

CHAPTER



Becoming Fit

"Vigorous outdoor living is the key to the spirit of Scouting."

 Robert S. S. Baden-Powell (founder of the worldwide Scouting movement), Aids to Scoutmastership, 1919



You're hiking along a rugged trail at a strong, steady pace, the miles rolling beneath your feet. You're canoeing all day, paddling with an almost effortless rhythm. You're bicycling toward the horizon, your legs pushing you along hour after hour with ease and speed.

Maintaining a high level of fitness will help you fully enjoy outdoor adventures. You will have the strength to take on demanding challenges and the endurance to see them through to the end. Rather than struggling to keep up or limiting yourself to short journeys along easy routes, you

can set out with the confidence that you possess the power and stamina to accomplish whatever needs to be done.

Getting yourself physically fit for an adventure trek is a terrific goal, but that should be just the beginning. Staying fit means you will be ready for any opportunities for outdoor activities that come along, and prepared for all else that presents itself throughout your life.



"[Fitness is] the ability to perform daily tasks vigorously and alertly, with energy left over for enjoying leisure-time activities and meeting emergency demands. It is the ability to endure, to bear up, to withstand stress, to carry on in circumstances where an unfit person could not continue, and is a major basis for good health and well-being."

 From Fitness Fundamentals: Guidelines for Personal Exercise Programs, President's Council on Physical Fitness and Sports

The stamina and strength to reach a mountain summit, ski a cross-country course, or complete other outdoor journeys often can be found on the playing fields near your home. Enliven your daily fitness routines by focusing on where your efforts to get strong and tough can lead you.

What Is Fitness?

Tall, short, wide, thin—the basic shape of your body is strongly determined by genetics. Your height, bone structure, and general musculature come in large part from your biological ancestors. So do many of the ways in which your body responds to food, to exercise, to stress, and to environmental influences.

Whatever your physical type, you can consider yourself fit when you have the strength and endurance to accomplish all you aspire to do, and when you have made staying in shape over the years a regular part of what you do. That means getting plenty of exercise and enough sleep, regularly brushing and flossing your teeth, and keeping immunizations up-to-date.

Becoming fit also means eating a balance of nourishing food in portions appropriate for you.

By themselves, the numbers on a weight scale seldom are a reliable guide for measuring fitness. For one thing, muscle weighs more than fat. If you are thinking of dieting to lose weight to achieve a certain appearance or as part of a fitness routine, consult a physician or nutritionist for guidance.

Whatever your shape and size, celebrate your body, do all you can to care for it, and give yourself every chance to excel. Then focus your energy on positive activities, friends, school, Scouting, family, and all else there is to enjoy in life.

For more on nutrition, see the chapter titled "Outdoor Menus."

"Normal" and "fit" are not the same as what many images portrayed in movies, on television, and in magazines would have us believe. The impossibly thin women and unnaturally muscular men often portrayed in advertising and the media might help sell lots of clothing, deodorant, and automobiles, but they are not practical role models for real people.

Being Active

There are many ways to exercise. Among them, you can find fitness activities that keep you interested and challenged so that you will want to do them regularly. You might already take part in sports with friends, in organized athletics, and in physically demanding personal endeavors. Consider what your current activities offer in terms of overall fitness, then adjust what you do to ensure that your body is getting the attention it needs. To prepare for most trek adventures and to increase overall fitness, include a mix of aerobic activities to improve endurance and stamina, and strengthening exercises for increasing power.

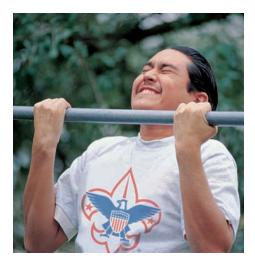


Regular physical activities will help keep you fit and ready for trek adventures.



Aerobic Exercises

Aerobic means "with air." Aerobic exercises are continuous, rhythmic activities that require your body to increase its use of oxygen. Brisk walking, jogging, running, jumping rope, swimming, cycling, and cross-country skiing can be aerobic exercises if you do them steadily for prolonged periods usually 20 minutes or more at a level sufficiently ambitious that you would find it difficult to carry on a normal conversation. The effort you make will cause your heart and lungs to work harder, especially if you maintain an exercise pace that makes it difficult to converse normally. By gradually increasing the intensity and duration of your aerobic exercises over a period of weeks, you can help your cardiovascular system become stronger and more efficient.



Strength Exercises

Physical activities designed to increase muscular strength usually are intense, but of brief duration. Well-planned strengthening routines including push-ups, abdominal crunches, and workouts with weights—force muscles to perform beyond their current capacities. Over time, the muscles will respond by becoming more powerful.



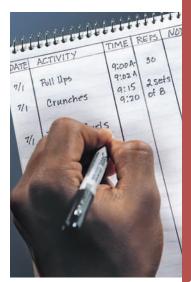


Getting Started

Warming up before playing sports or beginning an exercise session loosens your muscles, makes your joints more flexible, and prepares your body and mind to be in motion. Jogging, a game of catch, and a series of stretches all can serve to get you ready for more strenuous activities. Using similar easy activities to cool down after exerting yourself allows your heart rate, respiration, and temperature to return gradually to their normal resting states.

Exercise Notebook

An exercise notebook can be an important tool for making the most of your fitness efforts. Write down the routines you use and the number of repetitions for each exercise, and you'll have a record of your physical progress that can encourage you to keep improving. Over time, a written record will help you to evaluate and adjust your exercise plan. Before beginning any exercise routine, it's a good idea to have a thorough physical examination. Your physician will give you the green light to undertake the activities you are planning, or explain any limitations you might have. A physician also can help you plan a program of good nutrition and exercise.



Date and Time	Exercise	Repetitions or Duration	Other
June 12 3:40 р.м.	Warm-upsLateral raisesPush-upsCrunchesSquatsWalkingcrane lungeCalf raisesPlay basketball	Jogging 3 sets of 15 3 sets of 12 3 sets of 12 3 sets of 12 5 minutes 3 sets of 20 30 minutes	Keep back straight. Feet flat, knees bent Use hallway next to gym. Run hard to keep heart rate up.

An electronic spreadsheet might be a convenient way to track the types, durations, and repititions of your exercises.



Fitness is a lifelong endeavor. Be patient and keep at it, gradually increasing the duration and degree of exertion.

Stretching

Stretching can relax your muscles, increase your flexibility, and help calm and focus your mind. You can stretch anytime, but you might find it especially productive as you are cooling down after exercising. Ligaments and muscles will already be loose, and stretching can be a relaxing way to conclude a workout.

As with any physical activity, learn the correct techniques and then gradually increase the range of each stretch.

Breathe slowly and naturally. Stretching should never be painful; pay attention to your body and don't overextend.

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Achilles Tendon and Calf Stretch

Stand with both feet on a ledge or platform that is at least 3 inches tall. Step back with your right foot, placing the ball of your foot on the platform edge. Stretch your calf muscles and Achilles tendon by slowly dropping your right heel toward the floor. Hold the stretch for 15 to 30 seconds, then step up onto the platform and stretch the left leg.

Hip and Lower Back Stretch

Sit tall with one leg extended, the other leg crossed over it, and your elbow against your raised knee. Gently turn your upper body toward your hand on the floor, and hold the stretch for 15 to 30 seconds.

Reverse the position of your legs and arms, and repeat the stretch by twisting your torso in the other direction.

Quadriceps Stretch

To stretch the strong muscles in the front of your thighs, start standing, grasping a table or other solid object for balance. Reach back, grasp one of your feet, gently pull it toward your lower back, and hold that position for 15 to 30 seconds. Return to the start position, then perform the stretch with the other leg.

Groin Stretch

Sit on the floor with your legs stretched out in front of you and your back straight. With your right hand, bring the right heel to the groin. With the left hand, bring the left heel to the groin, joining the soles of the feet and bringing them close into your body. With your legs turned out at the hips, slowly press your knees to the floor. Hold for 20 seconds and release.



Lower Back Stretch

Lying on your back, bend a leg toward your chest, interlace your fingers around your knee, and gently pull it closer to your torso. After 15 to 30 seconds, release your hold and then perform the stretch with your other leg. (As a variation, you can bend both legs, grasp them together, and hold the stretch for 15 to 30 seconds.)

Hip Flexor Stretch

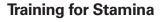
Kneel on one knee and position your other leg so that your thigh is parallel with the ground. With your hands on that thigh, lean forward until your thigh and calf form a right angle, then let your hips sink down. Hold the stretch for 15 to 30 seconds to loosen the muscles and tendons of your hip, then reverse the positions of your legs and repeat.

Hamstring Stretch

Stand with the right heel forward and place your hands on top of the right thigh to help you balance. Bend your back leg slightly. Bend at the hips and lower your torso toward your bent knee, gently stretching your back and the hamstring muscle in the back of your thigh. After 15 to 30 seconds of stretching, stand upright, reverse leg positions, and perform the stretch in the other direction.







The value of stamina training lies in raising your heartbeat and respiration rates, and maintaining those levels for 20 to 30 minutes or more. You can measure your heartbeat as you are exercising by stopping your activities for a moment and taking your pulse; place two fingers on the pulse point of your wrist or against the carotid artery in your neck. For most healthy people, the American Heart Association recommends an exercise target heart rate ranging from 50 percent to 75 percent of maximum heart rate.

- To figure maximum heart rate for a healthy person, subtract his or her age from 220.
- To figure your ideal heart rate for exercising, multiply your target number by your maximum heart rate. If you want to exercise at 70 percent of maximum heart rate, for example, multiply your maximum heart rate by .70:

 $(220 - your age) \times .70 =$ target exercise heart rate



"There were no shortcuts, I realized. It took years of racing to build up the mind and body and character, until a rider had logged hundreds of races and thousands of miles of road. I wouldn't be able to win a Tour de France until I had enough iron in my legs, and lungs, and brain, and heart."

 Lance Armstrong, It's Not About the Bike, 2000 (He overcame cancer to win bicycle racing's most prestigious event multiple times.)



Cross-training engaging in a variety of different sports activities and exercises—can eliminate the monotony of a single training routine and can increase the fitness of a wide range of muscle groups.



For someone 17 years old, a target exercise heart rate of 70 percent would be 142 beats per minute.

Many activities lend themselves to stamina training. Playing basketball or soccer, for example, is an ideal way to have a good time and get plenty of exercise, too. The key is to keep moving so that your heart rate stays in the target zone of exertion.

If you are tuning up for a particular trek adventure, you can use specific forms of stamina training to target the muscles you will use the most during your outdoor activities. A few examples follow:

- To prepare for backpacking, climb up and down the stairs at a sports stadium, walk briskly up and down the sidewalks of steep city hills, jog on a treadmill set at an incline, use stair-stepping machines.
- To prepare for mountain biking, mimic mountain conditions on a stationary cycle by alternating periods of intense and easy pedaling.
- To prepare for paddling watercraft, swim to improve both your endurance and the strength of your upper body. Use a rowing machine at a gym.

Training for Strength

Develop a strength-training plan that is safe and effective, and that you can sustain through the months and years. An appropriate program involves exercises that work all of the major muscle groups. You might be able to use exercise equipment and weights at a school gymnasium or a health club, use a few free weights for exercising at home, or complete a thorough exercise routine without using weights at all. School coaches, physical education instructors, and other fitness experts can assist you in planning an exercise program that is right for you. Routines will be most effective when you follow these guidelines:

- Follow a qualified trainer's guidance when using weights or weight machines, and practice proper form throughout the repetitions of each set.
- Engage in strength training two or three days a week. Allow at least 48 hours between exercise sessions so that muscle tissues can recover.



- Include eight to 10 exercises for the large muscle groups of the upper and lower body.
- As you become stronger, gradually increase the intensity and duration of workouts.
- Be consistent. Stick with a good exercise routine for several months and you are likely to see improvements in your level of fitness.

Sample Exercise Routine Without Weights

UPPER BODY

Modified Push-Ups

Begin facedown, your arms bent and the palms of your hands flat against the floor. Keeping your spine and neck straight, let your knees serve as hinges while you push yourself upward until your arms are fully extended. Slowly lower yourself back to the floor, then repeat. As your strength increases, shift to the regular push-up position with your weight on your hands and toes. Keep your spine and legs in a straight line.





Lateral Raises and Front Raises

With your elbows slightly bent, stand upright and slowly lift your arms sideways in a smooth arc. When your arms reach shoulder height, slowly lower them and then repeat the motion. For variety, raise and lower your arms in front of your body. (Holding a can of food or other light weight in each hand will increase the workload of these exercises.)

LOWER BODY

Calf Raises

Ensure your balance by putting your hands on a wall, a pole, or the shoulder of a workout partner. Raise yourself on tiptoe as high as you can and hold that position for about three seconds, then lower your heels as far as they will go and again pause briefly. Repeat.



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Squat

Keeping your spine straight, gradually bend your hips and legs, sliding down as if you were sitting on an imaginary chair. Lower yourself until your thighs are parallel with the ground. After several seconds in that position, slowly rise until you are standing, then repeat.

Walking Crane Lunge

This exaggerated form of walking is a good exercise for developing the thighs and buttocks. With your hands on your hips, take a wide step forward, leading with your heel and bending the knee until it is at a 90-degree angle. Be sure to keep your knee aligned with your heel. Press down onto the front heel, then bring the body back to an upright position with the legs together. Repeat with the other leg.



ABDOMEN

Crunches

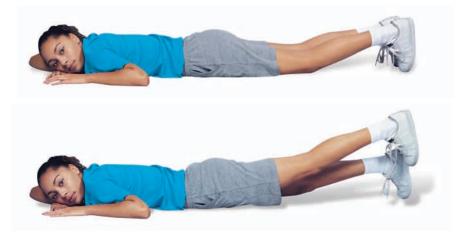
Start by lying faceup in a comfortable position. Reduce stress on your lower back by bending your knees and keeping the soles of your shoes flat on the floor. Place each arm across your chest, then use your abdominal muscles to curl your torso far enough to lift your shoulder blades. Ease your torso back down and repeat.



BACK

Leg Raises

Lying facedown, contract the muscles of one leg, keep it straight, lift it from the floor, and hold that position to the count of 10. Lower that leg, then do the exercise with the other leg, again counting to 10. Repeat.



3



Exercising With Weights

Used correctly, free weights and weight machines can be a boon to fitness efforts. Qualified fitness experts can help you learn how to use free weights and machines, and they can monitor your form to ensure that you are doing each exercise correctly. They are sure to remind you that beginning with light weights and gradually increasing exercise intensity will allow you to make progress without suffering injury.



Note: You should begin a weight-training program under the supervision of a qualified instructor.

Some of the weight-training exercises you might incorporate into your exercise routine include the following:

- Chest/bench press, seated row, overhead/ military press, and overhead pull-down for upper-body strength
- Leg curls for hamstring strength
- Leg press and calf raises for lower-body strength
- Crunches for abdomen strength
- Spinal extensions for back strength



Leg extensions (quadriceps)

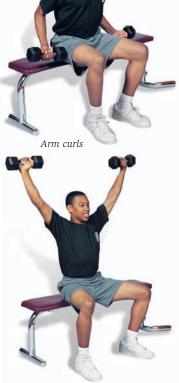


Leg curls (hamstrings)



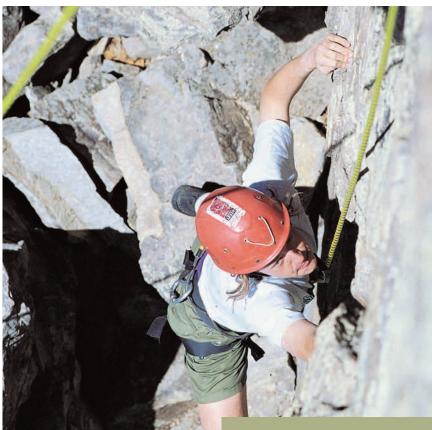
Overhead pull-down





Overhead press (military press)





Mental Fitness

Your body has grace and strength that you can nurture and improve. Likewise, your mind is full of potential. Just as you take positive steps to build your physical strength and stamina, do all you can to enhance your mental fitness, too. Take advantage of opportunities to learn new skills, to engage in positive experiences, and to interact with others in productive ways. Take pride in your accomplishments and strive to do more. Wherever you go and whatever you do, approach life with enthusiasm, with dedication, and with joy.

For more on the importance of attitude, see the chapter titled "Organizing for Adventures." "Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity."

 John F. Kennedy (1917–1963),
35th president of the United States