees, which only move one way; the condyloid joints of the wrist, which to some degree move in all directions; the pivot joints of the spinal column; and the gliding joints of the feet.

Ballet dancers often take stretch classes to keep their muscles long and limber, and a few minutes of stretching usually are tacked onto the end of an aerobics class. If you are really tight, you might find it necessary to work with a personal trainer to learn to stretch properly. You also can try yoga, Pilates, and other disciplines that have flexibility and limberness at their core. These activities are discussed in Chapter 9, "Other Paths to Stretching and Toning."

Aerobics instructors routinely finish each session with a cool-down and a stretch, and they do it so seamlessly that it simply becomes an expected part of the program. Don't forget to stretch, however, when you're working out on your own. Some people are naturally more flexible than others, and some people have trained themselves to improve their flexibility, but stretching can increase everyone's range of motion and limberness. It is a gradual process, especially if you have not been stretching. Increasing your body's flexibility by making stretching a regular part of your program contributes to improved posture, better body balance, and an enhanced sense of well-being. As your overall flexibility improves, you will discover many benefits to both your workout regime and the rest of your life. With more flexibility, you will find all movements easier, from hefting a bag of groceries to getting in and out of the car.

Stretching and deep
breathing are important
parts of the warm-up and
the cool-down.
(Photo: Anne W. Krause)

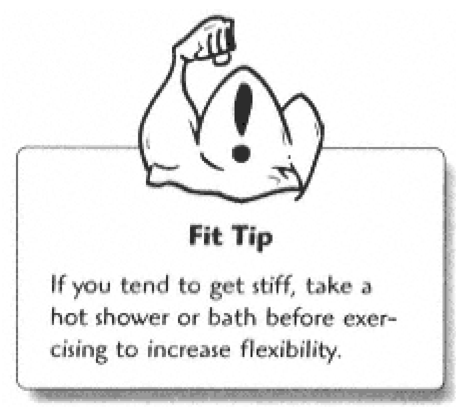
Stretching Basics

Achtung!

When you warm up and stretch lightly, move for five to 10 minutes to loosen your muscles. Even though movement is involved, don't bounce because bouncing can cause small tears in the muscle fibers.

Stretching is not only important to overall fitness and often neglected, but the more you stretch the more flexible you will become. However, stretching requires caution to prevent injury. Somehow, it seems easier to get into the habit of stretching some muscle groups than others. Stretching the long leg muscles after a walk or a run comes naturally and feels good, but people tend to neglect other parts of the body such as the knees. In any case, do not stretch to the point of pain.

There are two basic types of stretches: the ballistic (or active) stretch and the static stretch. The ballistic stretch uses momentum and motion to lengthen the muscle. Examples include a leg swing or an arm swing. Light ballistic stretches are an integral part of the warm-up before your workout. With the static (or passive) stretch, the muscle is lengthened as far as it comfortably will go and is held in that position. You can do a light static stretch during your warm-up and then stretch more aggressively after your cool-down while your muscles are still warm. To increase your flexibility, hold each stretch for 15 to 20 seconds or longer, release, and then repeat. You also can breathe deeply, intensifying the stretch as you exhale. There is a very good physiological reason only to stretch lightly during the warm-up and not to overdo your cool-down stretches. When you begin to stretch a muscle, especially a cold one, the muscle automatically reacts in the opposite way, contracting to resist the stretch. This is called the *stretch reflex.* To overcome it, it is important to stretch slowly and smoothly without bouncing or jerking. Breathe evenly throughout the stretch and do not hold your breath.



Cool down from your aerobics workout and then begin stretching, striving for five to 10 minutes of static stretches. Stretch each muscle group you worked, holding each stretch for 15 to 20 seconds. After a weight workout, whether with free weights or machines, be sure to stretch all the muscle groups you worked—legs, arms, shoulders, and back. You can boost a static stretch with external pressure in various ways. Sometimes your trainer will apply pressure to a particular muscle to lengthen it. In some stretches, you can turn your own body against the stretch to provide pressure. You also can quickly contract the muscle to be stretched by pressing it against your trainer, your workout partner, or even the wall. When you release that contraction, you will be able to stretch farther than before.

When stretching, it is just as important not to put the joints or the spine at risk for injury as it is to lengthen your muscles. Several common moves could cause problems. The hurdler's stretch (a favorite among track coaches, a seated stretch with one leg extended straight out and one leg bent and tucked next to the body) and the kneeling quadricep stretch (also called the knee-sit) both could injure the knee joint. The Plow from yoga (lying on your back and stretching both legs up over your head) can pressure the neck vertebrae. Even those relaxing neck circles can be bad for the neck. Circling your head to the back can hyperextend it. You can safely circle your head to the front and sides, however, or tip your head toward your shoulders.

Every Breath You Take

Achtung!

When you begin a workout program or significantly increase or change the one you've been doing, expect to feel sore 24 to 48 hours after you start your new program. You should feel this soreness in the muscles, not in the joints. Muscle aches are a response to a new workload. Joint pain could be a sign of injury.

Breathing is so automatic that you don't even have to think about it, right? Wrong—especially while you are working out. In addition to food and water, your body needs to process oxygen, transferring it from the lungs through the bloodstream to the muscles. There is a growing belief that the effectiveness of any exercise program at any level is impacted by breathing efficiency and technique. In fact, many trendy fitness centers have been adding breathing classes, and athletes seeking peak performance are turning to breathing coaches as part of their training.

In fact, the role of breathing in various body functions is nothing new. Breathing is an integral part of such Eastern disciplines as yoga and tai chi. Weightlifters and bodybuilders exhale so forcefully while they are lifting that they grunt as they lift. Even ordinary people on weight-training programs are routinely instructed to "breathe on the exertion" when they lift. Lamaze and other childbirth preparation programs use controlled breathing as a way to relax. Oxygen bars flared up as a '90s fad. It has long been known that the lung capacity of well-conditioned athletes exceeds that of ordinary people, but this was generally considered to be an effect of training.

During the course of an ordinary day, adults take an average of 28,000 breaths, most of which are shallow inhalations in which air does not reach deep into the lungs. Such shallow breathing tightens neck muscles, which in turn can cause stiffness and pain in the neck, upper back, chest, and shoulder areas. You might find it ironic to have to relearn, or at least become aware of, proper breathing.

Breathing workshops use the diaphragm to breathe deeply and rhythmically, expanding the rib cage and pulling air down to the bottom of the lungs and deep into the belly. Poses derived from yoga and exercises to enhance awareness of what part of the lungs is filling are part of such classes. Some instructors then move students onto aerobic machines so they can practice their new breathing techniques and at the same time increase their exercise intensity.

You can begin to enhance your awareness of your own breathing with a simple exercise. Lie on your back with your hands on your diaphragm. Begin breathing slowly, deeply, and rhythmically, inhaling through the nose and exhaling through the mouth. Feel your chest and midsection rise and fall with each breath. Move your hands down to your abdomen and try to expand the belly as you inhale.

This exercise is useful when you need to relax, when you need to charge up, or when you need to focus on your body.

Awareness of your breathing patterns leads to the next step, which is applying them to your workouts. Inhale deeply several times as part of your warm-up. This primes your air pump, which is what your lungs are. During aerobics, breathe through your nose as long as you can, because the nose helps humidify the dry air of the gym. When you are breathing hard and your nose can't pull in enough air, open your mouth to fill your lungs.

Quote, Unquote

"Nine out of 10 people are not getting the full capacity that they could. Our lungs are capable of holding a couple gallons of oxygen per breath, and we're settling for only a few pints."

—Pam Grout, author, *Jump Start Your Metabolism With the Power of Breath*

Exhale on the exertion when you are contracting your muscles (as in lifting a weight); inhale as you return to your starting position (as in releasing the weight). Be sure not to hold your breath. For many people, this is a natural reaction to muscular exertion. During the cool-down, your heart rate and breathing will return to normal. Finally, while you are stretching, breathe naturally and evenly, inhaling deeply at the farthest extension of a stretch to lengthen the muscles a bit more.

What does all this deep breathing do outside the gym? There are various opinions, although most authorities believe it is good for you. One school believes that oxygen intake is determined by how much of it the body needs, while another school believes that a regimen including controlled deep breathing actually increases the metabolism. Both sides agree that breathing properly is relaxing and stress-reducing, and it is less taxing on your neck muscles. And, oh yes, it will improve your performance as well.

The Least You Need to Know

- As you begin to get fit, you will learn to read your body.
- It is important to drink water before, during, and after your workout.
- Warm up before you work out and cool down afterward.
- Stretching should be part of every workout to increase flexibility.
- Become aware of your breathing patterns and learn to control them to enhance your workout program.

PART 2
STRENGTHEN AND TONE YOUR BODY

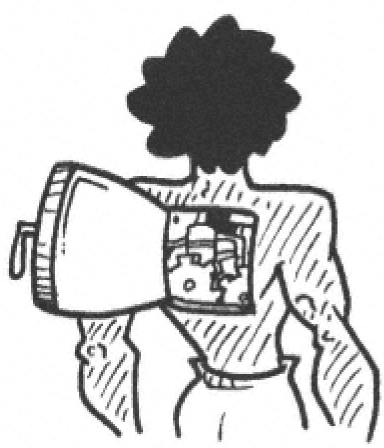
You've made your resolutions. You've gotten your doctor's go-ahead. You've even had a fitness assessment done. Now what? You only have 24 hours a day, and getting in shape probably isn't the only aspect of your life. Sorting out different ways to gain fitness—both upping your cardio condition and getting stronger—can be daunting. There are many options. None is "better" or "worse" than the others. They all help some people to get fit and healthy. The only thing that doesn't work is a broken resolution. Remember, procrastination is not an exercise.

The chapters that follow highlight many exercise programs to help you select what's right for you. The most important aspects of getting fit are to balance your exercise program between aerobic and strength training and to keep at it consistently until you see results. If something sounds good to you, but it doesn't feel right after you've given it a fair chance, you can try something else. Or if you start gradually—as you should—and outgrow your initial regime, you can switch to a different program.

Whatever you select, remember that a workout is work. You have to put effort into getting fit in order to be fit—and to stay fit. "No pain, no gain" was once a popular motivational phrase, and some people still use it. More recent thinking, however, believes that pain needn't be part of any program. The sense of extending your physical horizons, putting in real effort, and stretching your limits is still what makes a workout work.

"The way I see it, if you want the rainbow, you gotta put up with the rain."
—Dolly Parton

Chapter 6
Tune Up That Muscle Machine



In This Chapter

- Weight training makes you stronger, healthier, and more capable of everyday activities
- Learn a little about muscles before you begin a fitness program
- Feel good about feeling sore when you begin strength training
- Free weights and weight machines have pros and cons

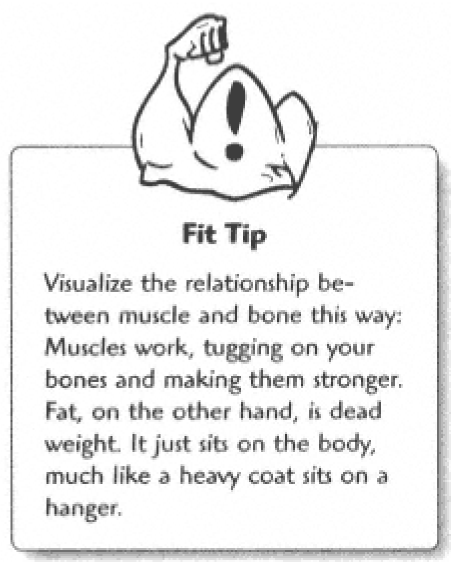
If your muscles had a motto, it would be "Use it or lose it." Not original—but true. Unused muscles ultimately atrophy, and even underused muscles quickly lose strength. Muscles that are used are functional, and when they are challenged, they get stronger—quickly. This phenomenon begins in infancy and continues into advanced age. Just think how excited parents are when their baby first lifts his or her head, rolls over, sits up, stands, creeps, crawls, and finally walks. Every one of these small actions demonstrates that the baby's muscles are getting stronger. He or she explores the increasingly accessible world with unbridled curiosity and enthusiasm. At the other end of the spectrum, elderly people who become sedentary are increasingly confined and fragile, and their world shrinks, too.

Most of us are in the great sea of humanity that floats between infancy and old age. We can make and remake ourselves. When we "let ourselves go," we are neglecting to build or maintain muscular strength, and we thereby tilt our bodies unnaturally and prematurely toward the older end of the lifespan spectrum—regardless of our biological age. Assuming that you have no health problems, nothing—but nothing—stops and even reverses the body's clock more than strength training. If you have medical concerns, the shape-up prescription probably will include muscle conditioning, too.

What to Expect from Weight Training

Weight training (or strength training) is one of the key elements of an overall fitness program. When you incorporate it into your life, you not only will become stronger, more capable, and healthier, you also will become more energetic, will feel better, and will look better. Remember that muscle is denser than fat, so a toned body looks slimmer, stronger, and more attractive than a flabby one. Also remember that a toned, slimmer-looking body might actually weigh as much as, or even more than, a flabby, out-of-shape one.

For muscles to become stronger, you need to demand more of them than their usual workload. Working them harder in this way is known as *overloading*— that's what you want to do when weight-training. Physiologically, when you lift enough weight to overload your muscles, you cause tiny tears in the muscle fibers. When they regenerate, the muscles become incrementally stronger. Not only will you be able to lift more in the gym, everyday activities will quickly become easier.



In addition to the benefit of muscular strength in and of itself, strong muscles and strong bones are linked. Muscles are attached to bones. When you strength-train, those muscles literally *tug* on bones. Therefore, as you build your muscles, your bones become stronger as a response to the greater force being exerted on them. In a sense, your bones try to "match" your muscles. You can help the process by taking in sufficient calcium and by participating in aerobic activities.

Various studies indicate that weight training reduces various serious health risks. Strength training improves glucose metabolism, for example, which can help control adult onset diabetes. Such training also helps speed the digestive process, or gastroin-testinal transit time, and reduces the risk of colon cancer. It can help ease lower back pain and can reduce arthritis pain, both osteo- and rheumatoid. Strength training can even help emotional well-being. A recent report in *Medicine and Science in Sports and Fitness* revealed that male and female volunteers experienced "significantly reduced anxiety" for three hours after a single weight-training session.

The bad news about muscles is that, when they are not used, they lose strength rapidly. The good news, however, is that strength can easily and quickly be recaptured, even by people who have never worked with weights. Muscle tissue burns calories much faster than fat tissue, so even after you've stopped exercising for the day, the "furnace" muscles keep utilizing calories. In other words, strong muscles actually will raise your metabolism. Obviously, the best thing you can do for yourself is not let your muscles become weak and flaccid in the first place. If you are out of shape, be encouraged by the fact that muscles begin to build extremely quickly when you commence strength training.

People differ in their potential strength. This is why some can become bodybuilders and others can't. *Everyone,* however, can become stronger. Some people feel increased strength from weight-training session number one and weight-training session number two. Virtually everyone sees a marked difference after six to 10 weeks of conscientious strength training. When tested, this increase can be anywhere from about 10 percent for a tentative new exerciser to as much as 40 percent for an aggressive person (especially males, who in general, have greater muscle-building capacity than females).

One of America's leading experts in fitness issues has a list of a dozen reasons to strength-train. Dr. Wayne L. Westcott, research director at the South Shore YMCA in Quincy, Massachusetts, found the following after a 12-year study of 1,132 people in YMCA weight-training programs. The following are his 12 reasons why every adult should weight-train:

Fit Tip

Start your strength training slowly and then gradually intensify. Even as your muscles become stronger, your ligaments and tendons might still be vulnerable to injury.

- To avoid muscle loss
- To avoid metabolic rate reduction
- To increase muscle mass
- To increase metabolic rate
- To reduce body fat
- To increase bone mineral density
- To improve glucose metabolism

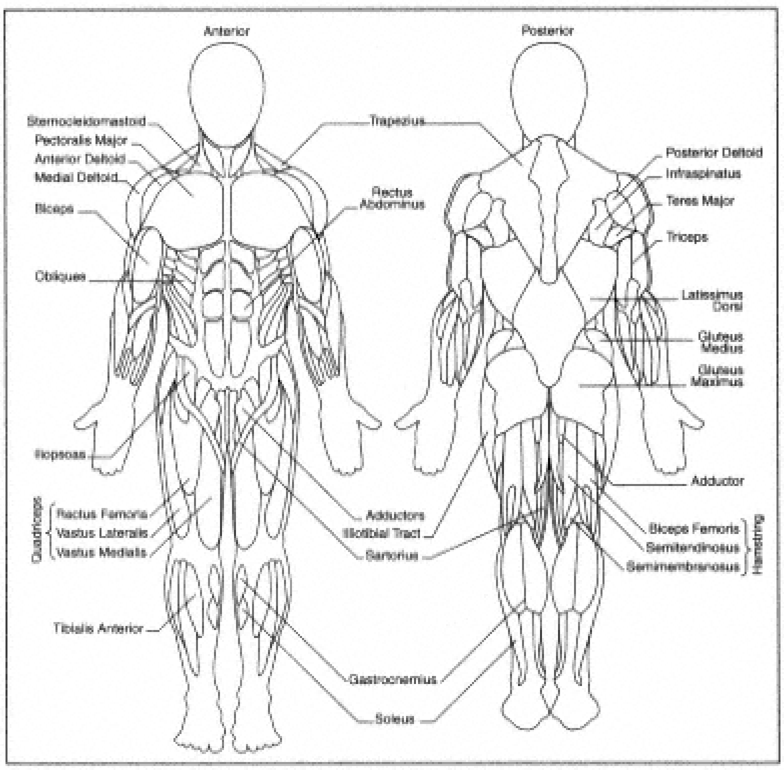
- ♦ To increase gastrointestinal transit time
- ♦ To reduce resting blood pressure
- ♦ To improve blood lipid levels
- ♦ To reduce low back pain
- ♦ To reduce arthritic pain

In addition to Dr. Westcott's dozen reasons for adults to weight-train, here are three more:

- ♦ To improve posture
- ♦ To increase sex drive
- ♦ To improve overall quality of life

Educate Yourself

Before you embark on your fitness quest, bone up about bones and the rest of the body. Study the exerciser's version of Anatomy 101 so you'll at least know a little about how the body functions. The skeletal system is your body's framework. Because it's what holds everything up, physicians and fitness instructors often talk about "building strong bones" through weight-bearing exercise and sufficient calcium intake. The organs—heart, lungs, stomach, liver, kidneys, and all the rest—take in oxygen, food, and liquid, process them, send them around the system, and eliminate waste. At the most basic level, your muscles enable you to sit, stand, and move. Strengthening, toning, and stretching the muscles should be a major part of any fitness program.



Anterior and posterior muscle chart.

Men and women obviously have some different internal organs, but we all have the same muscles—roughly 650 of them, two thirds of which are skeletal muscles that enable you to move your body. Many are so obscure that only a medical student is likely to know them by name. Astonishingly, no two muscles perform exactly the same function, although groups of large and small muscles function in harmony to enable you to perform specific moves. Of these hundreds of muscles, your exercise program will target roughly two dozen. Simply and briefly, the major muscles and muscle groups are described in the sections that follow.

Lower Body

There are four quadriceps muscles on the front of each thigh (QUADriceps, get it?) and three hamstring muscles on the back. Nicknamed *quads* and *hams*, they respectively enable you to straighten and bend your knee. The two muscles that comprise your calves, on the back of your lower leg, are the gastocnemius and soleus. They are used when you walk, run, stand on your toes, or jump. You use the tibialis anterior, on the front of the shins, when you raise your forefoot while your heel is on the ground.

Fitness Fact

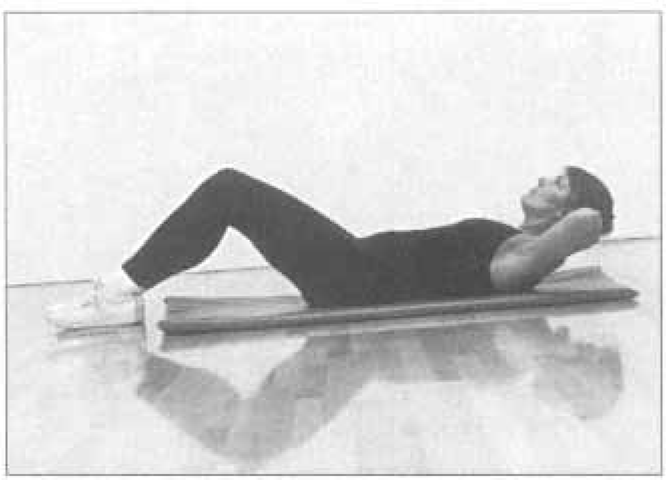
The hamstrings are a muscle group with two heads (that is, two attachments). The anatomical names of the three hamstring muscles are biceps femoris, the semitendinosus, and the semimembranosus.

The gluteal muscles, nicknamed *glutes*, are the muscles that shape your backside. You use the gluteus maximus to stand up from a seated position, to climb stairs, to walk up hills, and to extend your leg out behind you. The gluteus medius, more commonly known as the *abductor*, is the muscle that runs along your outer thigh. It is an important hip stabilizer, and it also enables you to step sideways (as you do when playing tennis), to move your leg out to the side (as you do when in-line skating), and to rotate your leg outward or laterally from the hip joint. The adductors are a group of inner thigh muscles that enable you to kick a soccer ball with the inside of your foot, to pressure your legs against the saddle when you are horseback riding, and to skate.

Torso

No muscle group causes more agony and concern than the abdominals (or *abs).* Everyone wants them to be firm and flat. This muscle group runs along the front and sides of your trunk. The rectus abdominus is the big, flat muscle that runs between your rib cage and your pubic bone. It enables you to stand up straight and to bend at the waist. It stabilizes your torso, and when it's toned, it looks terrific. When it is *really* toned so that every muscular ripple shows, it is called washboard abs. The internal and external obliques wrap around the sides of your torso. You use these diagonal muscles to twist your body and to bend at the waist.

The pectoral muscles (or *pecs)* comprise a fan-shaped muscle group on your upper chest below your shoulders. Buff men like to build shapely pecs, and women who work their pecs often find that their breasts appear firmer and sometimes larger. You use your pecs when you push a baby carriage, a shopping cart, or a lawnmower and also for such sports as golf, tennis, and volleyball.



Crunches, done regularly, can help flatten and tone the tummy.
(Photo: Anne W. Krause)

The latissimi dorsi (or *lats)* are the biggest muscles in your back, running from the inside of your upper arm next to the pectoral attachment down to your waist. These muscles are used when you pull something. The erector spinae run down the length of your back on either side of your spine. These postural muscles, along with the abs, enable you to stand up straight. You also use them to straighten up when you are bent over. The rhomboids are fairly small muscles on either side of the spine. These also are postural muscles, located under the trapezius muscles, that allow you to pull your shoulder blades together. If you were in the military, you'd use them a lot—whenever you had to stand at attention.

Shoulders and Arms

The trapezius muscles (or *traps)* run from the base of your skull, down your neck, across your shoulders, and down your upper back. You use them when you raise your arms to the side or shrug your shoulders. You wear your deltoids (or *delts)* like a muscular cap over the tops of your arms and shoulders. This important group of three muscles (front, side, and back) is used to move your arm. You use your deltoids for everything from picking up the telephone or reaching for a light switch to shoveling snow or jacking up a car. The rotator cuff holds your arm in its socket, and it's one of those muscle groups that people pay little attention to until they injure it. You use the rotator cuff to throw a ball, to swing a tennis racquet or a golf club, and to do the breaststroke while swimming.

Quote, Unquote

"Long legs. Long hair. Full bust. Full lips. These are style standards currently in vogue. But wait. Aren't the standards of beauty really a burden? After all, how did so many women today start desiring a washboard stomach and a bountiful bosom when so many have a washboard bosom and bountiful stomach?"

—Francine Parnes, Denver *Post* fashion editor

The biceps is a muscle with two heads (BIceps, get it?) on the front of your upper arm that attaches in two places on your shoulders. You use your biceps to flex your arm at the elbow. When a small child wants to show you how strong he or she is, it's the flexed biceps you'll be asked to feel. The triceps is one muscle with three heads (TRIceps, get it?) on the back of the upper arm that enables you to straighten your arm at the elbow and that also can help you push something. Your forearm is full of small muscles that enable you to wield a tennis racquet, to twist a jar lid or screwdriver, to use a computer keyboard or mouse, and to play the piano. These are the "Popeye" muscles, but even the most ardent weightlifter can't bulk them up the way the cartoon sailor does.

Look at those biceps.
(Photo: Anne W. Krause)

Feel Good About Feeling Sore

When you start a workout program that includes weight training, you can expect to feel sore and tired afterward. You might wonder whether you are doing yourself a favor or actually harming yourself. Keep in mind that, if you have not done anything like this, light weights and modest repetitions are the smart way to start. If you have not been doing any weight training—and especially if your daily routine includes lifting nothing heavier than a cereal box—you *will* feel sore. This is good because it means your muscles are being used.

Quote, Unquote

"People start on a rigorous program, do it two or three times, and hate it. Then we never see them again. We tell people, 'Stretch it. Push it. Pull it. But most important, have fun while you are doing it.' If people hate what they're doing, it won't last."

—Dan Timm, Allegria Spa, Beaver Creek, Colorado

Experts recommend one day of weight training followed by one day of rest from weight training. (Daily aerobic exercise, however, is fine.) When you strength-train, you actually cause small tears in the muscle fibers. This is what causes soreness the day after you work out. The tears take two days to heal, a process that also results in steadily increasing strength. The initial soreness will go away and be replaced by a feeling of postexercise well-being. As you get comfortable with resistance training and add weight or repetitions, some soreness might return the day after you work out. This is your muscles telling you that you've just gotten a little bit stronger and a little bit fitter than you were when you started.

Fit Tip

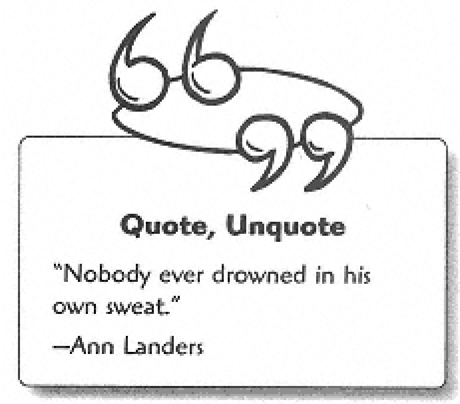
A balanced program to enhance overall fitness should include a minimum of two and preferably three resistance workouts a week.

When it comes to strength training (and aerobic activities as well), remember that staying in your comfort zone won't get you fitter very fast. If you keep using an amount of weight that you can easily lift, you will maintain whatever muscle tone you have, but you won't steadily increase your strength. To do this, you need to challenge yourself. At the same time, you will begin to experience how good you feel when you have worked hard. A little bit of soreness is a small price to pay for the physical and emotional benefits you are getting.

Muscles Burn Fat

If your goal is to reduce weight, think of exercise as the gift that keeps on giving. The calories you burn while you are lifting weights or doing other strength training are only the beginning. When it comes to weight loss and fat reduction, your muscles keep working even after the workout is over. Exercising revs up your metabolism. Researchers have found that a pound of muscle requires more calories, even at rest, than fat does. This means that a fit and strong body uses more calories just to sustain itself than a sedentary body of the same weight.

Every body function requires calories and therefore burns some degree of fat. Muscle tissue requires more fat just to maintain itself than other tissue. There are studies upon studies to determine why this is so and what patterns can be discerned. Various researchers have found strong evidence that weight training helps people become and remain slim. Keep in mind that one pound of fat is equal to 3,500 calories.



The University of Massachusetts Medical School conducted a weight-loss study in which some subjects only dieted, some dieted and participated in aerobic activity, some watched what they ate and participated in strength training, and some did all three. Although the group size was modest, just 65 subjects for the entire study, the most successful group did all three activities, losing weight while also building lean muscle mass.

Men and Muscles

Men are muscle-building machines. Men's bodies have a higher proportion of muscle than women's, and testosterone, a male hormone, enables them to build muscles faster than women. Men who work out more readily build round, beefy muscles—big shoulders, sculpted pectorals, bulging biceps, and the like. If you want to look as strong as you are, it will only happen if you are not overweight. When a man starts weight-training, some muscles—back, pectorals, biceps, quadriceps—get stronger and firmer faster than others. Because men have the potential to build big muscles, their weight training shows results quickly. Still, fat on top of muscles hides the sculpted muscles that strength training builds. When it comes to muscular strength, size matters. In general, the bigger the muscle, the stronger it is. Men are genetically preconditioned to build big muscles, so they are, in general, stronger than women.

Fitness Fact

Some 25 years ago, Dr. C. Harmon Brown and Dr. Jack Wilmore of the University of California at Davis placed 47 college-age women and 26 college-age men with no prior weight-training experience on a 10-week program. At the end of the study, the men's upper-body strength was 50 percent higher than the women's, and their lower-body strength was 25 percent higher than the women's.

Women Need Weight Work, Too

Women, who are significantly more likely to suffer bone loss, weakness, and fractures later in life, need weight training even more than men. For women, *osteoporosis* should be the scariest word in the English language. This debilitating condition, in which bone becomes less dense and therefore more fragile, afflicts 25 million Americans, 80 percent of them women. Osteoporosis is serious bone loss that comes with age, inactivity, and calcium depletion.

Beginning at about age 35, an adult woman can lose 1 percent of her bone mass every year, which translates to 5 to 7 pounds per decade. During and after menopause, a woman's muscle loss speeds up. Miriam Nelson, a physiologist at Tufts University, studied 40 postmenopausal women. The women in the control group who did not exercise lost 2 percent of their bone mass in a year. Those who weight-trained regained 1 percent of previously lost bone mass.

Think about it this way. Between the ages of 35 and 55, the bone density of a woman who does not counteract this syndrome will be diminished by roughly 20 percent. Because unchecked bone loss accelerates after menopause, by age 75, this same woman will have lost 50 percent of her bone mass, becoming frail, hunched-over, and injury-prone. No wonder many old ladies are frail and ultimately incapacitated. Isn't this reason enough for every woman to weight-train?

As important as strength training is for women—both for present activities and for future health—some women shy away from it because they are afraid of developing big, bulging muscles. Not to worry. Most women are genetically programmed to build long, lean muscles rather than round, bulky ones. Women who begin strength training replace fat with lean muscle. As you work out, you actually will find that you become more toned and slimmer from strength training, even if the number on the scale doesn't drop.

Fitness Fact

Doctors have traced 1.5 million hip, wrist, back, ankle, and other fractures a year to osteoporosis. After age 20, the average woman loses five pounds of muscle and gains 15 pounds of fat per decade, a net increase of 10 pounds of fat every 10 years.

What Kind of Weight Training?

Quote, Unquote

"Generally speaking, 99 percent of American women could not develop large muscles if their lives depended on it."

—Dr. Ellington Darden, *Especially for Women*

Weight rooms in gyms are equipped with two kinds of weight-training equipment: free weights and weight machines. Free weights are simple, consisting primarily of dumbbells and barbells. Weight machines include various types of complicated-looking apparatus. Multistation machines use a combination of weights, pulleys, and cables to challenge the muscles. The amount of weight is adjustable. Other machines use resistance—either hydraulic or pneumatic—to challenge the muscles. Nautilus machines use spiral-shaped pulleys to provide constant resistance, therefore working the muscles equally as they extend and contract. Various types of apparatus are covered in Chapter 7, "Making Weight Training Work for You," and home versions are discussed in Chapter 16, "Where to Work Out."

Some people get hooked on a particular type of strength-training apparatus, while others enjoy workout variety. The good thing is that free weights versus weight machines is not an either-or choice. You can do both at different times. Perhaps you'll use a particular brand of machine at the gym and have a set of free weights at home. Perhaps you'll do different weight workouts for variety, or you'll grab free weights if you are in a hurry and there's a wait for the machines at the gym.

Good or Bad Ideas?

Achtung!

Muscles get stronger more quickly than attachments (that is, tendons and ligaments). If you start lifting weights that are too heavy, too quickly, because your muscles are strong enough, you risk injuring the tendons and ligaments.

Electric muscle stimulators, which claim to strengthen muscles and even help weight loss, are bogus at best and harmful at worst. According to a report on MSNBC, the impulse created by the weakest machines is too feeble to do any good at all, while the strongest, cranked up high, is potentially dangerous. Physical therapists do use electric stimulators to aid in muscle rehabilitation. However, unlike the clinical setup, home models do not restrain the limb that contains the muscle being shocked into contraction, and this creates the possibility of injury. Even more seriously, people can misuse the machine by putting the transmission pads on their chests or necks, where blood vessels carry blood to and from the heart and head. Think *heart attack* or *stroke*, and you'll get the idea of why such devices are dangerous.

Weight Machines

Fit Tip

Many experts recommend that new exercisers, embarking on their first strength-training program, should start with machines rather than free weights. The stabilizing muscles required for free weights can relax because the machine takes over the stabilizing job. Therefore, machines require less coordination and experience. Beyond convenience and personal taste, there are benefits and drawbacks to both basic kinds of strength training.

The main benefit of weight machines is that they are easy to use and are comparatively safe. They are suited to beginners, because in many ways, the machines dictate the exercise. In many cases, by guiding the movement, they automatically initiate proper form and help prevent injury.

The weight's position and *route* of travel—that is, the body motion required to move it—is controlled, and some trainers believe this helps beginners avoid mistakes in form. Have a trainer or a weight-room staffer set you up for proper alignment on each machine and record the adjustments in your notebook. The discipline imposed by machines also means that, if you follow your program, you will work all the muscle and muscle groups by completing a circuit of all the prescribed apparatus in the gym.

Weight machines are well-suited for beginners and work for most body sizes.
(Photo: Anne W. Krause)

Weight machines are for everybody—sort of. Some brands are not designed to accommodate women under 5'3" or men over 6'2". A bad fit can mean bad form—or possibly even injury. Another drawback to machines is inconvenience. Unless you have a well-equipped home gym, you have to go where the machines are. Sometimes you might feel you don't have time to get to the gym, work out, shower, and get back home or return to the office, so you might skip a workout. At peak times, there might even be a queue for the weight machines.

Another problem some people encounter with machines is boredom. Weight equipment does not always face a television set the way aerobic machines frequently do, weight rooms don't always have music, and you can't read while you are working out. Being tethered to a machine with little diversion can be very tedious for some exercisers.

Free Weights

Fit Tip

If your gym is equipped with mirrors, you can watch yourself work out to double-check your form and to relieve boredom as well.

Free weights are *free* because they are not part of a machine, not because they are gratis. Dumbbells, or hand weights, are designed to be held in one hand but usually are used in pairs. The lightest are just one pound each; the heaviest are Superman-size 100-pounders. Barbells are larger. They consist of a five-foot supporting bar with weights on both ends, and they are designed to be used with two hands. You can customize your barbell by adding or removing weights (the same on each side, of course). The weights range from 21/2- to 45-pound plates. Various combinations are affixed to the ends of the bar to achieve the desired weight.

If you like the lightness of hand weights but the balance and control of a barbell, consider a weighted exercise bar. These well-balanced bars are about the length of a barbell, are two inches or less in diameter for easy gripping, and weigh between 9 and 36 pounds. These are especially useful for biceps, triceps, deltoid, and pectoral exercises.

Many experts believe that free weights are biomechanically superior to weight machines because they allow the user to mimic natural movements with the addition of weight rather than impose the machine's alignment. In addition, you get the same workout on both arms because you are lifting the same amount of weight on each side. If you have a weaker side, it doesn't get a *free ride* as it does on a machine. Additionally, if one position doesn't work for you while you are lifting free weights, a slight adjustment often will make the exercise comfortable. Such freedom of movement and position can ease the stress on your shoulders, wrists, and elbows.

When it comes to use, free weights, particularly dumbbells, offer ease and versatility. You just pick them up and start lifting. You can use the same weights to strengthen different muscles, depending on your arm position and body position. Move the weights to any vacant spot in the gym for a workout. Combine light weights with an aerobics or step class for additional cardio benefits as well as light strength training.

Free weights' prime disadvantage is their very freedom. Some beginning exercisers also find that free weights require more coordination than weight machines. Without cables and pulleys to keep the weights where you need them, it is easier to do something wrong and perhaps sustain an injury. (After all, you can't drop a weight machine on your thumb or your toe, but you certainly can do that with free weights.) When people get into lifting heavy weights, stabilization and constant control can be a real problem.

The Least You Need to Know

- Weight training reduces a slew of health risks.
- To strengthen muscles, you need to work them to overload.
- Underused muscles weaken; unused muscles atrophy.
- Women as well as men need to weight-train.
- Weight training can be done on exercise machines or using free weights.

Chapter 7
Make Weight Training Work for You

This Chapter

- Specialized jargon in the weight room
- Planning a weight-training program
- Essential exercises using weight machines and free weights
- Post–strength-training stretches

It's one thing to understand the importance of weight training. It's another thing to put that knowledge to work for you. Always keep in mind that—more than the numbers that register when you step on the scale—good muscle tone is what impacts how you look and feel. Never forget that strong muscles mean better health.

To be effective, weight training should be precise and should be done with a purpose. To tone and strengthen your muscles without injuring yourself or stressing your joints, you need to embark on the strength component of your program with particular care. After a few weight-training sessions, the equipment will be familiar to you. Proper form will come easily because your muscles will *know* how to move.

General Guidelines for Weight Work

Weight training is important, no matter which method or equipment you select. As far as your muscles are concerned, it doesn't really matter whether you go to a gym or exercise at home or whether you use weight machines, free weights, or some of the strength-training options described in Chapter 8, "Iron-Free Resistance Training." Regardless of your regime, several principles for weight training have become standard simply because they have been shown to be effective:

♦ Always warm up before your workout.

♦ See a trainer for a program or plan one that works each muscle or muscle group to fatigue.

♦ Start with light weights.

♦ Continue challenging your muscles by making the workout harder as you get stronger.

♦ Add challenge by increasing reps, increasing sets, increasing weight, or decreasing rest time.

♦ Do strength training every other day to allow your muscles to recover after each workout.

♦ Stretch after each workout.

As with any component of your fitness routine, the best time for strength training is whenever you can plug it into your schedule. If going to the gym or picking up weights at home in the morning before you go to work is most convenient for you, that's when you should be working out. Ditto for lunchtime, late afternoon, or evening.

Fit Tip

If you are not a morning person and cannot force yourself to be one, you can take comfort in at least one small, albeit inconclusive, study that shows late evening to be more effective for strength training. According to *Woman's Day* magazine, German researchers found that exercisers who did their weight work at 9 P.M. improved 20 percent more than those who did theirs at 9 A.M.

Reps, Sets, and All That Jazz

Weight rooms have a bit of mystique to the uninitiated, partly because of all the complicated-looking apparatus and partly because of the lingo that flies through the air. Two words you'll hear constantly in the weight room are "rep" and "set." *Rep,* short for *repetition,* refers to one completed movement. *Set* refers to the number of reps performed steadily, without stopping or taking a break. These terms are applied to exercises that use both free weights and weight machines. As an example, people speak of doing "one set of 10 reps" or "two sets of 15 reps" and so on.

Other words also are bandied about the weight room. In fitness-speak, *circuit* has nothing to do with electricity. The word refers to the sequential use of all the machines in a weight room. It developed this meaning because many gyms arrange their weight machines roughly in a circle. In fact, even when a gym arranges machines in a row, the word circuit often is used because you go from one station to the next with little rest in between. When you move between stations without a break between exercises, you keep your heart elevated in addition to strengthening your muscles.

"Whew! Only two more reps to go in this set." Your muscles should be fatigued at the end of a set.
(Photo: Anne W. Krause)

The weights on traditional weight machines are called *plates.* They resemble iron bricks, and they each weigh 5, 10, or 20 pounds, depending on the manufacturer. These plates are placed one on top of the other in a *stack* and are guided by a cable-and-pulley system along a path or track of some kind. To adjust the desired amount of weight, you insert a metal pin into a hole in one of the plates. When you begin using the apparatus, you are lifting that plate and every one above it. Sticking the pin into the bottom plate to capture all the plates in the stack is called *racking.*

Between 1987 and 1998, Americans' use of weight or resistance machines rose by 47.6 percent and use of free weights skyrocketed by 83 percent, according to the Sporting Goods Manufacturers Association.

Weight rooms attract serious body-builders and lifters, as well as those who use weight training as just one component of a fitness program. Even if you are just starting out, don't be intimidated by sharing space with people who lift way more weight than you could ever dream of—and don't feel you have to try to match their abilities.

Designing a Program

If you think you can afford to consult with a personal trainer just once, the beginning of your weight training is the time to do so. If a trainer isn't in the cards at all, keep in mind the principles listed at the beginning of this chapter. Whether you select free weights or machines, start strength-training two or three times a week and work each major muscle group every time. As an option, you can weight-train six days a week, alternating upper- and lower-body workouts and taking the seventh day off.

Fit Tip

Whether you work with weight machines or free weights, control the weights throughout the full range of motion to get the maximum benefit. Inhale on the exertion, whether it's a lifting, pulling, or pushing motion, and exhale when returning the weight to the starting position. Do not allow the weights to swing or let momentum take over.

Weight, reps, and sets can be combined in several ways to match your goals. If you want to tone your muscles, make strength training part of a weight-loss program, and make your muscles stronger for your everyday life, start with two sets of 10 to 15 reps per exercise, using relatively light weights. If you want to build big muscles, do fewer reps—no more than 10—with heavier weights. (Experienced body-builders seeking maximum strength gains lift as much weight as they possibly can, but they do six or fewer reps each time they work out.) If you want to build muscles but also maintain a nicely toned, nonbulky body, alternate these routines. Moderate weights and many reps help promote muscular endurance. What constitutes "heavier," "lighter," or even "moderate" depends on the strength you have to begin with. This, incidentally, is why a preliminary fitness assessment helps plan the right program for your needs and goals.

A personal fitness trainer can design
a suitable weight-training program.
(Photo: Anne W. Krause)

If you are committed to a weight program, your biggest question is probably, "How much weight should I lift?" The answer is, "It depends." It depends on your strength, your age, and other factors. If a trainer plans a program for you, he or she will outline the appropriate amount of weight as well as the number of sets and reps for each exercise. If you put together your own program, you'll have to use the trial-and-error method. Try several different weights and then pick one for each exercise that you can lift between eight and 12 times before fatigue, all while maintaining correct form. The last two or three repetitions should feel hard to do, but they should not be so difficult that completing them causes you to compromise your form or technique.

Whatever the amount of weight you can lift when you start, it won't be long before you are ready to increase the workload. When you are comfortably lifting an amount of weight and are completing the sets with good form, it's time to add more weight. Bump it up using the smallest possible weight increase. Every body part or muscle group won't *graduate* equally. You might be ready to increase weights for one muscle group but not another.

Achtung!

If and when you begin lifting heavy free weights, you need to enlist a spotter to guide you as you lift or lower the weights. A spotter can help protect you if the weight proves too heavy or if your form deteriorates in a way that could cause injury. If you have a workout partner, you can spot for each other.

If you hit a plateau and can't seem to lift a heavier weight, you can try what is called eccentric contraction. This means you work with weight beyond what you normally can lift on your own. Your trainer or exercise buddy will help you pull, push, or lift the weight—in other words, by contracting the muscle. You then return it to the starting position on your own—in other words, controlling the weight as the muscle lengthens and returns to its resting length. Most trainers recommend one to three sets of eight to 12 reps in this way.

Achtung!

If the weights bang together, you are not in control of the machine—it is controlling you. Crashing plates means you are lifting too fast, using too much weight, or both, and you cannot control each rep fully.

Managing Weight Machines

The most common weight apparatus in a gym is called a multistation machine. It consists of a strong metal framework, pulleys, handles, seats, ankle cuffs, and adjustable iron weights. Plates are stacked one on top of the other with holes in the sides. To adjust the amount you want to lift, slide a metal pin into the desired hole. When you pull or lift, you are moving the selected stack. Some brands are labeled with clearly illustrated instructions for setting up each machine.

Typically, such weight-stack cable machines have several stations that enable you to exercise various muscles. You will find specific stations for all major muscle groups: shoulders, back, chest, biceps, triceps, outer and inner thighs, hamstrings, and quadriceps. Some exercises require you to stand up, some to sit down, and some to lie down.

Before you begin each exercise, adjust the seat for your height (if there is an adjustment) and the weight stack for your program. Then begin lifting, pulling, or pressing, depending on the exercise. Try to stay in control throughout the exercise, lifting and releasing evenly and smoothly.

The following chart outlines 10 terrific exercises for weight machines. There are many more exercises and refinements, but these are among the most common that you can expect to be able to do in most weight rooms. As you look at the third column, "Position and Action," keep in mind that no two brands of weight machines are exactly alike. Even different models or vintages of the same brand may be designed and function slightly differently. Therefore, some of the movements may vary. If you have any questions, ask a weight-room attendant for help or set up a how-to session with a trainer to get you started correctly.

Ten Terrific Machine Exercises

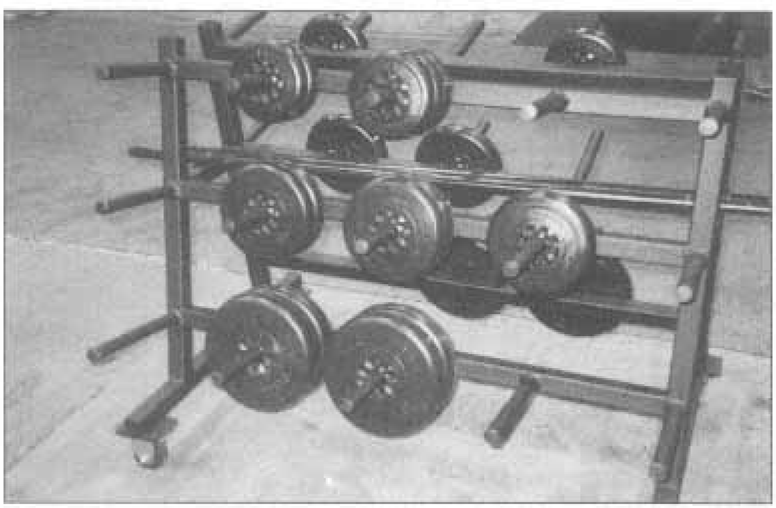
Machine or Station	**Muscle or Muscle Group**	**Position and Action**	**Function**	**Form**
1. Leg Curl	Hamstrings (back of thighs)	Lying: While lying face down, hook your ankles behind a padded bar, press your hips down, and bend your knees to bring your heels toward your buttocks. Straighten your legs to return to the starting position. Seated: While seated, hook your ankles behind a padded bar and lift your lower legs until they are parallel to the floor. Bend your legs to the starting position.	Climbing stairs and hills	A shapely behind
2. Leg Press	Quadriceps and gluteals (front of thighs and buttocks)	While lying on your back with your knees bent, place your feet against a pad and push your legs forward and up, stopping a few degrees short of the straightest possible extension. Bend your knees to return to the starting position.	Jumping, squatting, or lifting heavy objects from the floor	A firm and toned lower body
3. Triceps Press	Triceps (back of the upper arms)	While seated, grasp the handles at your sides with your elbows bent and straighten your arms, pressing downward and back. Bend your elbows and return to the starting position.	Pushing up from an armchair	Toned triceps that eliminate flapping upper arms, especially in women
4. Arm or Biceps Curl	Biceps (front of upper arms)	While seated with your arms in front of you, grasp the handles and pull them up toward your shoulders, bending at the elbows. On some machines, you stand with your arms lowered in front of you, grasp the handles, and pull them up	Carrying a baby or a toddler, lifting and carrying heavy objects	Sculpted biceps—one of the classic muscles that shows muscle mass

		toward your chest, bending at the elbows. Straighten your elbows to return to the starting position.		
5. Chest Fly	Pectorals (chest)	While seated, raise your forearms to chest level, place them behind padded panels or grip padded handles, and press them together in front of you. On some machines, you lie on your back and grasp handles above your chest, extend your arms out to your sides, and bring them up above your chest. Return to the starting position.	Pushing heavy objects, playing racquet sports	For men, a sculpted chest; for women, breasts appear firmer and sometimes larger
6. Shoulder Press	Deltoids (shoulders)	While seated, grasp the handles at chest or shoulder level and push them straight up. On some machines, you sit leaning forward slightly. Lower your arms to return to the starting position.	Lifting heavy objects	Well-developed shoulders that make your waist appear narrower
7. Upright Row	Trapezius, deltoids, rhomboids, and biceps (shoulders and upper arms)	While standing with your arms extended in front of your hips, grasp the handles and—bending and raising the elbows—pull them back and up to shoulder level. Lower your arms to return to the starting position.	Carrying heavy objects, rowing or paddling	Broad shoulders that make your waist appear narrower
8. Chest Press	Pectorals (chest)	While seated, grasp the handles in front of you at chest level and push them away from your body. Bend your elbows to return to the starting position.	Pushing heavy objects	For men, a sculpted chest; for women, breasts appear firmer and sometimes larger
9. Seated Row	Latissimi dorsi, trapezius, rhomboids, biceps, and erector spinea (back)	While seated with your legs bent, grasp the handles in front of you and pull them back, bending the elbows, as if rowing a boat. Return to the starting position.	Pushing heavy objects, helping posture, rowing and paddling	Pulling, lifting, standing, and sitting erect
10. Lat pull-down	Latissimi dorsi (back)	While seated, grasp the overhead bar and pull it down in front of your body to chest level, leaning back slightly. The weights will pull your arms upward to return to the starting position.	Lifting and pulling heavy objects, swimming	Well-developed lats that make your hips appear narrower

Some brands of strength-training apparatus use something other than iron plates to create resistance. The exercises often are similar to weight-stack machines, but the mechanics are different. Instead of cables and pulleys to lift and lower weights, some machines have hydraulic (fluid) or pneumatic (air) chambers or cylinders to provide resistance. Proponents of these machines like the even resistance throughout each exercise with this type of equipment. Nautilus equipment was based on a somewhat different principle. The system's spiral pulleys mimic nature's nautilus seashell to provide smooth, full-range-of-motion resistance training.

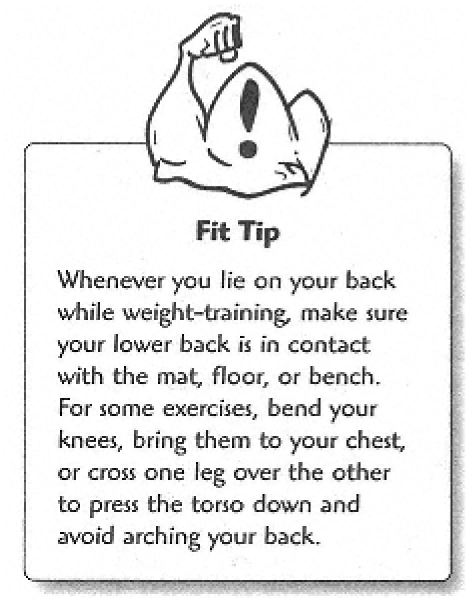
Working with Free Weights

As you progress and become stronger, you might want to use barbells, but at least at the beginning of your fitness quest, light dumbbells are the free weights for you. Starting with one-pounders, they come in small increments. A typical weight room might be equipped with weights of 1, 2, 3, 5, 8, 10, 121/2, 15, 171/2, 20, and 221/2 pounds-perhaps even more.



A rack of free weights stores a variety of sizes (and weights) for you to choose from.
(Photo: Claire Walter)

Hold the weights lightly but firmly in your hands without clutching them in a death grip. Some trainers like people to start light and progress to heavier weights. Under this approach, after warming up for each exercise with light weights, you increase the weight for each new set until you have reached the heaviest comfortable weight. If you haven't completed your planned reps by the time your muscle fatigues and your form begins to go, some trainers recommend that you rest briefly and then switch to the next-lightest weight, or even no weight, for the remainder of the set. Other trainers like people to warm up, begin with the heaviest possible weight, and then move to lighter weights to complete the set.



Fit Tip

Whenever you lie on your back while weight-training, make sure your lower back is in contact with the mat, floor, or bench. For some exercises, bend your knees, bring them to your chest, or cross one leg over the other to press the torso down and avoid arching your back.

Early in your exercise career, when you are using very light weights with small-diameter handles, you can crisscross, say, a three-pounder and a one-pounder, holding them both in the same hand to add just a little weight. This can get tricky, however, if you have very small hands or if the handle is large, because it is possible to drop one. Although dumbbells are used primarily for upper-body exercises, they can also be used to add challenge to such lower-body exercises such as lunges, step-ups, or squats.

Scores of variations exist for dumbbell exercises. Here are half-a-dozen basic ones for the upper body. To determine what they do in terms of function and form for specific muscles or muscle groups, see the preceding chart on weight-machine workouts.

The following are six sensational free-weight exercises:

1. Arm or biceps curl. Standing with your feet shoulder-width apart, your knees slightly bent, and your arms straight and close to your body, bend your elbows up to your chest. Straighten your arms and lower the weights to the starting position. The term *arm curl* or *biceps curl* is used when you do this exercise with the palms facing the ceiling. When you rotate your forearms so that your thumbs are facing the ceiling, the variation is called a *hammer curl;* when you do it with the palms facing the floor, it is called a *reverse curl.* Each variation strengthens the biceps and the muscles of the forearm in a slightly different way. You also can do these curls while sitting on a bench or using a barbell.

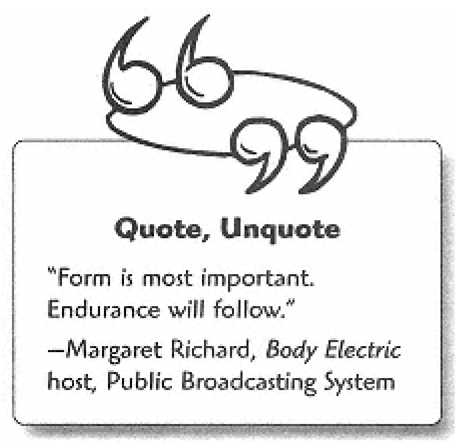
2. Triceps curl. You can do this exercise with one weight in each hand or with a heavier weight held in both hands. Standing in the same position as in the preceding exercise or sitting on a bench, raise your arms straight overhead, keeping them close to your ears, and bend your elbows, lowering the weights behind you. Straighten your arms to raise the weights to the starting position.

3. Forward arm raise. Standing in the same position as in the first exercise or sitting on a bench, keep your left arm at your side and raise your right arm straight in front of you to shoulder height. Alternate bringing your left arm up and your right arm down and then your right arm up and your left arm down. This exercise strengthens your shoulders.

4. Lateral raise. Standing in the same position as in the first exercise with your palms facing each other, raise both arms out to your sides to ear level. Return to the starting position. This exercise strengthens the shoulders, especially the deltoids.

5. Chest press. Lie on your back on a bench or a mat with your elbows bent, your hands at chest level, and your palms toward your feet. Press your hands upward and straighten your elbows without locking them. Bend them to return to the starting position. This exercise strengthens the shoulders, triceps, and pectorals. You also can do this exercise with a barbell. When you do it on a bench, which gives you a greater range of motion, it is called a *bench press.*

6. Fly. Lie on your back on a bench with your elbows slightly bent and your hands above your chest. (If you are uncomfortable on a bench, you also can do this exercise lying on a mat, but you won't get as much range of motion.) Extend your arms out to the side. Alternately open them and bring them together above your chest. Lying on a bench gives you a greater range of motion. This exercise strengthens the chest.



Weight-training accessories for special situations are also available. If arthritis is a problem that makes gripping hand weights uncomfortable, try heavy-duty plastic extenders called EZGrip, which clip onto the weights and provide a larger, more comfortable surface to hold on to. Call 877-439-4747 for details. Body-builders, of course, use support belts to prevent abdominal injuries while lifting heavy weights. Some people like to wear gloves while working with weights (especially if and when they start using heavy weights). If you wear gloves, you can avoid blisters by getting the right size. When your gloves begin to wear out or stretch, it's time for a new pair. These products are readily available where serious exercise equipment is sold.

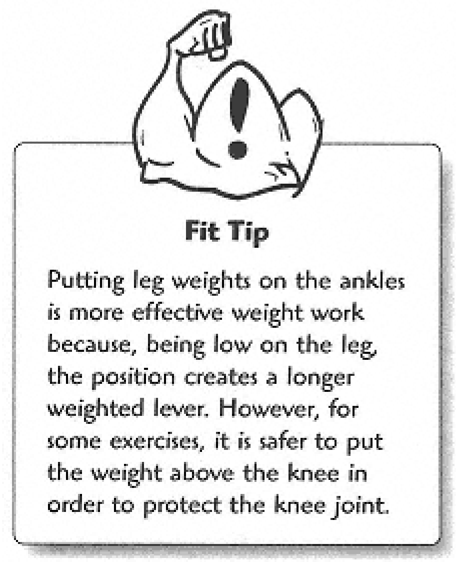
Let's Hear It for Leg Weights

The most popular wrap-around leg weights are flexible, padded, and have Velcro closures. The most versatile designs feature lead bar weights that slip into pouches and therefore can be adjusted for weight as well as size. Others, such as Lei Weights, contain small, heavy pellets. They are soft and comfortable and can be draped over the leg or used in place of dumbbells in other free-weight exercises. To intensify inner-and outer-thigh toning, hold the last rep of the last set for eight to 16 counts before releasing.

No matter what design you prefer, the following are the two most common lower-body exercises that use leg weights:

1. Outer-thigh leg lift. Lie on your left side with your hip bones stacked one above the other, perpendicular to the floor, with your left knee slightly bent. You can lift the right leg up and down, you can lift it and alternately bend and extend the knee, or you can combine these movements so that, on each rep, you lift, extend, bend, and lower the leg. Work up to two or three sets of 15 repetitions of each component of these outer-thigh lifts. You can complete the exercise by elevating your right leg to hip level and pulsing it for one set. Don't lift the right leg any higher than the hip, because you don't want to roll back onto your buttock. The idea is to keep the hip bones stacked. Switch to the other side. This exercise tones your outer thighs.

2. Inner-thigh leg lift. Lie on a mat or on the floor, as in the preceding exercise. Bend your top leg and place it on the floor in front of your body. Raise your bottom leg off the floor and lower it to the starting position. Again, be sure to lift your leg without rolling onto your buttock. Your goal should be the same number of reps and sets on each side as for the outer-thigh leg lift. This exercise tones the inner thighs.



Fit Tip

Putting leg weights on the ankles is more effective weight work because, being low on the leg, the position creates a longer weighted lever. However, for some exercises, it is safer to put the weight above the knee in order to protect the knee joint.

Stretch After Weight Training

Stretching after you have worked your muscles is the key to flexibility, and as you become stronger, you also should concentrate on increasing your flexibility. The two go hand in hand. Not only does stretching feel good, it also helps prevent soreness after weight-training. When you lift weights, your muscles are being shortened. Stretching not only returns them to their resting length, but you also become more flexible if you stretch immediately after strength-training because the muscles already are warm.

Loosen your hardworked muscles after weight-training.
(Photo: Anne W. Krause)

Here are a dozen basic stretches to follow your strength session. If you include both upper- and lower-body training, do them all. If you do just one or the other, be sure to stretch the muscles you worked. Hold each stretch for 20 to 30 seconds. Do not hold your breath and do not bounce. Instead, inhale when you are at a comfortable stretch, feeling slight tension but not pain. Exhale and try to increase the stretch slightly. Keep breathing throughout each stretch, even after you have reached maximum comfortable extension.

Achtung!

We all have heard about muscle-bound football players or other athletes who emphasize weight training. Being muscle-bound means being inflexible, which is a result of not stretching commensurate with strength training.

The following are a baker's dozen of super stretches:

1. Butterfly stretch. Sit on the floor or on a mat with the soles of your feet together and your knees out. Grab your feet with both hands and, bending from the hips, gently pull your body forward. This stretches the groin area and the lower back.

2. Modified hurdler's stretch. Sit on the floor or on a mat with your left leg bent (imagine it as half of sitting cross-legged) and your right leg at a 45-degree angle from your body. Try to keep your right leg as straight as you can, although beginners often need to bend it. Raise your left arm, curve it over your head, and stretch your right arm out as far as you can over the right leg. Change sides. Your goal is to eventually be able to keep your straight leg flat on the floor, flex your foot, and grab onto that foot. This stretches the hamstring, calf, and lower back.

3. Back-of-leg stretch. This stretch has two parts. First, stand with your weight on your left foot and your right foot reaching straight back. Keeping your back heel on the floor, bend your left leg at the knee and move your hips forward with your weight on the left foot. You will feel the stretch on the back of your right leg. Next, shift your weight to your right foot, raise your left toe, bend your right knee slightly, and move your hips back, keeping your weight on your right foot. You will feel the stretch in your left hamstring. Change sides. As an option, you can stand a slight distance from a wall, chair, barre, or other object for stability. This exercise stretches the Achilles tendon, calf, and hamstring.

4. Hip-flexor stretch. From the same position as in the preceding stretch, keep your weight evenly on both feet and sink straight down, lifting the heel of your back foot off the floor. Change sides. This stretches the hip flexor.

5. Quadriceps stretch. Stand near a wall, a chair, a barre, or another object, and hold on with one hand for stability. With your left knee slightly flexed, bend your right leg up toward your buttocks, reach back with your right hand, and grab your foot. Gently pull your right foot toward your body. Change sides. As an option, you can do a cross-stretch version in which you grab your left foot with your right hand and vice versa. Another alternative is to lie on your side on a mat or on the floor, bending the knee of the top leg toward your buttocks and reaching back with the same arm to grab the foot. This stretches the quadriceps.

6. Runner's lunge. Kneel on a mat or on the floor with a folded towel under your knees as a cushion. With your hands on either side for support, move your right foot forward until your knee is directly above your ankle at a 90-degree angle to the floor. Do not hyperextend (move the knee of the supporting leg in front of the ankle) or support your body weight on your hands. Change sides. This stretches your hip extensors, lower back, and quadriceps.

7. William's stretch. Lie on your back on a mat or on the floor. Bend your left knee and keep your left foot flat on the floor. Bend your right leg and raise it toward your chest. Reach under your knee and support your right thigh with your hands. Pull your leg toward your torso. Change sides. This stretches the lower back, hips, hamstrings, and gluteals.

8. Lying hamstring stretch. Begin as in the preceding stretch. Slowly straighten your right leg, pulling it gently toward you. Flexing the foot intensifies the stretch. If you cannot accomplish this by reaching around your leg, loop a small towel or band around your foot and pull it toward your body with both hands. Lower your leg to the floor. Repeat the lift-and-pull sequence eight times. Change sides. This stretches the hamstrings and gluteals.

9. Glute stretch. Stand on your left leg in front of a pole that cannot move and grasp the pole firmly with both hands. Place your right foot just above your left knee. Bend the left knee and sit back on that standing leg, holding on to the pole for support. Change sides. This stretches the gluteals.

10. Reach. From a seated position with your back straight and your legs bent comfortably in front of you, or while standing with your feet shoulder-width apart, reach both arms upward, interlace your fingers, and turn your palms up toward the ceiling. Push your arms back slightly. This stretches the shoulders, arms, obliques, and back.

11. Triceps stretch (also called an arm pullover). From a seated or standing position as in the preceding stretch, raise your left arm over your head with your elbow bent and your hand behind your head. With your right hand, grasp your left elbow. Gently pull your elbow and bend your upper arm gently to the right. Change sides. This stretches the triceps, lats, obliques, and waist.

12. Rotation stretch. From a seated or standing position, as in the William's stretch, twist your upper body to the left at the waist and turn your head to look over your left shoulder. Change sides. If you are doing this while standing, simply place your hands at your waist. If you are doing this while seated, it is slightly more complicated. To stretch to the left, bend your left leg comfortably in front of you (again, half of sitting cross-legged), cross your right foot over your left thigh, and place it on the floor. Place your left hand on the floor behind you, grasp your right thigh with your right hand, and twist your upper body gently to the left. Turn your head to the left. This stretches the middle and lower back and your waist. The seated version also stretches the outer thigh.

13. Full-body stretch (also called an elongation stretch). Lie on your back on a mat or on the floor. Raise your arms over your head (on the floor, not raised in the air) and keep your legs straight. Stretch your arms and hands up and your legs and feet down, elongating your body. Try to make yourself as tall as you can. Turn over onto your abdomen and repeat. You can do an optional cross-stretch, reaching away from your body first with your left arm and right leg and then switching sides. This stretches the arms, legs, and torso.

Remember that you do not want to stretch to the point where tension becomes pain. Pain means you are overstretching or stretching too quickly, and this can lead to an injury.

The Least You Need to Know

- Consult with a personal trainer before you start weight work.
- You will strengthen your muscles by lifting weights, whether you use machines or free weights.
- To build big muscles, do fewer repetitions using heavy weights, but to tone muscles, do more reps using lighter weights.
- It is vital to stretch after a weight workout to increase your flexibility even as you become stronger.

Chapter 8
Iron-Free Resistance Training

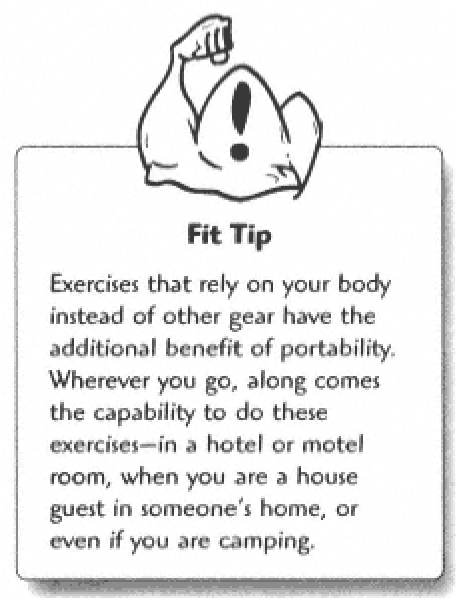
In This Chapter

- Use your body weight instead of iron for strength training
- It's buyer beware for fitness devices hawked on television
- Exercise tubes, bands, and balls: simple and effective
- Water exercises: low-impact and gentle on the joints

When it comes to strength training, especially for new exercisers, no single method works best for everyone—and you don't have to use a single method all the time. In fact, it often is better to have more than one type of workout in your repertoire and to vary your training. Mixing various kinds of strength training, cardiovascular conditioning, and sports is called *cross-training*, but you can consider varying your strength condition to be targeting cross-training. Not only is it more interesting than doing the same thing all the time, but it also reduces the likelihood of injury. Remember that you will build up and tone your muscles by working against resistance. To strength-train, you need to work your muscles to fatigue. Some people love to pump iron—and you might, too—but you might prefer another method that suits you. No matter how you strength-train, if you do it regularly and properly, you will get stronger and fitter.

There are four basic types of iron-free strength training. The first uses your own body instead of iron to create resistance. The second relies on other types of equipment to provide the necessary resistance for a strength workout. The third type is aquatic exercise, in which the water offers resistance. The final option is to exercise with a partner, because two people can offer strength-building resistance for each other. Trainers often use this technique. The important thing is to start modestly and keep at it—whatever *it* you choose to do.

Pump Your Body Instead of Iron

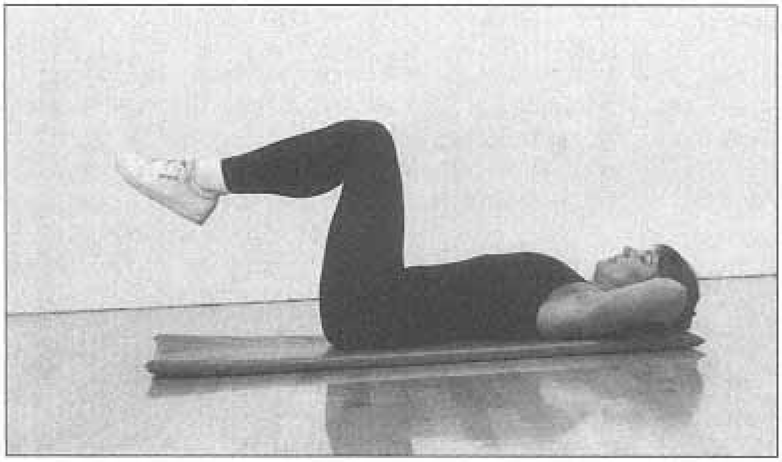


Exercises that use your own body weight are so fundamental to a strength-training program that they often are lumped in with weight training. They fit in well with the weight-training days on your program. Even the most ardent weightlifters often do push-ups, sit-ups, or crunches along with their ironwork.

Some of these exercises, such as push-ups and abdominal crunches, require you to heft your own body weight. Others are traditional calisthenics that you might have done in a long-ago gym class. They get the joints and muscles moving to provide general toning and mobility conditioning rather than specific strength or aerobic training. Several target the lower body, which many people say they most want to tone. For each of the exercises that follow, begin with a set of eight to 10 reps if you can, rest, and then do another set. When sets of eight or 10 become easy, increase the number of reps in increments of five and then up the number of sets to three or four. The key to success is slow, controlled movement through a full range of motion. Mega-reps are not necessary. Ultimately, you can notch yourself up to more advanced versions of these exercises.

Abdominal Crunches

Crunches are the most basic abdominal exercises in fitness today. There are countless variations on the theme of crunches. In all of them, you begin by lying on your back with your lower back pressed against the mat or floor, your knees bent, and your feet flat on the floor. Begin by contracting the abdominal muscles and then slowly lift and lower your head, shoulders, and upper back. You can select your arm position. If you feel tension in your neck, place your hands behind your head with your fingers interlaced or touching. If your neck does not bother you, you can extend your arms straight in front of you or overhead, or you can place them on your thighs and slide them up as you lift your upper body, shoulders, and head. If you are comfortable doing so, you can cross your hands over your chest. Some trainers advise clients to tuck the chin in; others advise to keep the cervical area straight. *Lightening* your feet off the floor, thus releasing weight from them, as you lift your upper body makes the crunch more challenging. You can feel this effect by alternately raising your right and left toes with each crunch.



No matter what variation you select on the abdominal crunch theme,
keep your lower back flat on the mat.
(Photo: Anne W. Krause)

Protect your back by tilting your pelvis forward so your entire spine is in contact with the floor, and contract your abdominals to keep it that way. To work deeper into the lower section of the rectus abdominus, keep your heels on the floor but alternately raise your left toes and then your right toes as you come up for each crunch.

Fitness Fact

The commonly used word "abdominals" includes the rectus abdominus, a flat, wedge-shaped muscle reaching from the rib cage to the pubic bone; the obliques, which are on each side of the waist; and the transverse abdominus, which wraps around the waist like a cummerbund.

Whichever position you prefer (and this might change over time), suck in your gut so that your lower back presses against the mat or floor. You can visualize pressing your bellybutton *through* your back to the floor. You also can think of this as not pushing your stomach out as you crunch. Work through the entire exercise slowly and steadily, without heaving yourself up or flopping down.

Modified Crunches

Crunches work the entire rectus abdominus, but several other exercises also concentrate on the lower section of the abdominal area. The easiest of these is a crunch with a modification. Lie on your back as you would to start your crunches, but let your knees fall outward, keeping your feet together. When you do your crunches from this butterfly position, you will feel your lower abs handling more of the load. To tone the "love handle" area on the sides of your torso, you need to work your obliques. The easiest version is to place your hands behind your head for support and begin alternating your left shoulder toward your right knee and then your right shoulder toward your left knee.

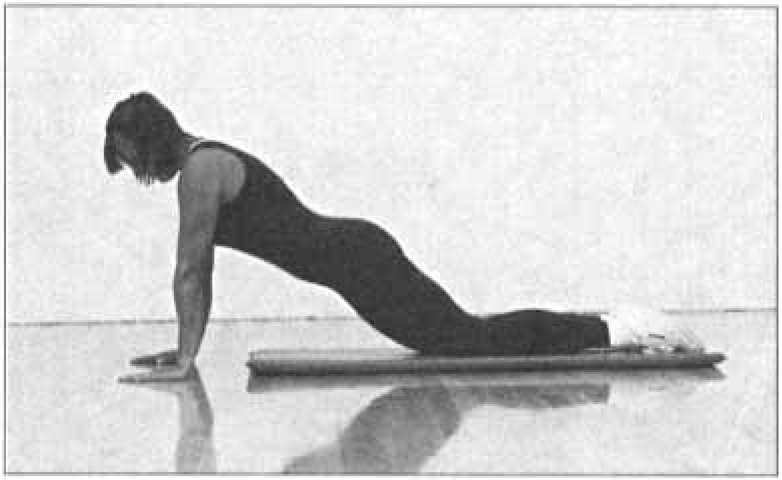
You also can increase the intensity of your abdominal exercises by doing a pulse set after your regular crunches. Pressing your lower back to the mat or floor, pulse for one set at the top of the exercise and then hold the very highest position for a count of 10. Remember to breathe. Other advanced abdominal exercises involve more challenging positions. For example, you can lift your legs off the floor and cross your ankles when you do your crunches to really work your waist. Reverse curls are the power exercise for the lower abs. Lie on your back, lift your legs straight up (or raise them and cross them at your ankles), and place your hands under your pelvis to support your back. Contract your abdominals to raise your hips off the floor. Be sure to suck in your gut with each lift, or else your back and hip flexors will do most of the work. Finally, when your abs are really strong, you can intensify your exercises further by combining crunches and reverse curls.

After you work your abs, remain on your back to stretch. First, raise your hands above your head and stretch your arms, legs, and torso, elongating your entire body. Next, bring your knees up to a bent position and let them fall to one side of your body. Stretch your arms to the other side. You also can roll over onto your abdomen with your legs stretched behind you. Place your hands, palms down, on either side of your body and raise your upper body. Stop at a comfortable point to protect your back. You do not have to straighten your arms fully for this to be an effective stretch.

Push-Ups

Before septuagenarian Jack Palance accepted an Oscar for his supporting role in *City Slickers,* he got down on the stage and wowed the audience by doing one-arm push-ups. You won't ever have to do this, but it should be motivational to know that someone his age did—in public.

You can start your push-ups very gently and modestly. Get down on your hands and knees on the floor or on a mat. For the most basic push-up, start with your feet and shins on the floor and your hands a little more than shoulder-width apart. Keeping your back straight, bend your elbows to lower your shoulders and upper body until your forehead and nose almost touch the floor. Straighten your elbows to raise yourself. You can even ease into push-ups by starting from a standing position and holding on to a horizontal support such as a sturdy porch or deck railing or a ballet barre. Bend your elbows to angle your upper body toward the support and straighten them to return to the starting position.



The easiest push-up position requires your shins and feet on the mat,
a flat back, and your hands a little more than shoulder-width apart.
(Photo: Anne W. Krause)

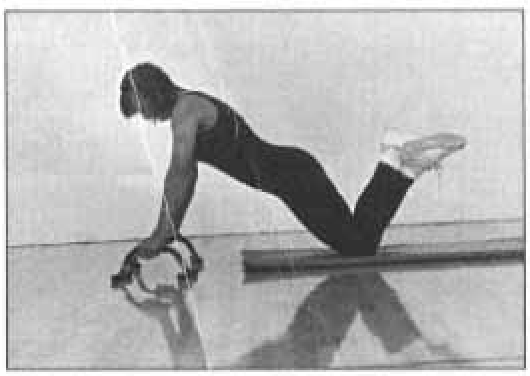
Fit Tip

If your wrists bother you when doing push-ups, you can use special push-up grips that resemble handles on sturdy bases. If you aren't using a mat, place a folded towel under your knees for comfort.

The next level of push-ups is nicknamed "girlie push-ups" because even many fit women, who generally cannot build upper-body strength like men, do them. Begin as in the basic push-up, but cross your ankles to raise your feet off the floor. Keeping your back straight, bend your elbows to lower your torso until your face, chest, and hips almost touch the floor; then straighten your elbows to raise yourself. You can begin with two sets of eight or 10 push-ups and, when you are comfortable doing these, continue until you cannot complete one fully.

For full or military push-ups, which only very fit women and reasonably strong men can do, keep your body straight, supporting your weight on your hands and toes.

Begin bending and straightening your elbows to raise and lower your body. You can do full push-ups to fatigue and then complete the exercise with one of the easier versions. If you ever make it to Jack Palance mode, you can put one arm behind your back!




Using push-up grips is easier on your wrists.
(Photos: Anne W. Krause)

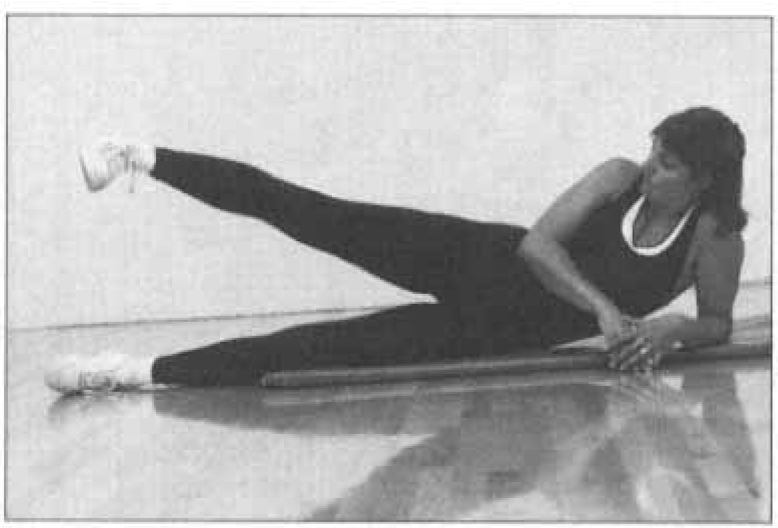
Stretching after push-ups relaxes your arms, shoulders, and back. First, stay in a kneeling position with your feet flattened against the floor and shift your hips back until you are sitting on your lower legs. Stretch your arms in front of you. Next, sit with your legs crossed comfortably in front of you and reach behind your back, clasp your hands together, and press them back to stretch your upper arms, shoulders, and chest. Then bring your hands in front of your body, clasp them at shoulder level, and round your back to stretch your arms, shoulders, and upper back.

Triceps Dips

Sit at the edge of a straight chair or weight bench with your feet slightly in front of you and slightly apart. Place your hands on the edge of the seat next to your hips with your palms down and your fingers forward. Slide off the seat, supporting your weight on your hands. Bend your elbows 90 degrees, flexing your knees to lower your hips toward the floor. Then, straighten your elbows to return to the starting position, with your hips level with the seat. Slide back onto the seat to rest between sets or whenever you need to. To stretch, raise your right arm and bend it behind your head. Grasp your right elbow with your left hand and press back against your forearm with the back of your head. Switch sides.

Leg Lifts

Lie on your right side with your hips stacked. You might be comfortable propping your head on your right hand, or you might prefer to extend your right arm out and cushion your head on it. To work your outer thigh, bend your right leg to a 45-degree angle from your body for stability. Raise your left leg from the hip until it is parallel to the floor and then lower it to the starting position. When you are ready for a slightly more advanced exercise, straighten your knee while your leg is raised, bend it, straighten it, and then lower it. When you can easily do two or three sets of each of these, you can add a set of small pulses and hold your leg up at the highest part of the lift for a count of eight and release. Switch to the other side.

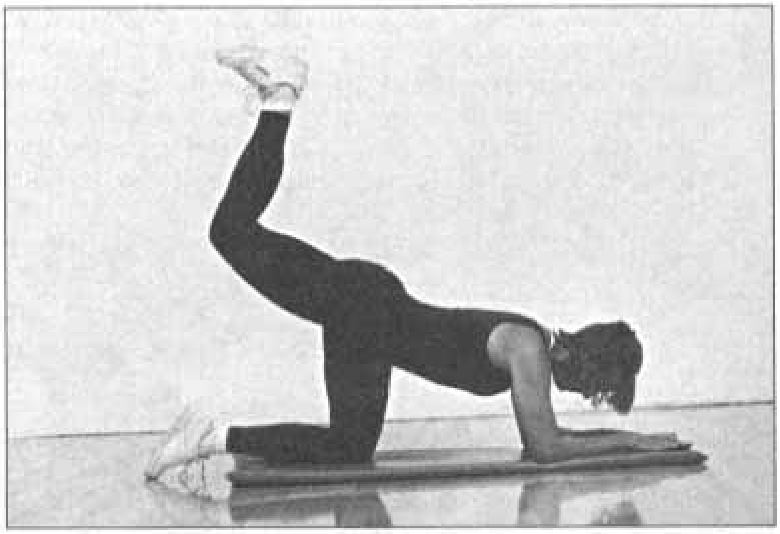


Leg lifts tone your gluteal muscles, but be sure to keep your back flat, not arched.
(Photo: Anne W. Krause)

To work your inner thigh, lie on your right side with your hips stacked. Cross your left leg over your right and place your left foot on the floor. This moves it out of the way of the right leg, which will be your working leg for this exercise. Lift and lower your right leg. When you are strong enough, finish with small pulses and then contract your muscles to hold your working leg at the highest part of the lift for a count of eight and then release. Switch legs. (The movements of these exercises are the same as for the outer-thigh leg lifts and inner-thigh leg lifts described in Chapter 7, but here, you are using just the weight of your own legs to provide resistance.)

Fitness Fact

The outer-thigh exercise is known as **abduction,** and the inner-thigh exercise is known as **adduction.**



This is another form of leg lift to tone your glutes and quads; be sure to keep your elbows on the mat to protect your back.
(Photo: Anne W. Krause)

Rear Leg Lifts

To work your hamstrings and gluteals, get down on all fours on a mat or on the floor. Then, to protect your back, lower your elbows so that your forearms are resting on the floor. Raise and lower your right leg, keeping it straight behind you and elevating it no higher than the level of your hips. Then, bend your right knee, and raise and lower your leg with your foot flexed and the sole pointing to the ceiling. You can add a set of pulses in each position, and then, when you are stronger, you can finish by holding your leg up for a count of eight to 15 seconds. Another variation is to raise your leg with your knee straight, then bend it so that the sole of your foot points at the ceiling, straighten it again, and then lower it. Repeat with the left leg.

Gluteal Squeeze

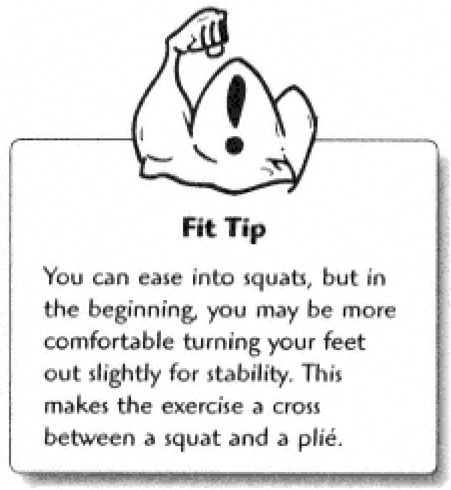
To tone your buns, lie on your back on a mat or on the floor with your feet shoulder-width apart. Keep your lower back pressed to the floor and raise your hips, and then alternately squeeze and release your gluteal muscles. This is a very small motion. By keeping your feet in place but bringing your knees together, or by moving your feet a few inches farther apart or closer together, you will vary the exercise slightly and work a slightly different area. Finish the exercise by contracting the muscles as hard as you can and holding for eight to 15 seconds.

Squats

A tried-and-true lower-body exercise for anyone without knee problems is the squat, which helps strengthen and tone the quadriceps, hamstrings, calves, and glutes. Stand with your toes pointing straight ahead and your feet hip-width apart. Keep a natural posture with your back straight but arched out or hunched over. Keep your knees pointing straight ahead and press your hips forward without bending at the waist and keeping your back straight. You can steady yourself on a chair back, a barre, or another support if you need to, or you can rest your hands on your thighs or keep them out in front of you for balance.

Keeping your feet firmly on the floor and your heels pressed down, squat slowly and no deeper than 90 degrees (that is, no lower than a position in which your thighs are parallel to the floor). Rise up at the same tempo, pushing your body back to a standing position. When you get stronger, you can add extra weight in the form of dumbbells at your sides or, eventually, a barbell across your shoulders. To stretch, balance on the left foot, bring the right foot up behind you toward your butt, grab the forefoot with your hand, and stretch gently. Switch sides. Then stand on your left foot again and slide your right leg behind you, pressing the right leg toward the floor until you feel the stretch along the back of that leg. Switch sides.

Lunges



Lunges are wonderful for toning the whole leg, but they are not recommended if you have knee problems. In each of the versions described, you lunge by stepping with one leg and sinking down, which causes the knee of the stationary leg to bend. Switch sides to work both legs. (Some people prefer to alternate legs, while others prefer to do one set per leg and then change.) All lunges start from a standing position, and when you have done each one, return to a standing position:

♦ For the standing lunge, move your right leg straight back behind your body, flexing the right foot, and sink down. This causes your left knee to bend.

♦ For the diagonal lunge, move your right leg out at a 45-degree angle and sink down. This again causes the left knee to bend.

♦ For the lateral lunge, step the right knee out to the side and sink down, once again causing the left knee to bend. The important thing is to keep the left knee over the ankle.

Calf Raises

For a more shapely lower leg, stand with your feet slightly less than shoulder-width apart and hold on to a chair back or door frame for balance. Rise up on your toes and come down again, stopping just short of your heels touching the floor. Repeat the motion with your heels together and toes pointing outward. To add challenge, you can alternate raising your heels and toes, or you can stand firmly on an aerobic step or on a stair in your home, letting your heel drop below the edge each time you come down. In the most challenging version, place one foot behind the ankle of your other leg, and rise and come down on one leg at a time.

Trimmers and Toners from TV to You

Cable television is awash with infomercials for specialty items to help you trim or tone this body part or that. Such devices have been around for years, but seductive television infomercials, often with celebrity endorsements, imbue them with an in-your-face presence that makes them hard to ignore. Many of the products hawked on television also are available at discount stores, sporting goods retailers, and perhaps even supermarkets. Some products are sturdy and decently built; others are flimsy and marginally effective at best. It's hard to tell on the TV screen, and most people just shove purchasing mistakes away rather than take advantage of the money-back guarantees that usually are part of the offers. If a product seduces you, try to take a good look at a real sample and evaluate its quality in relation to its price. You can always go home and order it, or you can buy it locally, perhaps even on sale. If you buy from a local retailer, you won't have to pay the dreaded shipping and handling add-on, and if you are unhappy with the product or it doesn't live up to its claims, you're more likely to return it to a local retailer than mail it back to a distant company. You will also find that such items are often available at garage sales, because many people order them but never use them.

Over the years, the fitness marketplace has probably seen more types of abdominal exercisers than any other category. One early low-tech (and low-cost) product consisted of a system of cords and pulleys with five loops, one to go over a doorknob and four for the wrists and ankles. You just needed to lie on your back on the floor and alternately move the left leg/right arm and right leg/left arm. More recent abdominal exercisers have been tubular devices twisted into a cagelike form. You rest your head on a pad, and your hands grasp the side supports as you work your abdominals by doing caged crunches. Brands designed for abdominal exercising include Ab Rocker, Ab Sculptor, Ab Trainer, Ab Blaster, EZ Crunch, and Perfect ABs. At the peak of their popularity, they cost up to about $100, but prices quickly dropped dramatically.

Lower-body toning devices also abound. The ThighMaster, with its celebrity infomercial endorsement, enjoyed a high profile during its heyday. To use it, you put this resistance device between your thighs and squeeze your legs together. Other lower-body toners include Better Buns, Bun and Thigh Sculptor, BunTrainer, Fit Thighs, IsoBun, and UltraBurner.

In addition to these products that target specific body parts, multistation exercise machines and aerobic machines for home use are marketed on television. Some are sturdy, quality devices that really enhance your workout. These will be discussed in the section about setting up a home gym in Chapter 16, "Where to Work Out." Others are low-quality devices that mainly enhance the marketers' pocketbooks. Whatever the device, if it requires you to move your body or to work your muscles against resistance of some sort, it probably won't do any harm. If you're willing to make the investment in a product that appeals to you, you can add it to your home fitness arsenal and use it to spice up your routine or to supplement longer strength-training and aerobic workouts. Always remember that none of these fad devices will do anything for you that mainstream gear or traditional exercising won't do. And like all other fitness equipment and programs, such apparatus are only good if you truly use them.

Buyer Beware

Fit Tip

You can compare prices for products promoted on television infomercials (as well as obtain phone numbers and company addresses) at www.magickeys.com/infomercials/catl.html/.

Do not believe exaggerated claims of calorie burning or conditioning in just a few minutes of exercising a day. In short, if a product or program sounds too good to be true, it probably is. The American Council on Exercise has specifically sited the example of Time Works, which markets an exercise machine that it claims helps achieve "full-body fitness in just four minutes a day." The device combines upper-body twisting and lower-body stepping. The manufacturer asserts that users can achieve a total aerobic workout, a total resistance workout, and a dynamic flexibility workout—all of which is equal to more than 60 minutes of traditional exercise.

The ACE commissioned Dr. David C. Nieman of Appalachian State University to test this $600 device. Not surprisingly, the study concluded that the manufacturer's fantastic claims are simply not true. The company asserts that people will "burn nearly three times the calories of a treadmill, rider, or strider!" In fact, study participants (12 men and 16 women of college age and average weight) burned eight calories per minute, and their metabolism returned to normal 15 minutes after they stopped exercising. Their total energy expenditure was about 40 calories, which is trivial in a fat-loss program. The subjects did gain some cardiorespiratory and lower-body strength benefits, but there was no gain in upper-body strength or joint flexibility. Harmful? No. Worth $600? Not really. The ACE also reported that from this product's release in early 1998 until early 1999 when the study was completed, Time Works racked up more than $60 million in sales. With profits like these, you can hardly expect infomercials for fitness products to go away.

Strike Up the Bands (and Tubes)

Achtung!

Red-flag products include creams, pills, supplements, and other chemicals that you rub on or swallow. Although exercise gadgets at best can be beneficial and at worst can be a waste of money, lotions and potions often are useless even if you do use them, and some might carry hidden dangers to your health.

You can do practically a full-body workout using *stretchercisers*—various styles of oversized elastic bands, cords, or tubes with or without loops or handles. These are portable, easy to use, inexpensive, and effective strength-training aids. Bands are flat pieces of elastic rubber with various resistance levels. Some come premade into loops; others need to be knotted for exercises that require loops. Exertubes are elastic tubes, usually with handles, that also come in various strengths. Less elasticity requires more strength and vice versa. Both types are color-coded so that their relative resistance is easy to identify. Just as you use different weights for different exercises, you may find yourself using different elasticities. You also can increase the amount of force required for an exercise by shortening a band.

Bands and tubes are extremely versatile because you can do versions of various curls, presses, leg lifts, leg raises, and other stretchercises. They work the muscles when both stretching and releasing the tension—which, if you recall, is one of the benefits touted of expensive, gym-quality pneumatic and hydraulic strength-training apparatus. Exercising with bands or tubes mimics weight training, because they come in varying degrees of stretchability and require commensurate amounts of effort. Unlike iron weights, however, you can't precisely define how much resistance you are using when you are working with elastic. In other words, a 10-pound weight weighs 10 pounds, but a band offers relatively easy, moderate, or challenging resistance, and it can change as the band begins to wear. Before you begin working with any kind of "stretcherciser," check the band or tube for wear, especially in a gym, where it may get a lot of use.

SPRI Products sells several styles of stretchercisers: Xertube, Xercise Band, Can-Do Xercise Band, the Door Strap, the Xercuff, the Xering, and even the Step Tube, which is designed for use with a step routine. Most sell for less than $10. For information, call 1-800-222-7774.

Isometrics: Icing for the Fitness Cake

Charles Atlas was America's first fitness god. Before "beefcake" was a word and workouts were a way of life, his story was known all over the land. "I Changed Myself from a Puny 97-Pound Weakling into the World's Most Perfectly Developed Man," screamed magazine ads in the 1930s, '40s, and '50s. The Atlas approach to muscular training and body-building went by the trademarked name of Dynamic Tension—in other words, it was built on a strong isometric foundation. It is still around, and while it is a quicker fix than most fitness professionals now prefer, his system certainly has withstood the test of time. With a holistic approach to strength and health, Charles Atlas was way ahead of his time.

Fitness Fact

Atlas passed on some years ago, but Charles Atlas Ltd. is still around marketing its low-cost fitness program which promises fitness in "only 15 minutes a day." Contact the company at 888-MR-ATLAS or www.charlesatlas.com.

What worked for Charles Atlas and his 30 million reported students throughout the world can help you strengthen and tone, too. Think of isometrics as equipment-free strength training. Isometrics, which often are used as rehabilitation, are muscle contractions. Most people do not consider them to be their main work out routine, but they are good to have in your fitness repertoire because you can do them anytime and with no equipment. Isometrics use minimal movement to build muscles. Instead, the force of muscle contraction, muscle-against-muscle resistance, or muscle-against-stationary-object resistance builds strength. This concept is easy to understand as soon as you try it. Hold your hands out in front of you with your left palm up and your right palm down. Press your hands together as hard as you can. You can feel your pectoral, shoulder, and arm muscles working. This is an example of isometric exercise. (In fact, you can add this to a list of isometric exercises.)

Fit Tip

Get into the habit of contracting and releasing muscles—abdominals, glutes, shoulders, even your chin—when you are stuck in traffic, standing in line, sitting in a theater waiting for the show to start, or anytime you think about it.

You most likely have been doing isometrics without even realizing it. When you suck in your gut, you're doing an isometric contraction. Runners automatically use isometric contractions to stabilize their torsos. Another example is the Kegel exercise, a contraction of the vaginal muscle, which women are counseled to do during pregnancy to counteract the pressure of the fetus on the bladder and afterward to tone the muscles stretched by childbirth.

Here are some isometric exercises that you can do virtually anywhere, anytime. Begin by holding each contraction for five seconds. Two sets of 10 repetitions is a good start. You can work up to 10 and then 15 seconds per contraction and then three or more sets.

♦ Stand in a doorway, hold your hands at thigh level, and then press the backs of your hands outward against the door jambs. This works the deltoids and supraspinatus.

♦ Stand in a doorway, raise your right arm above your head, and push your arm against the door frame. Change sides. This works the pectorals, obliques, and arms.

♦ Stand in a doorway, bend your elbows, and press the palms of your hands—at chest level—outward against the door jambs. This works the pectorals and biceps.

♦ Stand facing a wall about two feet away from it. Raise your hands to shoulder level and place your palms against the wall. Contract your abdominal muscles, straighten your elbows, lean your body weight toward the wall, and push against it. This works your arms and shoulders.

♦ Stand with your back against a wall. Tighten your abs so your back is firmly against the wall. Walk your feet forward, a few inches at a time, until your thighs are at least at a 45-degree angle but no more than a 90-degree angle from the floor. (At 90 degrees, your thighs are parallel to the floor, at a right angle to both your upper body and your shins.) Hold this position for as long as you can and then walk your feet back to stand up and relax. Repeat. This exercise also is known as the "wall-sit." It works the quadriceps and is an especially effective exercise for preseason ski conditioning.

♦ Sitting in a firm chair, place your hands on your thighs and press down hard, leaning forward slightly. This works your abdominals.

♦ Still sitting, place your hands palms down on the front of the chair seat and press down. This works your biceps and shoulders.

♦ Still sitting, press your legs tightly together or place a rubber ball between your knees and squeeze. This works your inner thighs.

♦ While sitting or standing, place your hands in front of you at chest level with your palms together, as if praying. Press your hands toward each other. This works the pectorals.

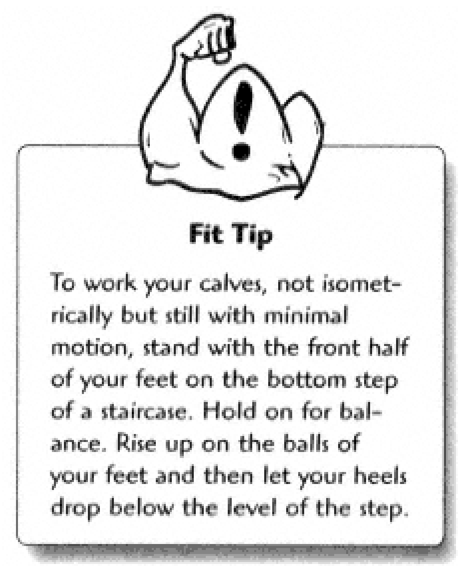
♦ Sitting in a chair, hook your feet under the edge of a desk (pad the tops of your feet with a folded towel or something else soft), the front of a sofa, or another large piece of furniture. Press your feet upward. This works the quadriceps. A variation for the quads that does not require hooking your feet under a piece of furniture is to raise one leg at a time and hold it parallel to the floor with the toes flexed.

♦ Standing beside a wall, door frame, or piece of heavy furniture, push your right ankle against the stationary object. Switch sides. This works the outer thigh of your right leg and inner thigh of your left leg.

♦ While seated in a straight chair, hold on to the front of the seat and pull your shoulders up and back, squeezing shoulder blades together. This works the rhomboids and trapeziuses.

♦ While seated at a table, press your palms against the underside of the table with your elbows bent at a 90-degree angle. This works the forearms.

Ball Game



Fitness can be a whole new ball game with a big, inflated, rubber orb called a fit ball or Swiss ball. Developed by Swiss physical therapists to help patients regain strength, balance, and flexibility, the fit ball makes a workout both productive and fun. Several dozen exercises have been developed to take advantage of this workout tool that looks like a great big toy. Here are several:

♦ **Abdominal strengthener.** Sit squarely on the ball. Slowly walk your feet out and simultaneously roll down onto your spine until your torso is parallel to the floor. Slowly roll back up, contracting your abdominal muscles to help regain the sitting position.

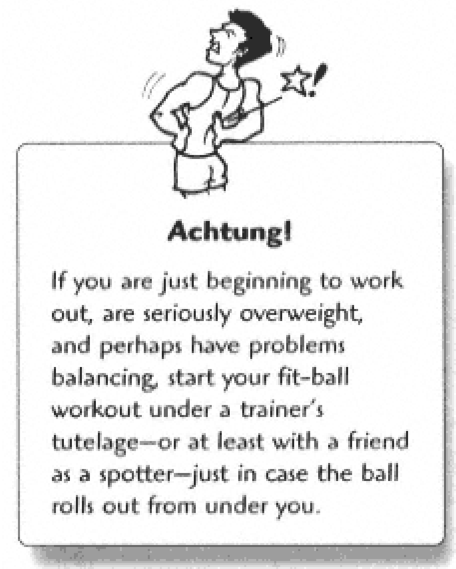
♦ **Back strengthener.** Kneel behind the ball and drape your body forward over it with your hands flat on the floor in front of the ball. Slowly walk your hands forward so that the ball rolls down the length of your body past your hips. If you can, keep moving until your thighs are resting on the ball, maintaining a straight line from your head to your knees. Walk your hands back to return to the starting position. (Eventually, you might be strong enough to walk your hands so far forward and in such refined control that only the front of your ankles and tops of your feet are resting on the ball.) This exercise is sometimes called the "plank," and in addition to toning your back, it helps refine your balance and body alignment.

♦ **Push-ups.** Kneel behind the ball and drape your body forward over it with your hands flat on the floor in front of the ball. Move forward on the ball in the plank position as in the preceding exercise. When you are comfortably balanced, bend your elbows to lower your chest toward the floor. Straighten them to come up again. This push-up is easiest when the ball is under your hips, it is harder when the ball is under your thighs, and it is more challenging still when the ball is under your lower leg. These push-ups tone the pectorals, deltoids, and triceps. They also work your obliques and abdominals more effectively than conventional push-ups because you have to use these muscles to stabilize yourself from rolling off the ball.

♦ **Quadriceps strengthener.** Stand with the ball between your lower back and the wall. Squat down until your legs are at a 90-degree angle, keeping the ball against the wall. The ball will roll upward to about shoulder-blade level. Straighten your legs, and the ball will roll down.

When you first use a fit ball, you might feel wobbly and out of control, and you might even end up on the floor. The small, quick-reflex adjustments you make to stay on the ball will help your balance and tone the muscles of your torso.

Play the Roller Derby


Achtung!

If you are just beginning to work out, are seriously overweight, and perhaps have problems balancing, start your fit-ball workout under a trainer's tutelage—or at least with a friend as a spotter—just in case the ball rolls out from under you.

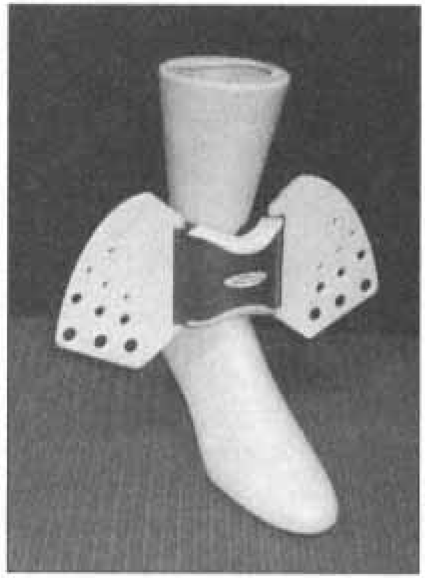
Jyl Steinback, a personal fitness trainer who worked at the Elizabeth Arden day spa in Beverly Hills and at Arden's Maine Chance in Scottsdale, developed a stretching and toning program called "Roll Yourself Thin in 12 Minutes." This medley of 14 side-to-side rolling exercises, done sitting or lying on the floor, is pleasant and can help muscle tone and flexibility. Thinness—if it comes—is more the result of the fat-free diet Steinback also espouses.

The exercises are fun and easy, and with no equipment required, they offer do-anywhere convenience, so they are a useful adjunct to a more comprehensive fitness program. One example is Steinback's Love Handle Roll. Lying on your back, stretch your arms out to your sides with your palms up and your elbows bent slightly. Raise your feet over your hips with your knees together. Keeping your shoulders and arms on the floor, roll both knees alternately to the left and to the right. This and the other 13 exercises, which should be coupled with warming up before and stretching afterward, are described in a pocket-size book available by calling 888-FAT-FREE (888-328-3731).

Liquid Resistance

Aquatic exercise is one of the most effective ways to add resistance training to your program without compromising your joints. It is especially effective for obese people, pregnant women, arthritis sufferers, and anyone getting back to a workout routine after a back or knee injury. Water all but eliminates the effects of gravity on the body and cushions weight-bearing joints, making aqua exercises the lowest of low-impact workouts. At the same time, water provides resistance to force, which makes it an effective strength-training aid.

Hop into the pool for resistance
training that won't stress your joints
(Photo: Aquatic Exercise Association)



Fins add resistance to an aquatic
workout.
(Photo: Claire Walter)

You can join a fitness class or buy special aquatic exercise equipment such as buoyancy devices that suspend your body with your shoulders, neck, and head above water. Other products designed for water exercises include webbed gloves, aquajogging belts, underwater runners, and paddlelike dumbbells that use an oversize surface area rather than weight to increase resistance. You also can increase your workload with a minimal investment. Commandeer a child's kickboard and push or pull it underwater to enhance arm, shoulder, and back muscles.

Fitness Fact

Water can be four to 42 times more resistant than air, depending on the speed of movement against it and the surface area being moved against it.

Here are some aquatic exercise tips from the manufacturer of AquaJogger (a buoyancy belt), AquaJogger Webbed Pro Gloves, DeltaBells (paddle-shaped dumbbells that use surface area rather than weight to increase resistance), and AquaRunners (underwater exercise footwear):

♦ Consciously work with resistance by finding the path of most resistance.

♦ Keep all moves below the water line.

♦ To make moves easier, bend the limbs and move more slowly.

♦ To increase resistance, straighten the limbs and increase speed.

♦ Push and pull the water to work forces equally in both directions to achieve balanced muscularity.

♦ Avoid being a "bobber" (a person who bounces up and down in the water), and try to keep your torso calm.

♦ Avoid using buoyancy-assisted moves.

♦ Because you are working with resistance, be sure to pay attention to any injuries. If a particular movement causes pain, eliminate it from your routine.

The Least You Need to Know

- More is not necessarily better. Slow, controlled movements are more effective than many repetitions with poor form.
- Fitness devices can be useful or useless, but most are harmless; check them out at stores and remember that most have a money-back guarantee.
- Exercise bands and tubes create resistance, because stretching them requires muscular strength.
- Water exercises are the kindest on the joints, because they are non–weight-bearing activities.