

6

Walk,



Run,



Swim!



In this chapter you will learn to:

- ◆ Design a walking program.
- ◆ Design a running program.
- ◆ Design a swimming program.

Walking, running, and swimming all provide excellent aerobic workouts. These three types of exercise will be discussed in this chapter for two reasons: 1) walking and running are the most common types of exercise that people engage in, and 2) all three modes of exercise can be used to test your level of physical fitness on the Navy PRT tests.

Walking and Running Gear

To maintain or improve your fitness and avoid injuries while walking and running you need to use the right exercise gear. Below are some tips and information to help you purchase training gear.

- ◆ **Shoes** provide shock absorption, cushioning, motion control and durability. The proper shoes will help correct biomechanical problems, such as foot **pronation** (inward roll of your ankle) and arch height. Specialty stores, magazines, and web sites have a lot of information about the latest footwear and what footwear is best for your foot type. Do not buy shoes based on their brand name!
- ◆ **Orthotics** are shoe inserts that provide additional foot support and control for people with biomechanical conditions that



may cause pain while running. They can be purchased as over-the-counter inserts or custom-made. Consult a sports medicine specialist or podiatrist.

- ◆ **Heart Rate Monitors** gauge exercise intensity by continuously monitoring heart rate. These consist of a wrist watch and a chest strap: the chest strap detects your heart beat and transmits it to the watch which displays heart rate in beats per minute. This allows you to check and maintain your heart rate within your target training zone (see [Chapter 5](#)) while you exercise.
- ◆ **Reflectors** and portable **beverage containers** are great for your safety and health when exercising outdoors. Other gear, such as walkmans, can provide entertainment, however, consider your training environment to determine whether they will hinder your safety by decreasing your awareness of your surroundings.



Walking

Walking is the easiest, most common, low impact exercise that people engage in. However, there are many misconceptions about the usefulness of walking for weight loss and cardiorespiratory conditioning. These health benefits can be realized by walking, as long as the intensity is high enough to increase your heart rate to 60-75% of your max HR ([Worksheet 5-1](#)).



When you walk, keep your back straight and your stride comfortable. **Do not use ankle or hand weights** because they increase the stresses placed on your joints. If you have been sedentary, start by walking for 15 minutes on a flat surface at a pace that allows you to talk somewhat easily. Walk every other day. Each week increase the time you walk by 10% until you can walk for 20 minutes continuously. Next, increase your distance by 10% each week (staying at the 3.0 m.p.h. pace) until you can walk continuously for 2 miles. Then follow the program outlined in [Table 6-1](#).

Table 6-1. Outline of a Walking Program

Weeks	Frequency times/week	Miles	Goal Time (min)/ pace	Comments
1-2	3	2.0	40 min / 3.0 m.p.h*	Quicken your pace by 1 min each week
3-4	4	2.0	38 min / 3.2 m.p.h.	
5-6	5	2.0	36 min / 3.3 m.p.h.	
7	5	2.0	34 min/ 3.5 m.p.h.	Increase your distance by 1/2 mile each week
8	5	2.5	43 min/ 3.5 m.p.h.	
9	5	3.0	51 min/ 3.5 m.p.h.	Maintain HR at 60% -75% of max HR.
10-15	5	3.0	45 min/ 4.0 m.p.h.	
16-17	4	3.5	53 min/ 4.0 m.p.h.	
18-19	4-5	4.0	60 min/ 4.0 m.p.h.**	

Adapted from OPNAVINST 6110.1D Jan. 1990. *m.p.h. = miles per hour; ** add hills for variety.

Running

A running program should only be started if you are able to walk 4 miles at a 4.0 m.p.h. pace. There are several reasons to begin a running program, such as managing your body weight, increasing your cardiovascular fitness, and building your self-esteem.

Running Form

Regardless of your running goals, pay attention to your form. This will ensure your running style is efficient and safe for your joints. The key is to run naturally and remain relaxed. Do not overstride, i.e., straightening your leg and landing with your heel in front of your knee. Overstriding is hard on the knees, back and the hips and can cause injuries.

Figure 6-1. Three Traits of a Good Running Form



Running Surfaces

The best outdoor running surfaces are unbanked, smooth cinder tracks or artificially surfaced tracks. Concrete and asphalt sidewalks and roads are

often banked and provide no shock absorption. Always change the direction you run on a track or path from one session to the next to reduce any biomechanical problems that may result from track conditions and repetition. Most treadmills are state of the art in terms of cushioning and you can control the speed and intensity of your workout. Deep water or aqua running is mainly used for rehabilitation as it takes the pressure off muscles and joints while providing cardiovascular benefits.



Beginning a Running Program

When starting a running program, combine walking and jogging. Gradually increase the time spent jogging and decrease the time spent walking. Remember that your exercise intensity should be between 60%-75% of your max HR, so adjust your pace accordingly. [Table 6-2](#) outlines a beginning jogging program to help make your transition easier. Advance to the next phase once you can consistently perform the walk-jog cycles outlined within your target heart rate zone. If you are interested in running for fitness, a good goal is 6 to 8 miles per week, spread over 3 running days of 2 to 3 miles each. Start a running log to track your workouts ([Worksheet B-1](#)), noting mileage, time, heart rate, and perceived exertion (see [Chapter 5](#)).

Table 6-2. Beginning a Jogging Program

Phases	Walk	Jog	Time / Distance	
Phase 1:	1 to 2 min.	Work up to jogging 2 min. continuously.	20-30 min	
Phase 2:	1 to 2 min.	Quarter mile (1 lap on a 440 meter track).	Jog six, quarter mile laps.	Check heart rate frequently. It should be between 60 and 75% max HR. (see Worksheet 5-1).
Phase 3:	1 min.	Half mile (2 laps on a 440 meter track).	Jog three, half mile laps.	
Phase 4:	during warm-up and cool-down	1 mile continuously.	1-mile jog and 1-mile walk.	
Phase 5:	during warm-up and cool-down.	Increase jog by quarter-mile increments until running 2 to 3 miles continuously.	2 to 3 miles.	

Increasing Your Running Workout

Once you can comfortably run 6-8 miles per week and you desire to progress further in a running program, start by increasing either your mileage or pace. Increasing either your distance or pace too quickly can cause

training injuries, so gradually increase one at a time by no more than 10% per week. (i.e., if you can run five miles, increase your distance by a half mile and keep your pace constant.) Maintain this new distance for at least one week, or until it is consistently easy for you. Consistency is more important than speed. When running for exercise and not competition, your pace should be even (60-75% max HR) and allow you to talk comfortably.

Increase your mileage or pace by only 10% per week.

Do not increase your mileage and pace simultaneously.

Twenty to 30 miles per week is a good training distance for an intermediate runner (Table 6-3). As a rule, your risk of injury sharply increases as your running mileage increases. So, if running for fitness rather than competition, keep your weekly mileage below 30 miles. Beyond this, your injury risks far outweigh any additional fitness benefits. Cross-train to work on aerobic fitness without running more than 30 miles.

Table 6-3. An Intermediate Running Program

Week	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Total
One	2	-	2	-	2	2	-	8
Three	2	-	3	-	3	2	-	10
Five	3	-	3	-	3	3	-	12
Seven	3	-	4	-	4	3	-	14
Nine	3	-	4	3	-	3	4	17
Eleven	4	-	5	3	-	5	3	20
Thirteen	4	-	5	5	-	4	5	23
Fifteen	5	-	5	5	-	6	5	26
Seventeen	5	-	6	6	-	6	7	30

Miles

Cross train or rest on non-run days.

With an endurance base of 30 miles per week you can easily compete in 10Ks, the Army 10 Miler, and other similar events.

Training for Long Distance Runs

If you are interested in building an endurance base for running long distance races, such as a half marathon, the Marine Corps marathon, the Air Force Marathon, or similar events, contact a local running group, a national running program, or a trainer with experience in coaching distance runners. Training for these distance races can be very challenging, both physically and mentally. For more information on running



distance races, contact the American Running and Fitness Association at <http://americanrunning.org>.

Swimming



Swimming is an excellent exercise for overall fitness. Because the water supports your body weight, swimming is a great cross-training exercise for running and other high-impact activities. Swimming is also an alternative for people with orthopedic problems or those who are in rehabilitation.

Beginning a Swim Program

For swimming to be your primary form of exercise, you must be a skilled swimmer. To emphasize the energy expenditure during a swim, swimming 1/4 mile, or 440 meters, is equivalent to jogging 1 mile. Therefore, it is very likely that an inexperienced swimmer will not be able to swim continuously for 20 to 30 minutes. If you are unfamiliar with the basic swimming strokes, focus on your technique by taking lessons. Once you swim continuously for 20-30 minutes you will have a good base for increasing your distance or pace. [Table 6-4](#) outlines a 10-week swim program for intermediate swimmers.

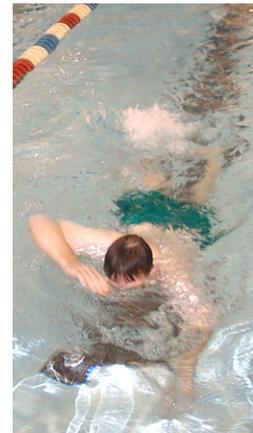


Table 6-4. Swim Program to Build Your Distance

Week	Distance (meters)	Number of Lengths	Frequency (Days/Week)	Goal Time (minutes)
1	300	12	4	12
2	300	12	4	10
3	400	16	4	13
4	400	16	4	12
5	500	20	4	14
6	500	20	4	13
7	600	24	4	16
8	700	28	4	19
9	800	32	4	22
10	900	36	4	22.5

Table taken from *OPNAVINST 6110.1D*, Jan 1990, p 17.

Open-Water Swimming

Open-water swimming can be a very challenging and rewarding workout. But before heading out to sea, you should be able to swim at least one mile continuously, and consistently, in a lap pool. When swimming in open water you are faced with many safety issues not addressed in pool training, so follow these safety rules: (Section adapted from L. Cox.

Seaworthy. Women's Sports and Fitness July-August 1995;17(5):73-75.)



- ◆ Ask lifeguards or locals about the safety of the area. (Are there any strong currents or riptides? What marine life is in the area? Avoid areas where sharks have been spotted.)
- ◆ Walk the beach along the course you will be swimming. Look at buoys, surfers, and other swimmers to gauge the direction and strength of the current. Pick landmarks (houses or lifeguard stations) to use as markers while you are swimming.
- ◆ Wear a comfortable, unrestricted suit (a wet suit in cold water); a swim cap and goggles with UVA/UVB protection. Water gloves and fins can be worn as well. Use a waterproof sunscreen all over your body.
- ◆ Never swim alone. On your first outing, swim just past the breaking waves.
- ◆ Follow the shoreline, staying 100 to 150 yards outside the breaking waves. Check your distance from the shoreline as you turn your head to breathe. Swim toward an unmoving target in the distance. Check your position with this target every 50 to 100 yards and adjust your course appropriately.
- ◆ A good starting distance for open-water swimming is a half mile. Swim against the current for the first quarter mile, then turn around and swim with the current for the last quarter mile. Gradually build up your distance by quarter mile increments.
- ◆ Avoid boats and jet skis by wearing bright colors. If a boat is moving toward you, swim away from it and kick hard to make large splashes that announce your presence.