

FEELING Great!

EXERCISE FOR ALL

A PROJECT OF KSU COOPERATIVE EXTENSION SERVICE & KANSAS HEALTH AND SAFETY EXTENSION CORPS

Incorporate Exercise into Your Daily Life

Beginning an exercise program

To achieve physical fitness, you need to make a few lifestyle changes to easily incorporate exercise into your daily schedule. Many routines offer a chance for ten minutes of brisk walking or thirty minutes of physical activity that reaches an "aerobic" level—getting the heart to work faster and the major muscle groups to move.

While it may not seem easy to fit regular exercise into your routine, there are successful ways to help you get started.

What do you want to do?

Set a realistic goal as the first step of your exercise plan. An example of an attainable goal can be to decide you will get thirty minutes of exercise every day. It is especially important that you begin at a level your body can handle without undue stress (fatigue, pain, soreness, or loss of sleep) in order to avoid injury.

How will you reach your goal?

Find the best time in your weekly schedule for exercise and develop an exercise plan. Because the new fitness guidelines stress several minutes of activity throughout the day, it may be tempting to maintain the status quo and

assume that the chances for exercise will present themselves. However, without some specific planning, even the best exercise intentions can quickly be undermined.

Consider these points when you are evaluating your schedule for exercise opportunities:

- Is your employment within walking distance?
- Do you have breaks or time during lunch that you can use for walking or other activity?
- What regular errands do you have, such as light grocery shopping or banking, to which you could walk or cycle?
- Have you considered new hobbies that are active, such as gardening or tennis?
- Do you pay others to do household chores that you could do, such as mowing, raking, washing your car, or housecleaning?
- What types of indoor and outdoor aerobic



activities, in addition to activities that involve specific chores, errands, or hobbies, would you enjoy most? Consider cycling, walking, running, jumping rope, stair climbing, or aerobics to a video. Incorporate one or more of these into your week to enhance your fitness effort.

- Are there individuals in your neighborhood or work place who might respond positively to an exercise partnership if they were asked? Brisk morning or lunch-hour walks, an afternoon cycle ride, or an evening swim with another person can boost your motivation and provide accountability.

- Make your children an active part of your own exercise routine. Taking the children to the park or playing outdoor games with them is beneficial for everyone's overall fitness.

- Don't forget the teens. While younger children have an automatic "exercise" mode that's expended through physical activity, teenagers tend to get out of touch with their need for exercise. Both teens and parents can benefit from weekly cycling, family sports, and other outdoor activities.

Make the necessary schedule changes and personal commitments to work exercise opportunities into your day. The choice is yours as to how to work in your exercise and to what extent it fits into the daily routines. A specific activity, time, and location may work best for you, or you may be more successful with "adding" an activity to your daily schedule, such as leaving earlier to walk to work or taking up a sport or hobby.

Start small.

The general rule for beginning a fitness routine is to exercise several times a day for short periods, rather than for an extended period of time without stopping. Short periods of exercise will help to reduce fatigue and to stimulate your body at the proper pace for a

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New Exercise Guidelines

Benefits of daily activity

Despite the efforts of health enthusiasts and the encouragement of television stars touting their slimming gadgets, the statistics are bleak—more than 50 percent of adults are completely sedentary, according to the Centers for Disease Control. Even individuals who join a health club are only slightly more likely to make exercise a regular part of their daily lives; 37 percent cancel their memberships within one year.

While these facts are not encouraging, they do point to a lesson learned from the fitness emphasis of the last decade—life lived in the fast lane can only last so long.

For many people, an exercise program requiring a prolonged effort of intense physical activity is a ticket to failure. A specific, vigorous exercise regimen can be discouraging over time, much in the same way that extreme diet changes often fail when we lose the desire to keep up the accelerated dieting effort. Many individuals don't have time for a specific workout routine, especially one requiring access to a private gym or extensive time away from home.

A need to be active

Despite the information, there remains the need for individuals to be active; our bodies simply were not made to function through inactivity.

Decades of research have proven that our body's systems—cardiovascular, muscular, skeletal, nervous, digestive, etc.—need a proper balance of activity, rest, and nutrition in order to maintain healthy levels of production. Without this balance, system slowdowns, and even breakdowns, can occur. The result is greater potential for fatigue, lethargy, ill health, obesity, heart problems, and even premature death.

In 1987 at the University of Minnesota, a study of over 12,000 middle-aged men showed that moderate activity over a seven-year period reduced their chances of dying from heart disease by one-third and decreased their risk of dying from other causes by 20 percent.

Ongoing research by epidemiologist Ralph Paffenbarger at Stanford University suggests that expending a mere 2,000 calories a week through activity or

physical exercise can result in significant health gains.

A modest, consistent approach

"Inactivity is the big risk factor for disease," says Dr. Carl Casperson, an epidemiologist at the Centers for Disease Control, "but people can lower that risk by making simple behavioral changes."

Striking a balance between an excessive exercise routine and no activity at all is the ideal goal for most individuals. While the more rigorous guidelines still apply for those who enjoy an intense exercise program, the main goal for all individuals is a modest, consistent approach to getting fit.

Recent exercise guidelines released by leading American health authorities encourage fitness:

- as a routine of life,
- incorporated into regular, daily activities,
- amounting to one-half hour of cumulative, moderate activity,
- five or six days a week,
- to reduce the risk of disease.

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Flexibility: The Importance of Stretching Out

Most experts believe greater flexibility—the range of motion in a joint—helps prevent injury during exercise and in everyday activities. A joint's flexibility depends on the amount of "give" allowed by the muscles in the joint.

According to Dr. Daniel Rooks, research associate in orthopedic surgery at Harvard Medical School, the greater the range of motion in our joints, the more comfortable we will be performing our normal activities.

As we age, muscle fibers become less pliable and restrict motion. However, flexibility can be improved at any age. By doing regular stretching, twenty minutes a day five days a week, you can achieve noticeable improvement in a month.

When a muscle is stretched farther than it can go, sensitive structures called muscle "spindles" send a message to the spinal cord and brain which causes the muscles to contract. By repeating proper stretching techniques, these spindles "learn" to tolerate the tension and permit the muscle to extend still further. Stretching also lengthens the connective tissue in a muscle, allowing it to stretch further.

When a muscle group performs the same movement over a period of time without any variety in motion, "tracking," which limits the range of motion, can occur. Tracking can also result from remaining in one position too long, such as sitting in a chair all day.

"A static position puts pressure on your joints," says Dr. Robert Stephens, director of sports medicine at the University of Health Sciences Medical School in Kansas City, "either through your own body weight or through muscular contractions, making it difficult to move."

With adequate stretching and use of muscle groups, however, factors, such as tracking and muscle strain from exercise, can be greatly reduced. Stretching routines that pinpoint specific muscles are considered the best for improving flexibility, though any activity that takes your joints through a variety of motions will stretch the surrounding muscles.

A good flexibility program should concentrate on muscles where tightness is common, such as the hamstrings, hip flexors, quadriceps, calves, Achilles tendons, lower back, shoulders, and chest. Women should pay particular attention to strengthening the upper back muscles to prevent the shoulders from rounding with age.

Experts recommend that you stretch after warming up with a hot bath or after five to ten minutes of walking, easy jogging, or cycling on a stationary bike. Also, stretch immediately after a workout—"a cool down" stretch—to help you keep the flexibility gains made during the exercise, to keep your muscles from stiffening, and to help prevent soreness.

While there are no specific guidelines from the American College of Sports Medicine on stretching, most experts believe that, at the very least, you should make a habit of stretching before and after exercise. For the best results, stretch a little every day, holding most individual stretches for thirty seconds.

Stretching is best done by extending a body part until you feel slight tension in the muscle being stretched.

- Do not stretch to the point of feeling pain.

- Hold the stretched position for fifteen to twenty seconds....relax....and repeat.
- Stretch both sides of the body, as well as front and back separately.
- Do some stretching of the entire body because the right and left sides of the body may differ in their flexibility.
- Avoid bouncy, jerking motions that may cause soreness or injury.
- Stretch as far as you can reach comfortably....hold for several seconds....and then relax.

Flexibility in the hip and trunk muscles is a guard against the back pain that many people suffer due to tight muscles.

Sample exercises

Chest to knee: Aids in flexibility of your hamstrings (back of hips) and lower back muscles.

- Sit on the floor, with your legs extended out straight in front.
- Bend forward and grasp your lower legs with your hands.
- Pull your chest toward your ankles, keeping your head up by looking beyond your feet.

An alternate method is to tuck one foot in toward your opposite knee, then stretch toward the ankle of your straight leg, as described above.

Stretching can also be done with your legs forming a "V" and reaching with one or both arms toward one leg, then the other, or toward the center.

Lateral bends: Good for trunk flexibility.

- Stand with your feet slightly apart.
- Place your arms over your head, reaching toward the left.

- Hold for four to ten counts and repeat on the other side.
- Keep your body straight, not leaning forward or back.

Calf stretcher: Particularly good in both preventing and relieving muscle soreness. Do this exercise before and after walking, jogging, and running.

- Face the wall about eighteen inches away.
- Lean your forearms and forehead on the wall, keeping your trunk straight and your legs straight, with your heels just off the floor.
- Push your hips toward the wall.
- Stretch each leg separately by bringing one leg forward and bending the knee.
- Hold for several seconds.

Shoulder stretch:

- Fold your arms over and behind your head, grasping one elbow.
- Gently pull.
- Repeat on the other side.

Arm circle:

- Extend your arms to the sides.
- Circle forward and backward with a single arm or both of your arms together in large and small circles.

Curl- and Sit-ups: For abdominal muscle strength.

Curls:

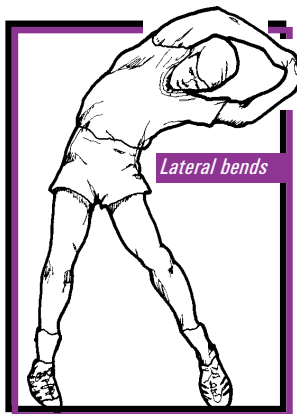
- Lie on the floor and fold your arms across your chest or place them at your sides.
- Bend your knees with your feet flat on floor, and your back rounded.
- Rise enough to look at your feet and hold.
- Lower slowly and repeat.

Sit-ups:

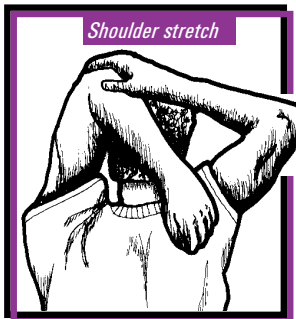
- Stay in the same position as in "Curls" above.
- Rise high enough to touch your elbows to your knees.

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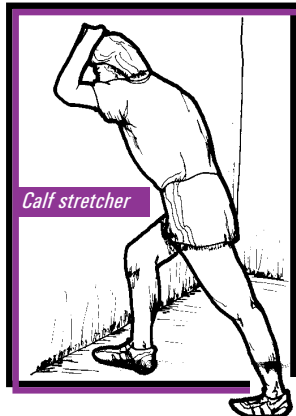
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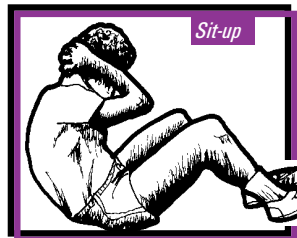
Lateral bends



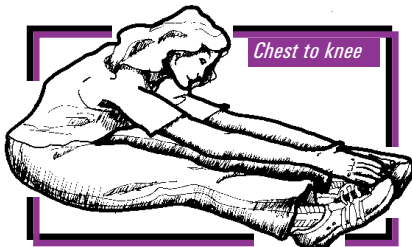
Shoulder stretch



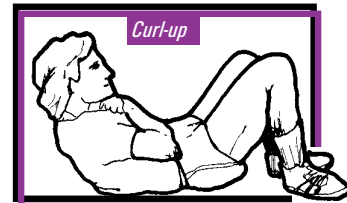
Calf stretcher



Sit-up



Chest to knee



Curl-up

Tips for a Walking Program

One of the most positive outcomes from the recent emphasis on fitness has been the increased interest in walking. Adults of all ages from around the nation are involved in a regular walking program and reap the health benefits of this simple but effective cardiovascular exercise.

Though many have tried to make walking for exercise a science, experts agree that it is simpler than that.

"The walker's motto should be 'keep it simple' and do what comes naturally," says cardiologist James Rippe, coauthor of *Fitness Walking for Women*. "For most people, the right way to walk is more or less what they're already doing. If you're asked to do something terribly complex, chances are it's not worth doing."

Since many people tend to formulate bad physical habits, such as incorrect posture, would-be walkers need to be informed of "proper" walking procedures. This, in effect, is relearning how to walk in a way that benefits muscle groups and facilitates your cardiovascular endurance without making you look like a "duck on the run."

The following tips are a basic guide for beginning a walking program in the proper step:

- **Hold your head high, with the underside of your chin parallel to the ground.** According to Joseph Askinasi, a New York City kinesiologist, "Tilting your head down prevents efficient breathing; changes the curve of your spine; strains the neck, shoulders, and back; and increases fatigue."
- **Pull in the stomach.** Lead with your chest, with buttocks pulled forward under the hips. Walking with a "loose belly" increases the risk of back strain.
- **Walk with your arms bent at the elbows, but swing your arms in moderation.** Don't swivel your hips. Clenched hand and teeth are signs of tenseness. Concentrate on relaxing.

- **Use your natural stride.** Giant steps actually inhibit efficiency and work.
- **Step lightly.** Walking is like rocking. Land on your heel, pointing your toes toward the sky. Roll through the foot, and push off with a lightness of step that comes from using good posture.
- **Walk slowly for five to ten minutes, then stretch before walking more.** It is safer to stretch "warmed up" muscles.
- **Be aware of your limits.** For beginners, keep the walk to no more than twenty minutes a day for the first two weeks. This is to avoid shin splints or related pain which comes from stretching or tearing the muscle at the shin bone. Warm up muscles by steadying yourself against a wall or post and rotating your foot slowly in the air, ten times clockwise and ten times counterclockwise.
- **Beware of the temperature.** During the summer, walk indoors if the temperature is 90 degrees or above with a humidity of over 80 percent. Usually, it is safe to walk with temperatures as low as 10 degrees below zero (Fahrenheit). On hot, humid days or when you are dehydrated and can't produce enough sweat, you may not be able to dissipate the heat. This causes hyperthermia. The early symptoms of this dangerous build-up of internal heat include headache, nausea, dizziness, clumsiness, and excessive

sweating or not sweating at all. Skip the brisk walk and opt for a casual stroll or stretch indoors if it is hot and you feel a cold coming on.

Hypothermia, or too much heat loss from the body, though not as dangerous as hyperthermia, can also present problems. Even on moderately cool days, in high altitudes or if it is damp and windy, hypothermia can occur. The warning signs include shivering, a sense of elation, and a feeling of intoxication. On cold and cool days,



wear polypropylene garments near the skin that wick away moisture. On top, wear several thin layers of cotton for insulation and a nylon windbreaker as an outer layer. In the winter, a wool cap and gloves help retain body heat.

- **Travel empty-handed.** Contrary to popular belief, carrying hand weights while you walk does not necessarily burn more calories. Instead, it puts unnecessary strain on your joints and muscles, especially in your hand and forearm. However, don't use this as an excuse to avoid walking to work toting a briefcase or purse. Walking with something in your hands is better than not walking at all.
- **Drink your fill.** Dehydration can lead to a weak stride, light-headedness, headache, and sore muscles. The water drinking rule of "8 8-ounces a day" is healthy advice.
- **Remind yourself that walking isn't wimpy.** If your pace doesn't seem difficult enough, simply increase the speed from three miles an hour (the speed at which we move through daily life) to four miles an hour. According to Rippe, "Walking at four miles an hour requires no different biomechanical motions than everyday walking," and you are getting increased cardiovascular benefits from your effort. The brisk walker achieves the same aerobic fitness as a runner, but with a lower risk of injury. A runner hits the ground with three to four times the body's weight, while a walker's body comes down at only one to one-and-a-half times the weight.

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Budget-wise Exercise

Interested in an exercise program that doesn't involve expensive health club fees or the purchase of a home gym?

Dr. Larry Durstine, an associate professor of exercise science at the University of South Carolina, has suggested five workouts that promote physical health without breaking the budget. Choosing one of the following or alternating between several can get you on an affordable path to physical fitness.

Walking

Clearly the fastest-growing participant sport in America, walking is the simplest and easiest method for achieving cardiovascular benefits through exercise. As a beginner, start with fifteen to twenty minutes of brisk walking (fast enough to raise your heart rate and produce a sweat) four to five times a week. Gradually increase your walk to thirty-five or forty minutes.

Running

For persons without ankle, knee, or back problems, running is a good exercise alternative. Persons who can comfortably walk two miles in thirty minutes are generally good candidates

for a running program. It's best to begin with twenty-minute periods of walking and jogging, gradually building up to thirty minutes of running. Running more than twenty miles a week is unnecessary and could encourage injuries from overtraining and stress, such as knee pain, shin splints, arch fatigue, pulled muscles, and stress fractures.

Jumping Rope

While this exercise can also be hard on your joints, it does provide variety to an exercise routine. Requirements are only a six-by-six-foot area and a sturdy rope that will maintain a steady rhythm. It should be long enough to fit your body height from your armpit to the floor and back to your opposite armpit. Jumping rope raises the heart rate fast, so it is best to alternate jumping with brisk walking or jogging in place, and work up to fifteen or twenty minutes of steady jumping.

Stretch, curl-ups, pushups, and lunges

A few minutes of stretching is good for overall toning and works well as a warm-up to an aerobic workout.
Sit-and-reach stretch: This movement stretches the hamstrings in back of your thigh as well as the calf muscles.

- Sit on the floor with your legs out straight and heels on the ground.
- Try to touch your ankles or toes.
- Hold for three to five seconds.
- Repeat five times.
- **Bent-knee curl-ups:** This strengthens the abdominal muscles.
- Lie on your back with your knees bent and your feet on the floor.
- With your hands at the back of your neck, roll up slowly from the neck, to about 30 degrees, without jerking your body.
- Then unroll all the way back.
- Start with ten to fifteen in a row and gradually build up to three groups of thirty curl-ups.
- **Push-ups:** These are effective for biceps and triceps.
- Beginners or individuals with back problems can use their knees as a fulcrum instead of their toes.
- Keep your hands even with your shoulders.
- Start with four or five at a time and work up to three groups of eighteen.
- **Lunges.** These stretch the gluteal, hamstring, and calf muscles.
- Stand with your feet together.

- Take a big step forward with the right leg and lean into the step until your knee is at a 90-degree angle with your thigh parallel to the floor.
- Putting most of your weight on the right leg, slowly straighten it and bring your left foot forward to meet your right.
- Then, step forward with your left foot.
- Begin with three sets of eight lunges per leg.

Exercise videos

Though not a free option, purchasing a quality exercise video may be a wise investment for some. Renting before you buy, if possible, is advisable to make certain you will enjoy and stick with the routine. Look for videos created with assistance from an advisory board of certified exercise experts. Doug Brooks, exercise physiologist and personal trainer in Mammoth Lakes, California, recommends step aerobic videos for maximum cardiovascular benefit. An adjustable step, accompanied by video, ranges from \$60 to \$80.

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Exercise and Weight Loss: A Threefold Approach

John weighed 363 pounds when he began a concentrated effort to lose weight. When his doctor informed him that his cholesterol and triglycerides were in the upper extremes, he knew it was time to make a lifestyle change. As he puts it, "I was pumping purple peanut butter!"

John began changing his eating habits, turning to dry toast; baked, skinless chicken; salads; fruits; and vegetables for his daily meals. But he also knew the benefits of adding exercise to proper eating habits, especially when he wanted to not only burn off the excess fat, also to develop and tone his muscles.

John committed himself to walking a mile or more every day. In less than two years, he lost over 100 pounds, feeling better than ever. His maintenance plan for keeping the weight off and muscles toned? "Not over-eating, watching the amount of fat I take in, and general exercise and walking."

Any individual eager to lose weight will want to take a three-part approach to their efforts:

1. Aerobic exercise to increase the body's ability to burn fat.
2. A balanced and nutritious diet.
3. Muscle-strengthening efforts to increase the amount of muscle, which allows you to increase the fat you burn.

When weight loss is the focus of a fitness program, often you can become discouraged if the pounds don't come off as quickly as you want. What we forget is that other good things are happening in our bodies, such as cardiovascular strengthening, muscle toning and improvement, and even increased energy and emotional strength.

In John's case, he knew that his weight and diet were putting him at great risk, and in his efforts to become a

healthier individual, the weight naturally decreased. Without a proper approach to improving all body systems, a quick weight-loss program often backfires. When the rest of the body is unprepared for the change in diet, the body's ability to burn off additional calories often decreases.

Aerobic exercise

Aerobic exercise is sustained exercise which summons large quantities of fresh oxygen into the system. Generally, an activity is considered aerobic if it

- Uses the larger muscle groups (such as you do in cycling, walking, or jumping rope).
- Gets you warm and breathing heavily without being out of breath, and increases your heart rate.
- Goes on for an extended period of several minutes.

Aerobic activity is beneficial for cardiovascular endurance—the sustained ability of the heart, lungs, and blood to deliver oxygen throughout the body. The cardiovascular system's ability to deliver oxygen increases as the heart strengthens and the lungs become more "elastic" through exercise.

With an improved cardiovascular system, you feel better, your mind is sharper, and you have a greater chance of having reserve energy at the end of the day.

Aerobic exercise distinctly effects the body's storage and metabolism of fat. When this exercise is coupled with a balanced diet, the amount of fat retained by the body is reduced.

Balanced eating habits

A balanced and nutritious diet is important to any fitness program. Obviously, a variety of foods provides a variety of nutrients, so balance is the key

to getting the proper amounts of natural vitamins and minerals.

As a general rule, nothing substitutes for the real thing. If your exercise goals include a diet change, focus on fresh fruits and vegetables, cereals and grains, lean meats, and low-fat dairy sources.

Breaking bad habits of consuming excessive sweet foods and drinks will go a long way toward dropping your weight. With increased activity and an improved diet that is low in fats, your weight will come off at a natural and healthy pace and you will be more likely to keep it off.

Beware of the dangers of fasting in order to lose weight. Skipping meals cannot only make you irritable and tired, but it also can lead to weight gain.

When the body senses the lack of nutrition and energy, a fat storage mechanism is triggered, much in the same way animals survive the winter by storing excess calories to use during hibernation. Most individuals who go on radical starvation diets often gain more weight back once they return to their regular eating patterns than they weighed when they started.

Having healthy between-meal snacks and reducing the serving sizes of your main meals keeps your metabolism working at a higher rate so more calories are burned. At the same time, you maintain higher energy levels when you're not "running on empty."

For maximum energy, your total calorie intake should include 15 percent of protein for muscle and tissue cell maintenance and 50 percent to 60 percent of carbohydrates for immediate energy. Adherence to balancing the major food groups and getting your carbohydrates from fruits, vegetables, and whole grain breads will ensure more successful weight maintenance. Be especially wary of fat intake. Consume

no more than 30 percent of fat in your total daily calories to deter weight gain and to improve your energy level.

Drinking adequate amounts of fluids, at least eight cups of water a day or juices, will help control your appetite as well as combat your lack of energy, which is often caused by dehydration.

Increase muscle for more fat burning

Muscle strengthening, either through specific weight training or another activity that works the muscle groups with weight and repetitions, can have long-term effects on your body chemistry.

With increased muscle, your body uses more calories, your posture is improved (such as strengthening your back and shoulder muscles), and your body shape is enhanced. Toning and strengthening your muscles creates greater flexibility which reduces your risk of injury during exercise.

It is unhealthy to assume that weight gained over a period of ten years will come off in a matter of a few weeks. However, with a commitment to daily aerobic activity, a balanced and nutritious diet, and efforts at toning and strengthening muscles, those seemingly permanent pounds will be lost in time and the body's tendency to gain and store fat will be greatly inhibited.

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Target Heart Rate

Generally, exercise has reached an "aerobic" level if it causes the heart to beat faster, the breathing rate to increase, and the body to sweat. When these signs occur, you have achieved what is called an "aerobic response." Once this level is reached, it is best to maintain the activity for 15 to 60 minutes, (10 to 20 minutes for beginners) at least three times a week to reach aerobic fitness.

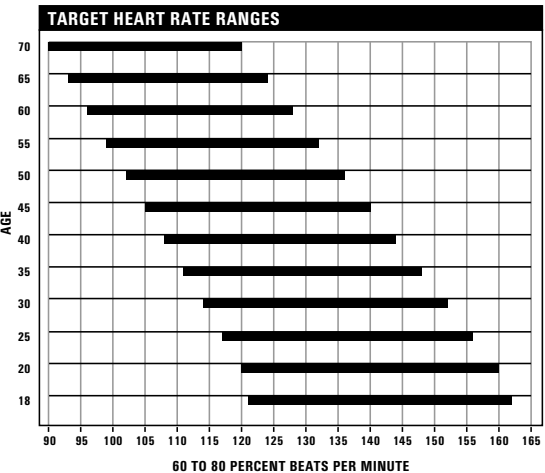
As you exercise, your heartbeat increases to rates that accompany the "aerobic response" level. The point at which you achieve cardiovascular benefits is considered the "target heart rate," and will vary for individuals depending on their level of fitness.

According to the guidelines of the American College of Sports Medicine, a target heart rate of 55 to 90 percent of maximum is considered most beneficial for maintaining good cardiovascular health. You can monitor your own aerobic response by measuring your heart rate.

A target heart rate range is the range within which a healthy person can safely exercise. To obtain this range for your age, subtract your age from 220 and multiply that number by 60 percent for the lower level and 80 percent for the higher level of the range.

For example, if you are 30 years of age:

- Subtract 30 from 220.
 $220 - 30 = 190$
- Multiply the number (190) by 60 and 80 percent.
 $190 \times .60 = 114$
 $190 \times .80 = 152$



The target heart rate range for a person age 30 is 114 to 152 beats per minute.

Before beginning an exercise program, consult with a physician to determine if there are problems that would prohibit you from exercising at higher heart rate levels for extended periods.

As you continue to exercise, you will find that it takes more effort to achieve your target heart rate. This indicates that your heart and lungs are stronger and your aerobic capacity is better.

A resting heart rate is usually between 60 to 100 beats per minute and rarely falls below 50 beats per minute.

Another way to monitor your aerobic fitness is to monitor your resting heart rate. Take your pulse before you get out of bed in the morning. This figure should decrease as your aerobic fitness level improves and your heart becomes a more efficient "pump," pumping more blood with each beat and providing more oxygen to your muscles.

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Traffic Safety Tips

If you're considering taking to the streets for your exercise, be sure to heed the traffic. By implementing a few simple rules, you can avoid the potential for traffic-related accidents and injury.

- **Travel against the traffic.** Don't allow moving traffic to approach you from behind. If you must walk or run on the shoulder of a road, always face oncoming traffic. It is best to stay on sidewalks if they are provided, especially near highly congested streets.
- **Run or walk defensively.** Expect drivers to misbehave, and always mentally picture an "out" for yourself in any potential traffic situation.
- **Be especially cautious at intersections.** Drivers turning right into an intersection will often look left for cars, but not to their right for runners and walkers.
- **Wear reflective or light-colored running gear to make yourself visible.** If you're not sure a driver sees you, don't be shy about waving your arms or even yelling to alert them you are coming.
- **Alertness is the key to safety.** Don't venture out into heavier traffic if you are feeling under-the-weather or unable to concentrate on your surroundings. While a walk or run can help relieve "the blues," make sure you are feeling alert and observant before hitting the high-traffic roads.

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New Exercise Guidelines

Under the new guidelines, a day of various activities, such as ten minutes of gardening, a brisk fifteen-minute walk, and a five-minute cycle to the grocery store, meet the criteria for daily exercise that benefits cardiovascular endurance.

The pace and place can be your own

In addition to the obvious health benefits, a consistent routine of daily activity can fit into one's lifestyle more easily than an hour or two at the health club three times a week.

Activities can be chosen that are not only right for you, but are located at times and places convenient to your schedule. The pace and place can be your own, and such an exercise routine offers a variety of options from gardening to a brisk walk to the library.

Incorporating exercise into your daily schedule helps to break the yo-yo habit of beginning a vigorous exercise regimen (sometimes costly because of health club fees or expensive equip-

ment) only to tire of the intensity or inconvenience and fall from the initial commitment.

With a moderate and consistent routine of daily activity that works easily into your schedule, one can eventually invest in exercise "add-ons," such as a jump rope, weights, or a stationary bike.

A consistent approach to physical activity throughout the day and week, coupled with good nutritional habits, is considered enough to benefit the cardiovascular system and keep most health risks at bay. Developing an attitude of daily activity will help make exercise as automatic as brushing your teeth.

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Motivation

Disease. Reading literature about exercise keeps you knowledgeable and informed and is a good motivator for pursuing the health benefits of exercise.

Remember that you are forming habits. All habits, good and bad, take time to develop. Don't be discouraged if regular exercise doesn't come "easy" or you find yourself procrastinating because of waning interest. There will be times when you must consciously remake the decision to continue toward your goal. Committing yourself to this goal, despite temptations to do otherwise, is your ticket to success.

If boredom rears its yawning head during your exercise, then it may be time to re-evaluate your activity or set new goals. Consider the following if you find yourself losing interest:

- **Does your exercise routine include variety?** Simply sticking to one style of activity may be right for some, but many people enjoy variation in their fitness schedule. Even active hobbies, such as gardening, or daily routines, such as walks or bike rides to the store, can provide fitness benefits with a change of scenery. Also, varying the activities during the week helps to work different muscle groups.

- **Are you exercising alone?** You may find that joining someone for an activity is not only motivating, but keeps you exercising regularly.
- **Are your goals realistic?** Perhaps you've pushed yourself to a level of burnout or you have set higher goals than your body is ready to attain and have become discouraged. Don't be afraid to cut back on your original plan. Easing into a routine of exercise is better and healthier than going "whole hog" the first week. Set attainable goals, including some short-term goals, which will allow for early successes.

If a relapse in your exercise pattern does occur, don't punish yourself. Choosing to skip exercise for a day or several days does not make you a failure. Getting less exercise is better than not exercising at all.

Do what it takes to get back on track and motivated for exercising your way to a healthier lifestyle!

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Choosing the Proper Shoes for Walking

Choosing the proper shoes for walking is important because excess stress and strain to your muscles, joints, and feet can be avoided with the right footwear. If you're confused about what brand to buy, go to a reputable athletic shoe store or call a walking or running club to find out where members go for a good fit.

Consider the answers to the following questions as you explore what shoe is right for you:

Can I walk in just any type of athletic shoe or 'sneaker'?

It is best to stick with the walking shoes. A regular fitness walker will benefit more from the sturdy soles of walking shoes, than from the more flexible soles usually found on shoes made for runners or the flat, archless soles of casual canvas shoes.

What measures can I take to assure that the shoes are right for me?

- Look for immediate comfort. The pain and tightness we tolerate in dress shoes should not be present in a walking shoe.
- *Shop at the same time of day you walk.* Since our feet increase in size throughout the day due to the pooling of blood, it's best to try on shoes at the time of day you normally walk and with your walking socks.
- *Try on both shoes.* Many people have one foot longer than the other. Try on both shoes to make sure the pair is comfortable.
- *Be willing to search.* Take the time to find the proper fit, even if it means wearing a shoe made for the opposite gender.

What should I look for in a good walking shoe?

- *Check out the sole.* The ball of your foot is the only place where the shoe should bend. Stability up to that point helps you avoid twisting and turning and injuring your vulnerable arches.
- *The heels should be snug.* The shoe should hug your heel. The heel

counter—the hard piece that fits around the back of the shoe—should be firm and continue along for at least 20 percent of the length of your shoe. Squeeze the heel to gauge its firmness.

- *Test the cushioning.* Higher arches will need more cushioning. Your ankles, knees, and hips suffer if there isn't proper shock absorption in the shoes.

What type of socks are best?

Wear dry, padded socks. Padded socks are blister fighters. Polypropylene is best for wicking moisture away from the foot. According to many walkers, a blend of polypropylene and wool or cotton is more comfortable.

What precautions should I take in breaking in new shoes?

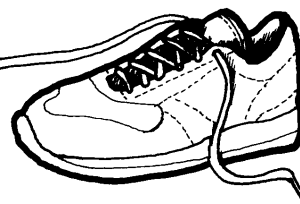
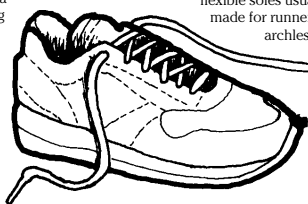
When wearing new shoes, trim your walk by about 20 percent for three or four days. Often, people buy new shoes and then walk longer than usual and end up with blisters, ankle soreness, and other injuries.

How often should walking shoes be replaced?

Get new treads after every 400 hours of walking. Worn-out shoes put you at risk of forefoot soreness and stress fracture. Be willing to buy new shoes to avoid injury and soreness.

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Home Exercise Equipment

Despite the fact that Americans purchase billions of dollars worth of home exercise equipment each year, surveys show that a large majority of buyers do not remain steady users. By understanding equipment types and how they match your exercise goals, you can avoid accumulating fitness machines that end up as expensive coat racks.

The majority of exercise equipment is designed either to enhance your cardiovascular endurance or to build muscular strength. While a machine isn't necessary for an aerobic workout and strength building, many people prefer exercising indoors or want that option in case of bad weather.

The convenience of exercising at home is appealing; cycling while watching the evening news is preferable to taking specific time out of your schedule every day for exercise, especially if it means waiting in line for equipment at the health club. Having equipment at home can be an exercise motivator, making it easier to stay on schedule.

It's important to remember, however, that there's nothing "magical" about exercise equipment. Any frequent activity that increases your heart rate for an extended period of time and works the major muscle groups will provide aerobic benefit.

If at some point you decide to invest in equipment for the home, here are some guidelines:

- **Try before you buy.** Even if you are purchasing by mail order, find the model at a store or local health center to make sure it fits your body and is comfortable and easy to use.
- **Check for durability.** Cheaper models and those that fold up for storage may tend to be made of flimsier materials. Check the display models to see how they have lasted. Generally, heavier frames are better;

for example, a stationary bike will weigh 50 pounds or more.

- **Shop from a reputable store or dealer with a knowledgeable staff.** Ask questions, especially if you will need to assemble the equipment yourself.
- **Think twice about the extras.** Fancy trimmings, such as video displays, can add to the price of the equipment. Remember that the more complicated the machine, the greater a potential there is for breakdowns.
- **Equipment should have at least a 90-day warranty** and preferably one that covers service along with parts.
- **Consult your doctor about what equipment is right for you.**

Individuals with back or knee problems may be advised to avoid certain machines. The following is a summary of four of the more popular machines.

Exercise bikes

These work mostly your lower body, although some have handlebars that move back and forth to exercise your shoulders and arms. An excellent aerobic conditioner, some models even simulate uphill and downhill cycling, although they usually cost more. Look for smooth

pedaling and a comfortable seat. "Saddle soreness will turn a bike into a dust collector," says George Lesmes, Ph.D., director of the Human Performance Laboratory at Northeastern Illinois University. Also, look for solid construction and an easy-to-adjust workload.

Treadmills

These machines closely duplicate regular running and, by increasing the incline, you can boost your workouts to higher aerobic levels. The self-activated models (where your movement pushes the belt) can produce more strain and potential for injury, so look for motorized versions.



Look for one with an easy-to-adjust speed and incline, plus a wide and long running surface that is shock absorbing. High-powered models will handle heavy loads and high speeds better, but should have a slow minimum speed for safe starts. Full-length handrails are nice.

Stair climbers

These allow you to achieve strenuous workouts, raising your blood pressure and heart rate quickly. Dual-action models work your arms along with your legs. Machines which have independently moving steps give a better workout, as opposed to machines with "linked" steps (where one step goes down as the other step goes up.)

Look for large pedals and smooth-stepping action. This equipment works your calf muscles better than actual stair climbing. Although the workout is less strenuous on the knees, persons with knee problems should be cautious and consult a doctor before investing.

Cross-country machines

These machines simulate cross-country skiing and work the most muscle groups for an excellent all-around workout. While it may take some practice to coordinate the movements, the exercise puts minimal strain on the body and is easy on the knees.

Shop for equipment with adjustable leg and arm resistance, smooth action, and a base length that accommodates your stride. Equipment that uses cords instead of poles provides you with a more strenuous workout of the upper body.

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continued from page 1

Beginning an Exercise Program

variety of changes that will occur with regular exercise.

For example, if your goal is thirty minutes every day, you may exercise thirty minutes or you may accumulate thirty minutes in a day through smaller segments. You can do ten minutes of cycling in the morning plus twenty minutes of yard work later in the day, for a total of thirty minutes by day's end.

Set deadlines.

As you evaluate your early exercise efforts, establish a deadline for your fitness goals. For example, a goal of fifteen minutes three times a week, can be gradually increased to fifteen minutes a day after one month and then to thirty minutes a day at the end of two months.

Setting deadlines helps you meet your goals and encourages you to achieve new levels of fitness. Also, it keeps you from doing too much too soon and reducing your chance for improvement. Your body needs time to adapt before you move to higher levels of physical activity. Improve your fitness by gradually increasing your exercise efforts.

"Warm up" the muscles.

Stretching your muscles helps you avoid stress and injury. Flexibility—the ability to rotate our body parts through a wide range of motion—is not just for runners and dancers; it helps you avoid exercise-related strains and muscle damage.

As we age, maintaining our flexibility becomes increasingly important. Much of the blame for physical decline lies in poor exercise habits, particularly the habit of not exercising. Decreased flexibility is a common result. But, fortunately the problem can be remedied.

Flexibility is best achieved through regular stretching activities. Because flexibility does not cause a substantial increase in heart rate, almost anyone of any age and fitness level can begin a flexibility program.

Most body parts can and should be stretched. If stretching is done before and after aerobic activity, it may also help prevent or relieve soreness.

Always stretch several minutes before and after vigorous activities, using slow, static movements instead of bouncing or jerking. If daily stretching is not convenient, stretch ten to twenty minutes two or three times a week. Be certain to stretch all muscles of your body. (See a

related article "Flexibility: The Importance of Stretching Out" on page 2.)

Finally, for any adult beginning an exercise program, the old adage still applies: consult your doctor. Even for a fitness program that includes yard work or other "routine" chores, if your overall daily activity is increased, a physical check-up is a good idea.

The more willing you are to become active on a daily basis, especially in an aerobic activity that stimulates your heart and breathing rates, the more likely you will develop a life-long habit of staying active and reaping the benefits of fitness. The desire to form a habit of exercise is the first step. Acting on that desire by incorporating opportunities for aerobic activity into your daily schedule will put you on the track toward a healthy, "feel good" life-style that's easy to maintain.

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FEELING
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