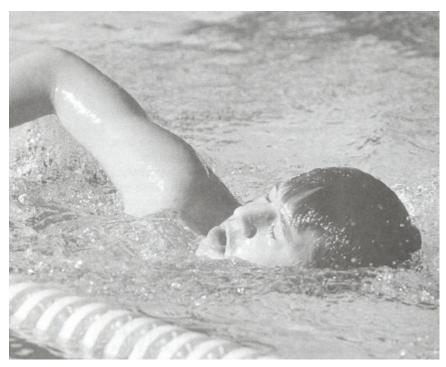
## Swimming for Fitness and Health

Regular exercise may be the single most important thing a person can do to live a long and healthy life. Studies of individuals who live to great age; into their 90s and beyond; indicate that these people have at least one thing in common: regular, consistent exercise. While exercise has a wide variety of benefits, the most remarkable are the prevention of heart disease and the strengthening of bones.

## **Exercise and Health**

The relationship between exercise and heart disease has been investigated extensively. The results are always the same: less heart disease among the physically active. The impact of exercise on heart disease is, in part, due to its beneficial effects on the other risk factors of heart disease.



People who exercise regularly are much less likely to be overweight because exercise burns calories. Exercise reduces blood pressure, too. In fact, the combination of exercise and weight reduction often allows people with hypertension (high blood pressure) to control it without medication. This control may be better than was possible with medication. Research has shown that active male joggers have lower total cholesterol than men of the same age who don't run. There is no substitute for exercise when it comes to protecting your heart.

Without sufficient exercise, bones become demineralized. They lose their calcium and become brittle. If a person is put to complete bed rest, this process starts almost immediately and progresses rapidly. This is one reason why doctors recommend that activity be resumed as soon as possible after a major operation or heart attack.

The demineralization of bones has been documented in astronauts returning from space, where lack of gravity robs activity of its exercise value. Weak and brittle bones, caused by lack of exercise, are also common in the aged.

Exercise is an excellent cardiovascular conditioner and is important to living better as well as longer. People who exercise regularly feel and look younger than those who don't. Improvements in muscle tone and circulation undoubtedly contribute to freedom from fatigue and the feeling of well-being that the physically fit enjoy. Moreover, research shows healthy people are more productive at work.

So why do people often neglect to exercise and protect their health, if the importance of exercise is so well-known and obvious? The primary reason is *choice!* Remember your Scout training and Oath; what will be your choice?

How, when, and where you choose to exercise will depend on such things as where you live; what facilities and equipment are available to you; and your health, physical abilities, and training. But these things should determine only the type, place, and timing of your exercise, not your basic decision as to *whether* to exercise. Some people may go rock climbing; others may take daily walks. For some the choices may be almost limitless, for others the choices may be fewer, but everyone can choose to exercise and gain from doing it.

For those who are limited by choice or circumstances to one form of exercise, a full-body exercise is strongly recommended. In full-body exercise, all muscles and joints are moved and flexed. Such forms of exercise include brisk walking, running, cycling, rowing, and swimming.

## **Swimming for Exercise**

In many respects, swimming is superior to other forms of exercise because it involves all the muscles and joints, is highly aerobic, involves no impact stress like in running, and has a very low injury rate. Swimming also promotes coordination, and joint stress is further reduced by the buoyancy effect of water immersion.

Upper body strength can be enhanced by concentrating on overarm strokes, and leg development can be emphasized with kick drills and swim sprints using the flutter kick. It's not surprising that swimming is often prescribed and used in physical therapy for paralysis, stroke, and injury victims.

## Planning a Swimming Exercise Program

Why not enjoy your favorite activity—swimming—and get that ever-so-important exercise at the same time? Simply plan and pursue a regular swimming routine, and you've got it.

The five components of a fitness exercise routine are warm-up, aerobic activity, strength building, flexibility maintenance, and the cool-down. You could warm up with a lazy 50-yard swim using the sidestroke or breaststroke. A great aerobic workout would be three or four 25-yard swim sprints using an aggressive butterfly or crawl stroke with a one- or two-minute rest between sprints. Follow the sprints with a 300- to 500-yard swim using a crawl or trudgen for a good strength workout. Flexibility is a part of almost every swimming activity, so add a few stretching/flexibility exercises to your warm-up and cool-down routines before or after your time in the water.

The key is commitment and consistency. If you go through your full swimming fitness routine two or three times every week for an extended period, you will get the most from it. Participating even once a week will make a significant difference; less than once a week is still better than being a full-time couch potato. To help yourself make the commitment and develop self-discipline, keep a detailed record of your exercise—how far you swam, time in the water, what strokes were used, comparative times, and number of repetitions. These records will chart your progress and show the improvement in your stamina and strength. Seeing your own success will provide even greater incentive.

For more information on planning a fitness exercise program, refer to the *Personal Fitness* merit badge pamphlet.