# Active Aerobics and Recreation



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# Activity 1

## **STEP AEROBICS**

If you performed the aerobic dance routine in chapter 7, you have an idea of how you can make physical activity fun by using various foot and arm movements. Step aerobics uses arm and leg movements similar to those in aerobic dance, but in step aerobics you use a step, or an elevated platform, to create interesting additional movements. Stepping up and down on the step during a step aerobics routine can increase the cardiovascular intensity of the exercise without causing stress to the joints. Also, stepping helps increase muscular endurance of the legs. The height of the step can be adjusted to alter exercise intensity.

# Lesson 8

# **Active Aerobics**

## **Lesson Objectives**

After reading this lesson, you should be able to

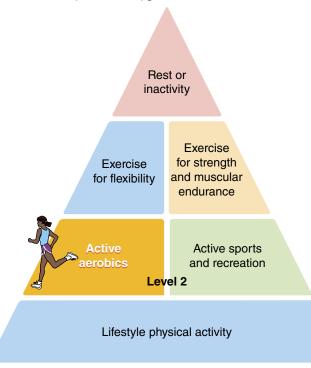
- 1. Explain the difference between lifestyle physical activity and active aerobics.
- 2. Describe some of the benefits and risks of active aerobic activities.
- 3. Describe several types of active aerobic activ-

## **Lesson Vocabulary**

active aerobics (p. 119), aerobics (p. 120), circuit training (p. 120)



Two types of physical activity lie at the second level of the physical activity pyramid: active aerobics and active sports and recreation. Activities at this level are more vigorous than lifestyle activities (level 1 of the Physical Activity Pyramid) and are especially good for building cardiovascular fitness and providing the health benefits of physical activity described in chapter 3. In this lesson you will learn more about the many different types of active aerobics.



# The Popularity of **Active Aerobic Activity**

Most activities in the Physical Activity Pyramid (including lifestyle activities) can be considered aerobic. But only those that are vigorous enough to elevate the heart rate above the heart rate threshold and into the target zone are considered active aerobics. Aerobic activities are among the most popular and the most beneficial of all activities in the Physical Activity Pyramid. For example, jogging or running, aerobic dance, cycling, and swimming are all among the most popular activities. Reasons for the popularity include:

- ▶ They often do not require high levels of skill.
- ► They frequently are not competitive.
- ▶ They often can be done at home or near home.
- ► They often do not require a partner or a group.

In general, active aerobic activities are safe compared to other activities such as sports and recreational activities. However, they can result in injury if overdone. Jogging or running is one of the top five activities in terms of injuries to participants. People who do a lot of highimpact and step aerobics also are often injured. Unlike sports injuries that are often sprains and muscle strains, joggers and aerobic dancers typically get overuse injuries such as heel bruises, sore shins, stress fractures in the legs and feet, and sometimes knee or back injuries. Most of these injuries can be prevented simply by not overexercising. People most prone to injury are those who train every day and who participate in several exercise sessions a day. Long distance runners and aerobic dance instructors have a higher than normal injury rate. Taking at least one day a week to rest is generally a good idea for injury prevention.

# **Types of Active Aerobics**

Many types of active aerobics exist. Some of the most popular will be described here. Some activities could be classified in more than one of the sections of the Physical Activity Pyramid. For example, swimming is an active aerobic activity but is also a sport and a type of active recreation. In this book it will be classified as an active aerobic activity. Many activities are described in this chapter and in the one that follows. Each activity will be described only once, even though it could fit in several places.

#### **Aerobic Dance**

Aerobic dance involves the continuous performance of various dance steps to music. Unlike various forms of social dance, performers typically dance by themselves, often following a leader or a video. This activity first became popular in the 1970s and remains one of the most popular forms of aerobic exercise. Various forms of aerobic dance include low impact, high impact, and step aerobics. Low impact is typically done with one foot staying on the ground at all times. This form is best for beginners because it has fewer injuries than other forms. High impact is typically more vigorous and involves jumping. Step aerobics involves dance steps done on a step or box. Some types of aerobic dance use light weights, rubber bands, and other types of exercise equipment.

## **Aerobic Exercise Machines**

Types of aerobic exercise machines include treadmills, stair steppers,

exercise bicycles, rowing machines, and ski machines. You can purchase these machines for use in your own home or you can find them in health clubs and schools.

They can be effective if used properly, but some people do not find exercise on machines as enjoyable as activities that allow them to move more freely.

For example, actual skiing may be more enjoyable than using a ski machine. On the other hand, exercise machines are often convenient and efficient.

## **Bicycling**

Bicycling could be classified as a sport because some compete in it or as a recreational activity because some do it for fun. It is included here because it is often done continuously at a consistent rate of speed that elevates the heart rate. If done relatively slowly it can also be considered as a form of lifestyle physical activity. Some forms of cycling such as BMX are considered to be extreme sports (see chapter 9).

# FITNESS Technology

GPS (global positioning systems) technology provides a system that communicates information. A satellite sends signals to a receiver, which sends the signal to a computer that analyzes the information. Originally GPS was developed by the government to help in national defense, but the technology is now available for consumer use. GPS has been used in automobiles to help drivers find their way, and now it can



also help bikers and joggers. The system for bikers and joggers includes a GPS receiver that is strapped on the upper arm and a watch that is worn on the wrist. A satellite sends a signal to the receiver, which sends it on to the watch. The watch provides information about how fast you are moving (speed), the distance you have traveled, and the average pace for your total workout. It is extremely accurate.

## **Cooper's Aerobics**

Dr. Ken Cooper, the founder of the Cooper Institute in Dallas, Texas, popularized the term **aerobics.** He developed a system of points that can be earned for doing active aerobic activities. The goal of those who do this program is to earn at least 30 aerobics points each week.



## **Circuit Training**

Circuit training refers to performing several different exercises one after the other. The performer does one exercise for a period of time and then moves on to the next with only a brief time between exercises. The goal is to keep the heart rate in the target zone. Circuit training can use exercise machines, small equipment such as jump ropes or rubber bands, free weights, or no equipment at all (for example, calisthenics). Sometimes people use music to determine how much time is spent on each exercise. Breaks in the music signal that it is time to move to the next exercise.

## Dance

Dance is one of the oldest art forms and has been a means of expression for many cultures. Some forms of dance are not only enjoyable but also excellent forms of active aerobic exercise. Modern, ballet, folk, and square dance are among the more traditional dance activities. Another form of dance is social dance. It includes more

traditional types such the waltz, country dancing, Latin dancing, and newer dance forms including hip-hop and line dance. All can be good forms of active aerobics if you do them vigorously enough to elevate your heart rate.

## **Martial Arts Exercise**

Judo and karate are just two of the many martial arts. Martial arts can build various parts of fitness, but they are not always good at building cardiovascular fitness because they may not involve enough continuous activity to keep the heart rate elevated. Recently some forms of martial arts have been combined with aerobic dance to create martial arts exercise such as TaeBo and cardiokarate. This form of exercise can build cardiovascular fitness but may not be as effective in learning self-defense as other more traditional techniques.

## **Rope Jumping**

Jumping rope has been used by boxers and other athletes as a method of training. Because it requires moving both the arm and legs as well as the entire body, it can be quite vigorous. For this reason people sometimes alternate jumping rope with other forms of exercise such as calisthenics. You can use many different jump rope steps. Advantages of jumping rope are that it is inexpensive and you can easily do it at home or in the neighborhood. Also, you can easily transport the equipment when you are away from home. One limitation is that not all people find it enjoyable.

## **Swimming**

Swimming is a sport and a form of recreation. It is included here because it is one of the most popular fitness activities among adults and it can be good for improving cardiovascular for almost all people. Like water aerobics, it is good for people who are overweight, elderly, or suffering from joint problems. For swimming to be effective aerobic exercise, your heart rate must be elevated and you must swim continuously for many minutes. Many people who say they swim do not meet either of these standards.

## **Water Aerobics**

Water aerobics, sometimes called aqua-dynamics, involves doing calisthenics or dance steps in a swimming pool. This form of aerobic exercise is especially good for people who are overweight, elderly, or suffering from arthritis or other joint problems. The water prevents the exercises from causing stress on the joints. Water also can offer resistance and increase the intensity of exercise for the able-bodied exerciser.

# **Finding the Best Type of Active Aerobics for You**

In this class you will get the opportunity to try out many types of active aerobics. Examples include aerobic dance, step aerobics, line dance, jogging, exercise circuits, and jumping rope. It is important that you try a variety of activities so that you can discover the ones you like best. It is also important to try an activity more than once before you decide whether to do that activity in the future. If you are going to stick with an activity over the long term, it must be enjoyable. To help you enjoy an activity, you should consider getting good instruction, wearing appropriate activity clothing, getting good equipment if necessary, and finding others with whom you can participate.



More teen boys (72 percent) are vigorously active at least three times a week than teen girls (57 percent). High school girls are especially likely to become less active as they grow older. Health experts are interested in finding ways to help teen girls to be more physically active.

#### **Lesson Review**

- 1. What are active aerobics and how do they differ from lifestyle activities?
- 2. What are some of the benefits and risks of active aerobic activities?
- 3. What are some types of active aerobic activity?



Swimming is a good form of active aerobics.



## Self-Assessment

# FITNESSGRAM 3—Cardiovascular Fitness, Flexibility, and Strength



In chapter 2 you performed two *FITNESSGRAM* assessments to measure strength and muscular endurance. In this assessment you will perform two more *FITNESSGRAM* tests to measure cardiovascular fitness and the strength and flexibility of your back and trunk muscles.

Table 8.1

Rating Chart: Trunk Lift

Rating	Inches
High performance	11-12
Good fitness	9-10
Marginal fitness	7-8
Low fitness	<6

Adapted with permission from FITNESSGRAM.



## **Trunk Lift (Upper Back)**

- **1.** Lie facedown with your arms to your sides and your hands under your thighs.
- 2. Lift the upper part of your body very slowly so that your chin, chest, and shoulders come off the floor. Lift your trunk as high as possible to a maximum of 12 inches. Hold this position for 3 seconds while a partner measures the distance your chin lifts off the floor. Hold the ruler at least 1 inch in front of your chin. Look straight ahead so that your chin is not tipped upward abnormally.



**Caution:** Do not place the ruler directly under your chin in case you have to lower your trunk unexpectedly.

**3.** Do the trunk lift 2 times and record the number of inches you can lift and hold your chin. Do not record scores above 12 inches. Use table 8.1 to determine your fitness rating. Record your results.

## The PACER

PACER stands for Progressive Aerobic
Cardiovascular Endurance Run and is a test
of cardiovascular fitness. You will need a tape
recorder and a special audiotape to perform
the test. Because the test requires this special
equipment, it may not be as easy to do as other
cardiovascular assessments you will do later.
However, by taking this test you can see whether
you meet the national health-related cardiovascular
fitness standard. The objective of the test is to run
back and forth across a 20-meter distance as many
times as you can.

- **1.** When you hear the beep, run across the 20-meter area and touch the line before the tape beeps again. Turn around.
- 2. At the sound of the next beep, run back to the other side. (You must wait for the beep before running in the opposite direction.) The beeps will come faster and faster, causing you to run faster and faster. The test is finished when you twice fail to reach the opposite side before the beep.
- **3.** Your score is the number of times you can run the 20-meter distance before your test is finished. Record this number on your record sheet. Then find your fitness rating on table 8.2.

Table 8.2

Rating Chart: PACER (Scores Are Laps Completed)

	13 YEARS AND YOUNGER		14 YEARS OLD		15 YEARS OLD		16 YEARS OLD		17 YEARS AND OLDER	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
High performance	55-74	31-42	61-80	33-44	65-85	38-50	70-90	43-56	74-94	50-61
Good fitness	35-54	15-30	41-60	18-32	46-64	23-37	52-69	28-42	57-73	34-49
Marginal fitness	30-34	13-14	36-40	16-17	41-45	21-22	47-51	25-27	52-56	30-33
Low fitness	<29	<12	<35	<15	<40	<20	<46	<24	<51	<29

Adapted with permission from FITNESSGRAM.

# Lesson 8.2

# **Active Recreation**

## **Lesson Objectives**

After reading this lesson, you should be able to

- **1.** Define recreational activity and leisure time.
- 2. Describe several types of active recreation including their benefits and risks.
- 3. Describe some safety considerations for active recreation and active aerobics.
- **4.** Define social support and describe how it can help you to be physically active.

## **Lesson Vocabulary**

active recreation (p. 124), leisure time (p. 124), recreational activity (p. 124)



We would all like to have more **leisure time.** It is time free from work, or in the case of teens, free from commitments such as school, homework, and jobs. Leisure is more than free time. It is an attitude that refers to being free from doing things you have to do. The word recreation refers to re-creating or refreshing yourself. Accordingly a **recreational activity** is an activity that you do during your leisure or free time to refresh or re-create yourself. Recreational activities are done for fun and enjoyment. They need not be vigorous or purposeful. They can include watching TV, reading a book, playing chess, and many other relatively inactive pursuits. Some activities such as fishing, some forms of boating, and camping can be considered lifestyle activities.



# Types of Active Recreation

**Active recreation** includes activities that are fun and typically non-competitive. The main purpose of doing



Biking is an aerobic activity that is also a form of active recreation. Many communities have cycle clubs that involve members of all ages in riding for fun and fitness. Ask at your local cycle shop-they will likely have information on how to get involved.

the activity may not be to build fitness, but if the activity is continuous and vigorous, it can be good for this purpose. Recreational activities that are vigorous enough to elevate the heart rate in the cardiovascular target zone are considered to be active recreation. Many types of active recreation are done outdoors because participants feel that the beauty of the outdoor setting and the fresh air help them become refreshed. Examples of active recreation include:

- ▶ **Backpacking and hiking.** Hiking is a particularly enjoyable activity because it is an outdoor activity that can be done independently or in groups. Most county, state, and national parks have a wide variety of scenic trails for hikers of all levels of experience. Hiking usually involves a one-day trip. Backpacking is often a severalday venture that requires carrying food, shelter, and other supplies on your back.
- ▶ Boating, canoeing, kayaking, and rowing. Various types of boating are done outdoors on water, free from the hassles of normal daily life. When done vigorously they can also be good for building fitness and promoting good health. Kayaking and rowing can be especially vigorous and require considerable skill to perform well and safely. Even when not done vigorously, boating activities can be relaxing and refreshing.
- Orienteering. Orienteering combines walking, jogging, and map-reading skills. It is usually done in a rural area and might include hiking through rugged terrain. One participant departs from a starting point



One type of active recreation is called urban orienteering. It uses the same ideas and skills as orienteering in a rural setting but it can be done in the inner-city areas.

every few minutes so that he or she cannot follow the person ahead. Each participant has a compass and a map that describes a course from 1 to 10 miles. The compass is used to help locate several checkpoints that are marked by flags or other identification. At each checkpoint the participant marks a card to indicate that the checkpoint has been located. In some cases the activity can be competitive if the goal is to cover the course in as little time as possible.

► **Skating.** Types of skating include inline skating, roller skating, and ice skating. Inline skating is one of the fastest growing participation activities. It was originally developed as a method of training for skiers in the summer. It has become popular, and now many nonskiers do inline skating. Inline hockey and other inline sports have now developed. One study by a sports medicine group found that inline skating was the most risky of the many participation activities studied, possibly because people fail to use safety equipment or they try advanced skills too soon. Because of the risk in this activity the safety guidelines described here are



Engaging in outdoor recreational activities, like camping, is a great way to refresh or re-create yourself.

# Safety Tips for Active Aerobics and Recreation

## Wear Proper Safety Equipment

For example, bikers and skaters should wear helmets. Skaters should wear hand and knee pads. Dress appropriately for the weather. Choose warm clothes for winter activities and clothing that allows you to stay cool in the heat.

## **Use Safe Equipment**

Bikes should have lights and reflectors. Backpacking equipment should fit your body size, and loads should not be too heavy. Skis and other equipment should be in good repair, be of the correct size, and have proper safety releases. Boaters should wear life preservers. Rock climbers should have appropriate safety equipment. As described in chapter 2, it is important to drink water regularly when doing vigorous activity, especially in the heat.

## **Get Proper Instruction**

Whether it is skiing, inline skating, boating, rock climbing, or some other activity, it is important to get proper instruction before participation. Many

injuries and accidents occur because people are not performing activities properly.

## **Perform Within the Limits of Your Current** Skills

Many injuries occur because people attempt to perform beyond the limits of their current skills. For example, beginning skiers should not attempt to ski advanced slopes until they acquire more skill. For all activities. start with simple skills and gradually attempt more difficult skills as your abilities improve.

## **Plan Ahead**

Planning is very important. If you are going on a hike, make sure you have a map and that you know where you are going. Carry an emergency phone. If you are going skiing, make sure that the trail is open and don't ski in restricted areas. When backpacking, carry enough food and water to supply you if you get lost. When planning trips to unfamiliar areas it is important to stay with a group.

especially important. Roller skating is a more traditional activity that uses skates with four wheels as opposed to one line of several wheels. Ice skating has been around for a long time and is now performed by people of all ages. Ice skating is very popular in colder climates. Figure skating, speedskating, and hockey are Olympic sports, so this activity could easily be included in the next chapter on sports.

- ► **Skateboarding.** Skateboarding is a recreational activity that is popular among teens. Like inline skating it is a risky activity, so proper safety equipment is essential, as is proper instruction. Serious skateboarding is now considered an extreme sport, and for this reason it could be included in the next chapter on sports. Finding a proper place to perform skateboarding is very important. Many cities have planned skate parks to provide safe places to skate because many skate hangouts are unsafe and sometimes are in locations where skating is prohibited.
- ▶ **Rock climbing.** Many schools now teach rock climbing on climbing walls. Learning on a climbing wall is a good idea because you can get proper



Many activities are considered active recreation.



# **Taking Charge: Finding Social Support**

Social support is when members of your family, your friends, teachers, and members of the community encourage your physical activities or participate with you. You are more likely to begin or continue an activity if the people you associate with also do it.

Shannon's family has always enjoyed riding bikes. As a toddler, she would ride in the child's seat behind her mother. Every evening the family would ride through the neighborhood. By the time she was in school, Shannon had her own twowheeler. Now as a teenager, Shannon still loves to ride. Because of school activities, she can't always ride with her family. Shannon wants to continue riding, but she doesn't want to do it alone.

Jim's family never has been very active. Most of his friends tend to watch television, play video games, or just hang out rather than do anything active. Sometimes, Jim watches while a group of his classmates plays a quick game of volleyball after school. They often invite him to



join the game. He has been tempted to join, but he has hesitated because he is not friends with any of the players. He has enjoyed the activities he has tried in the past, although he never continued them for very long.

Both Shannon and Jim need social support. Shannon needs it to continue an activity she already enjoys. Jim needs it to begin an activity and then to continue to reinforce participation in it.

## **For Discussion**

Whom might Shannon ask to go riding with her? What could Jim do to become involved in physical activity? What groups of people provide the social support a person receives? Fill out the questionnaire provided by your teacher to find out what social support you have. Consider the guidelines on page 128.

instruction and can have proper spotting (protection against falling). More advanced climbers will have special safety ropes and equipment and the skill to use them. Beginners and intermediate climbers should always climb with the assistance of an expert. When done properly, rock climbing is a relatively safe activity.

- ▶ **Bouldering.** It is a safe alternative to rock climbing that can be done in the natural environment with minimal gear.
- ▶ **Skiing.** Kinds of skiing include cross-country (Nordic), downhill, snowboarding, and ski jumping. Cross-country skiing is typically done at a steady pace over relatively long distances. For this reason it could be considered an active aerobic activity. Downhill skiing typically involves faster skiing, sometimes over moguls and jumps. Snowboarding is like skateboarding on snow and has become extremely popular. It has joined the other forms of skiing as an Olympic sport and can also be considered an extreme sport. All types of skiing could be considered sports, but they are classified here because so many people do them just for fun and recreation.

# **Safety Considerations** for Active Recreation

In general active recreation activities are safe, but some activities are more risky than others. For example, skating is the most risky of all forms of physical activity. Inline skating is especially risky. Skateboarding, downhill skiing, and rock climbing are others that are relatively risky. Some general information concerning safety for all activities at level 2 of the Physical Activity Pyramid are listed in the box on page 126.

## **Lesson Review**

- 1. What are the definitions of recreational activity and leisure time?
- 2. What are some types of active recreation? What are their benefits and risks?
- 3. What are some safety considerations for active recreation and active aerobics?
- 4. What is meant by social support? Describe how it can help you to be physically active.



# **Finding Social Support**

Experts indicate that people who find the support of others are more likely to participate in regular physical activity, especially over a lifetime. Social support is also helpful to people who are interested in losing weight, building muscle fitness, and improving their eating habits. Consider these guidelines to help you get the support of others for your physical activity:

- ▶ Do a self-assessment of your current level of social support. Ask your teacher about the social support worksheet that can help you do this assessment.
- ▶ Use the self-assessment to determine areas in which you can improve your social support.
- ▶ Find friends who have interests in the activities that interest you, or encourage your current friends to support you or join you in your participation.
- ▶ **Join a club or a team.** If no club or team exists, talk to a teacher, family members, or a community recreation leader about starting one.

- ▶ Discuss your interests with family and teachers. Ask them for their support. Ask them to help you in learning the activity.
- ▶ **Get lessons if possible.** In addition to formal lessons, teachers and others can support you by helping you learn to perform an activity properly.
- ► Encourage other family members to try the activity.
- ▶ **Get proper equipment.** Ask for equipment for birthdays or for other special occasions.



# Jogging: Biomechanical Principles and Guidelines



If you are looking for an excellent cardiovascular activity requiring little skill and no equipment except a good pair of running shoes and proper clothing, jogging might be for you. More than 6 million people in the United States are joggers. Many more could learn to enjoy this activity if they knew how to jog properly. If you plan to start jogging, be sure to consider these biomechanical principles and guidelines:

- ▶ Use a foot action appropriate for jogging. The foot action for jogging is not the same as for fast running. In fast running, your weight is mainly on the front of your foot. In jogging, you land on your heel or on the entire foot. Then you rock forward and push off with the ball of the foot, followed by the toes. Improper jogging technique can cause injuries such as sore shins, sore calves, or even a sore back.
- ➤ Swing your legs and feet straight forward.

  Do not let your feet turn out to the sides. Feet and legs out of alignment cause unnecessary strain on your joints and muscles. When jogging, step farther than your normal walking step.
- ▶ Swing your arms straight forward and backward. Do not swing them across your body. Keep your arms bent at the elbows, and keep your hands relaxed. Try to keep your shoulders relaxed. If you jog with a floppy jaw, your upper body will relax more.

- ➤ **Keep your trunk fairly erect.** When jogging, do not lean forward as you would when starting to run fast.
- ▶ Learn your own best pace. Learn how fast or slow you should jog to raise your heart rate to the appropriate level. A correct jogging pace is different for each person. Find your own pace; do not try to jog at someone else's pace, especially if it is faster than your own best pace.
- ➤ **Avoid running on hard surfaces.** If possible, jog on running tracks, grassy places, or dirt paths. These surfaces have more give than concrete sidewalks and put less stress on your feet and legs. If you jog indoors, try to jog on a wooden floor rather than on concrete.
- ▶ **Breathe easily.** If you are jogging with a friend, you should be able to carry on a conversation as you jog. If you are jogging alone, you should be able to breathe comfortably. If you are panting or gasping for breath, you are jogging too fast.

# **Jogging Practice**

Work with a partner to practice the jogging techniques discussed above. Jog about 100 yards while your partner stands behind you and checks your technique. Have your partner check your feet and legs and answer these questions:

- **1.** Does your heel or whole foot hit the ground first?
- 2. Do you push off with the ball of your foot?
- **3.** Do your legs and feet swing and land straight ahead?
- **4.** Is your jogging stride longer than your walking stride?

Now do a second 100-yard jog. Have your partner look at you from a side view, checking your arms and body, and answer these questions:

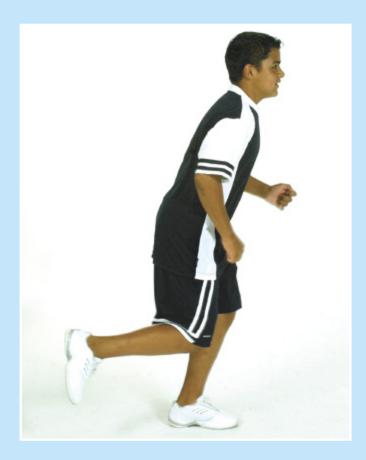
- **1.** Are your elbows bent properly (90 degrees) with your hands relaxed?
- **2.** Do your arms swing straight forward and backward?
- 3. Are your head and chest up?
- **4.** Is your body leaning only slightly?

Discuss your assessment with your partner. Then have your partner jog twice while you evaluate his or her technique. Try to correct your technique and have your partner check you again. Do the same for your partner. Both you and your partner may jog more than twice if necessary.

Table 8.3

Target Heart Rates (in Beats per Minute)

Resting HR	Beginner (low fit)	Regularly active (good fitness)
<50	127-143	143-182
51-70	132-147	147-183
71+	140-153	153-185



## **Beginner's Jogging Workout**

This workout helps you learn about how fast to jog to get a fitness benefit (by reaching your target heart rate). You learned about target heart rate in chapter 7. Try this workout after you have practiced your jogging technique.

- **1.** Begin your workout by taking your resting heart rate using the procedure you learned in the self-assessment in chapter 1.
- 2. Determine your target heart rate using the method described on page 115 or use your resting heart rate and table 8.3 to determine the appropriate target heart rate for your workout. If you are a beginner or if you are low or marginal in cardiovascular fitness, use the target zone in the first column. If you have been exercising regularly and you are in the good fitness or high performance fitness levels, use the second column.
- **3.** Jog for 5 minutes trying to get your heart to the target level. Use your watch to keep track of how long you run. How long you run is more important than how far. By using time instead of distance, you can jog anywhere. Set your own course. Try to jog half the time away from your starting point and the other half returning to your starting point. If you are not somewhere near your starting point at the end of 5 minutes, walk back to it.
- **4.** At the end of 5 minutes, count your heart rate to get your one-minute exercise heart rate. Record this score on your record sheet. Determine whether your exercise heart rate was in your target heart rate zone.
- **5.** Jog for 5 minutes again. If your exercise heart rate was lower than your target heart rate on the first jog, then jog faster this time. If your exercise heart rate was higher than your target rate on the first jog, then jog slower this time. If your exercise heart rate was in the target zone on the first jog, then jog at the same speed this time. After the second run, count your exercise heart rate again. Record your score on the record sheet.



# **Project**

Keep a record of your daily participation in active aerobics and active recreation for one week. Record the minutes of activity in these activities each day. How might you adjust your physical activity to better maintain or improve your cardiovascular fitness level? What short-term goals might you have for minutes each day in active aerobics and active recreation? (Do not include active sports; they are included in the next chapter.) Make a written plan for the following week, incorporating changes that might help you reach your goals. Use the worksheets provided by your teacher.





# **Reviewing Concepts and Vocabulary**

Number your paper from 1 to 4. Next to each number, write the word (or words) that correctly completes the sentence.

1.	The word means "with oxygen."
2.	Free time or time free from work is called
3.	TaeBo is a type of exercise.
4.	Jogging, swimming, and skating are examples of

Number your paper from 5 to 9. Next to each number, choose the letter of the best answer.

#### Column I

- **5.** water aerobics
- 6. orienteering
- 7. inline skating
- **8.** recreational activity
- 9. circuit training

## Column II

- a. aqua-dynamics
- b. several exercise stations
- c. done for fun during free time
- d. uses map-reading skills
- e. has relatively high injury risk

Number your paper from 10 to 15. On your paper, write a short answer for each statement or question.

- **10.** What are some good safety tips for performing active aerobics and active recreation?
- **11.** Why is it important to include in your activity plan choices from the active aerobics and active recreation part of the Physical Activity Pyramid?
- 12. Why is aerobic activity among the most beneficial types of activity?
- **13.** Why might team sports not be good as an only choice for your lifetime activity plan?
- **14.** Why is good equipment important to safe physical activity?
- **15.** Why are active aerobics among the most popular physical activities among adults?

## **Thinking Critically**

Write a paragraph to answer the following question.

What are some active aerobic and active recreational activities you might include in your lifetime activity program? Explain why you made each choice.