

Lesson 9.1

Vigorous Aerobics, Sport, and Recreation

Lesson Objectives

After participating in this lesson, you should be able to

1. list and describe the three types of vigorous-intensity physical activity (one from step 2 and two from step 3 of the Physical Activity Pyramid),
2. list and describe several types of vigorous aerobic activity (pyramid step 2),
3. describe the four categories of vigorous sport (pyramid step 3),
4. define *recreation* and *leisure*, and
5. list three types of vigorous recreation (pyramid step 3).



Lesson Vocabulary

aerobic, anaerobic activity, anaerobic capacity, circuit training, leisure time, lifetime sport, recreation, sport, vigorous aerobics, vigorous recreation, vigorous sport

How often do you engage in activities that make you breathe hard and sweat? Did you know that building fitness increases your chances of living longer? Vigorous-intensity physical activities are activities that make you breathe hard and sweat. The Physical Activity Pyramid shows two types of vigorous-intensity physical activity: vigorous aerobics (step 2) and vigorous sport and recreation (step 3) (figure 9.1). Activities included in these steps are more vigorous (requiring 7 METs or more) than the moderate-intensity activities included in step 1 (which require 4 to 7 METs) and are especially good for building cardiorespiratory endurance. (As discussed in chapter 7, 1 MET represents the energy you expend when at rest.) The MET count increases as activity becomes more vigorous. Research shows that vigorous-intensity physical activity (7+ METs) provides the health benefits of moderate activity—and more. In this lesson, you'll learn more about the many types of vigorous-intensity activity.

Vigorous Aerobic Activity

Most activities included in the Physical Activity Pyramid (including moderate activities) can be considered **aerobic**. But only activities that are intense enough to elevate your heart rate above your threshold of training and into your target zone are considered **vigorous aerobics**. Aerobic activities—such as jogging, aerobic dancing, cycling,

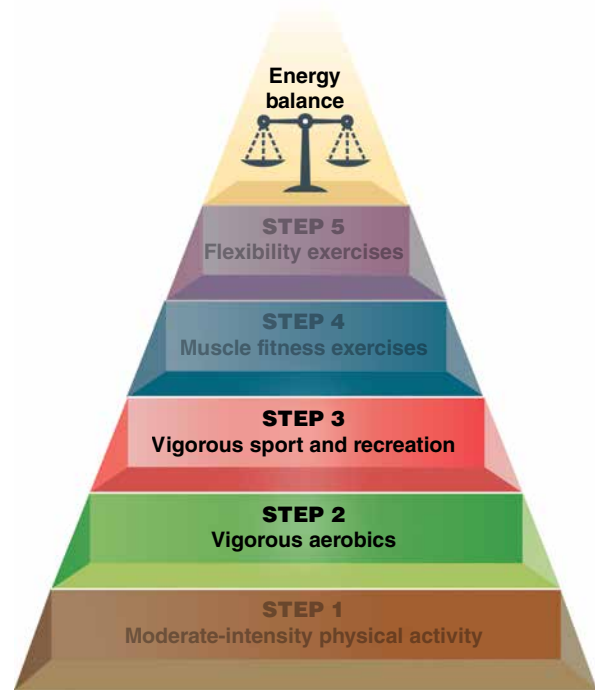


FIGURE 9.1 Vigorous aerobics, sport, and recreation (steps 2 and 3) build cardiorespiratory fitness and have many other health benefits.

Adapted from Physical Activity Pyramid for Teens, source: C.B. Corbin.

and swimming—are among the most popular and most beneficial of all the activities included in the Physical Activity Pyramid. They are popular for the following reasons.

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

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There are many types of vigorous aerobic activity. Some of the most popular are described in the following sections. Some activities could be classified in more than one section of the Physical Activity Pyramid. For example, swimming is a sport, a type of vigorous aerobic activity, and a type of vigorous recreation; in this book, it is classified as a vigorous aerobic activity. Each activity is described only once in this chapter even if it could fit in multiple places.

Aerobic Dance

Aerobic dance involves continuously performing various dance steps to music. Unlike social dancers, aerobic dancers 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. Forms

of aerobic dance include low-impact, high-impact, and step aerobics.

Low-impact aerobics is typically done with one foot staying on the ground at all times. This form is best for beginners because it leads to fewer injuries than other forms. High-impact aerobics 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, as well as movements from other activities such as martial arts.



Aerobic Exercise Machines

Types of aerobic exercise machines include treadmills, stair steppers, elliptical trainers, exercise bicycles, rowing machines, and ski machines. You can purchase these machines for use in your own home or use them in health clubs and schools. They can be effective if used properly, but some people do not find exercise on machines to be as enjoyable as activities that allow them to move more freely. For example, skiing may be more enjoyable than using a ski machine. On the other hand, exercise machines are often convenient and efficient.

Cycling

Cycling is a sport because some people compete in it and a recreational activity because some do it for fun. If done slowly, it can also be considered a form of moderate physical activity. It is included here because it is often done continuously at a consistent speed that elevates the heart rate. Some forms of cycling, such as BMX and downhill mountain biking, are considered extreme sports.

Circuit Training

Circuit training involves performing several different exercises one after another. The performer does one exercise for a period of time, then moves 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). Doing different activities helps build muscle fitness as well as cardiorespiratory endurance and can increase your enjoyment because of the variety. Sometimes people use music to determine how much time to spend on each exercise. A break in the music signals that it's time to move to the next exercise.

Dance

Dance is one of the oldest art forms and has been a means of expression in many cultures. Some dance forms are not only enjoyable but also excellent forms of vigorous aerobic exercise. More traditional dance activities include modern, ballet, folk,

and square dance. Another category of dance is social dance, which includes both more traditional types (such as the waltz, country dancing, and Latin dancing) and newer forms (such as hip-hop and stepping). Some dance activities have been altered so that traditional steps are used in ways that make the activity similar to aerobic dance. For example, Zumba uses Latin music and Latin dance steps in ways that resemble aerobic dance. All can be good forms of vigorous aerobics if you do them vigorously enough to elevate your heart rate.

Jogging and Running

Jogging and running consistently rank among the most popular forms of vigorous aerobic activity. Jogging is generally considered to be noncompetitive, whereas running is a faster movement than jogging and is a competitive activity for some people. Runners often participate in competitive events such as 5K and 10K races. Jogging and running are combined into one category here because they are very similar. You'll learn more about them in the self-assessment that follows this lesson.

Martial Arts Exercise

Judo and karate are just two of the several hundred martial arts practiced around the world. Different countries throughout the world have different forms. Martial arts can build various parts of fitness, but they are not always good at building cardiorespiratory endurance because they may not involve enough continuous activity to keep the heart rate elevated. Some forms of martial arts, however, have been combined with aerobic dance to create martial arts exercises; examples include Tae Bo and cardio karate. These forms of exercise can build cardiorespiratory endurance but may not be as effective for learning self-defence as more traditional techniques.

Rope Jumping

Rope jumping has long been used by boxers and other athletes as a method of training. Because it requires moving the arms and legs, as well as the entire body, it can be quite vigorous. For this reason, people sometimes alternate rope jumping with other forms of exercise, such as calisthenics (e.g.,



FITNESS TECHNOLOGY: Global Positioning System

The global positioning system (GPS) is a satellite-based system that communicates precise location information to places around the world. Satellites send signals to a receiver, which sends the signal to a computer that analyzes the information. The GPS was developed by the U.S. government to aid in national defence, but the technology is now available for consumer use. Global positioning system technology is quite accurate and has been used in automobiles to help drivers find their way. It is now being used to help bikers, joggers, hikers, and others who perform outdoor physical activities. The GPS can also provide information about how fast you're moving, the distance you've traveled, the altitude you've gained or lost, and the average pace for your total workout. The first GPS systems for use in physical activity were complicated and required arm or leg straps with a receiver, as well as a watch-like device worn on the arm. Others required a computer chip built into



Global positioning system technology can help track your physical activity—for example, these watches can track how far a jogger has run.

shoes to pick up the satellite signal. Technology changes rapidly, however, and now GPS devices for use in physical activity are more advanced.

Using Technology

Research GPS technology for use in physical activity. Identify the device that you think would be the best buy and give reasons for your choice.

push-ups, sit-ups, planks). Practitioners have developed many rope-jumping moves. Rope jumping is inexpensive and can easily be done at home or in your neighbourhood. You can also easily transport the needed equipment when traveling.

Swimming

Swimming is both a sport and a form of recreation. It is included here because it is one of the most popular fitness activities among adults and can serve as a good way to improve cardiorespiratory endurance for almost all people. Like water aerobics, it is a good choice for people who are overweight, elderly, or suffering from joint problems. For swimming to be an effective aerobic exercise, however, your heart rate must be elevated, which means that you must swim continuously for many minutes. Many people who 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 because the water reduces stress on the joints. For stronger exercisers, water can also be used to provide resistance and thus increase the intensity of exercise.



Swimming can be a good form of vigorous aerobics.

Vigorous Sports

Sport involves physical activity that is competitive (has a winner and loser) and follows well-established rules. Some sports, such as golf and bowling, are classified as moderate physical activity (step 1 of the Physical Activity Pyramid). **Vigorous sports** (step 3 of the pyramid) elevate the heart rate above the threshold level and into the target zone for cardiorespiratory endurance.

There are so many vigorous sports that it is impossible to mention them all here. We can, however, mention general categories: team sports; dual sports; individual sports; and outdoor, challenge, or extreme sports. Certain other sports are not considered here either because they are not among the most popular or because they have little relevance to a personal physical activity program (for example, auto racing and horse racing).

Team Sports

Team sports such as football, hockey, soccer, volleyball, and basketball are among the most popular for high school students and for adult spectators. These activities can be very good for helping participants build fitness (though of course they do little for the fitness of spectators!). Team sports can be harder to do after your school years are completed because they require other participants (teammates), as well as special equipment and facilities. Even though baseball and softball involve some vigorous-intensity activity and training for these sports often requires vigorous-intensity physical activity, they are usually considered to be moderate activities.

Golf, primarily an individual sport, is the most widely practiced sport in Canada. The next five most widely practiced sports are team sports (ice hockey, soccer, baseball, volleyball, and basketball); numbers 7 through 10 are dual or partner sports (downhill skiing, cycling, swimming, badminton). No team sport is among the 10 most popular types of physical activity performed by adults in Canada, but basketball, soccer, volleyball, hockey, and baseball are listed among the top 20. The 10 most popular activities are mostly either moderate physical activities or vigorous aerobics. Because relatively few people who play team sports when they are young continue to pursue them for a lifetime, it will be important for you to actively seek opportunities if you want to play team sports as you grow older.



a



b

Team sports: (a) Volleyball and (b) basketball are two of the most practiced sports in Canada.

Another way to stay active is to begin learning an individual sport, a dual sport, or an aerobic activity that you can enjoy later in life.

Dual or Partner Sports

Dual sports are those you can do with just one other person (the person you are playing against) or with a partner against another set of partners (for example, tennis doubles). Examples include tennis, badminton, fencing, and judo. Because they require fewer people than team sports, dual sports are often referred to as **lifetime sports** in that they are easier to continue throughout your life. Badminton is often included in the top 10 participation activities in Canada partly because it can be done with just one other person and is easy to set up in backyards and on beaches.

Some dual sports are not activities that many people do as adults. For example, wrestling is considered a dual sport but is not often done as a lifetime sport, even though it does develop many important parts of health-related fitness. Dual sports that are not done by many adults are not considered lifetime sports.

Individual Sports

Individual sports are those that you can do by yourself. Golf (as mentioned earlier, the most widely practiced sport in Canada), gymnastics, and swimming are truly individual sports because you do not have to have a partner or a team to perform them. Many of these sports are also lifetime sports because they are more likely to be done throughout life, although some, such as gymnastics, are not done by many people later in life (and gymnastics often requires a spotter). Skiing and skating are two forms of vigorous recreation that are also sometimes classified as individual sports.

Outdoor, Challenge, or Extreme Sports

Many types of vigorous recreation can also be classified as sports. Certain vigorous recreation activities are sometimes referred to as outdoor or challenge sports, such as mountain biking, rock climbing, sailing, and water skiing. Some other activities may be referred to as extreme sports, such as snowboarding, skateboarding, surfing, and BMX cycling.

Vigorous Recreation Activities

Vigorous recreation includes activities that are fun and, typically, noncompetitive. **Recreation** is something you do during your free time; therefore, recreational activities are sometimes called leisure activities.

Many types of vigorous recreation are done outdoors because participants feel that the beauty of the setting and the fresh air help rejuvenate them. Examples of vigorous recreation are discussed next.

Backpacking and Hiking

Hiking is particularly enjoyable because it takes place outdoors and can be done either independently or in a group. Most municipalities and national parks offer scenic trails for hikers of all levels of experience. Hiking usually involves a one-day trip, whereas backpacking often involves a multiday venture that requires you to carry food, shelter, and other supplies on your back.

“ [Leave] all the afternoon for exercise and recreation, which are as necessary as reading; I will rather say more necessary, because health is worth more than learning. ”

—Thomas Jefferson, U.S. president

Boating, Canoeing, Kayaking, and Rowing

Boating can be done in various forms that offer the enjoyment of water and the outdoors, free from the hassles of normal daily life. When performed at a vigorous intensity, these activities also help you build fitness and promote good health. Kayaking and rowing can be especially vigorous, and they require considerable skill to perform well and safely. When not done at a vigorous intensity, boating activities can be relaxing and refreshing.



Paddleboarding can be a vigorous recreational activity that builds cardiorespiratory endurance and provides other health benefits.

Surfing and Stand-Up Paddleboarding

Surfing and stand-up paddleboarding (SUP) are increasing in popularity. These board sports can get participants outdoors and require good balance. Surfing requires upper body strength to paddle out to the waves, as well as flexibility and power to get from lying down on the board to standing up and surfing. Stand-up paddleboarding can be a vigorous recreation activity when you are paddling for speed and distance, or it can be a moderate-intensity physical activity when you are taking a relaxing paddle in calm water.

Orienteering

Orienteering combines walking, jogging, and skilled map reading. It is usually done in a rural area and might include hiking through rugged terrain. Participants depart from a starting point in staggered fashion every few minutes so that no participant can simply follow another. Each participant uses a compass (compass apps are available) and a map that describes a course up to 16 kilometres long. The compass is used to help locate several checkpoints marked by flags or other identifiers. At each checkpoint, the participant marks a card to indicate that he or she has located it. The activity can be competitive if the goal is to cover the course as fast

FIT FACT

Leisure time is more than free time. It involves an attitude of declaring freedom from doing things you have to do. Similarly, the word “recreation” suggests refreshing or re-creating yourself. Thus a recreational activity is one 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, creating art, making music, and doing many other relatively inactive pursuits. Some leisure activities—such as fishing, camping, and some forms of boating—can be considered moderate activities.

as possible. Urban orienteering uses the same ideas and skills but in inner-city areas rather than rural settings.

Rock Climbing and Bouldering

Many schools now teach rock climbing on climbing walls. Learning on a climbing wall allows you to get proper instruction with good spotting (protection against falling). More advanced climbers are skilled in using special safety ropes and equipment. Beginners and intermediate climbers should always climb with the help of an expert. When rock climbing is done properly with proper equipment, it is a relatively safe activity. It’s also a good type of activity for building muscle fitness.

Bouldering is a type of rock climbing in which the climber tries to reach the top of a boulder using only gloves and special shoes (no special ropes or other equipment). Bouldering is most often done outside, but some clubs have artificial boulders for indoor climbing. The height of climbs is typically limited to about 9 metres (30 feet). As with rock climbing, bouldering requires special skills, so instruction is recommended for beginners.



Outdoor vigorous recreational activities have health benefits and help you meet national activity guidelines.



SCIENCE IN ACTION: Anaerobic Physical Activity

Unlike aerobic activity that can be sustained for long periods of time, **anaerobic activity** is activity that is so intense your body cannot supply adequate oxygen to sustain performance for more than a few seconds. Very vigorous anaerobic activity, such as an all-out sprint, can be sustained for only about 10 seconds and relies on high-energy fuel stored in the muscles (ATP-PC). Some vigorous activities (also anaerobic) are not “all-out” but are still very intense (they can be sustained for 11 to 90 seconds), and for those activities, the glycolytic system is used. Glucose (glycogen) stored in the muscles and liver provides the energy. Anaerobic activities are typically done in short bursts followed by rest periods. During anaerobic activities your body builds up an oxygen debt because it can't take in enough oxygen to replenish the fuel needed to continue performance. After the activity is completed, oxygen is available to replenish the fuel stores—it “repays” the oxygen debt.

Your ability to perform anaerobic activity is referred to as **anaerobic capacity**. One of the most common tests of anaerobic capacity is the Wingate Test, which is done on a bicycle ergometer (stationary bicycle) and requires an all-out effort to pedal as fast as possible. This test is typically reserved for people interested in high-level anaerobic performance.

Sports such as basketball, football, and soccer involve sprints up the court or down the field. These sprints are anaerobic because they often require short but maximal effort. Sports allow time for recovery after these anaerobic bursts. This pattern means that players' heart rates may exceed the target zone during anaerobic sprints, then drop below the threshold of training during rest intervals (for example, when a free throw is taken in basketball). In fact, vigorous sports are not true aerobic activities, but when they are done for similar amounts of time they can be considered similar to vigorous aerobics. This is because they provide health benefits and improve cardiorespiratory endurance.

These sports offer the added advantage of building anaerobic capacity (also called *anaerobic power* and *anaerobic fitness*). Anaerobic capac-

ity allows you to recover more quickly from anaerobic bursts and therefore improve your performance in certain sport activities. Some vigorous recreation activities, such as kayaking, are similar to vigorous sport activities in that they require good cardiorespiratory endurance as well as anaerobic fitness.

People who train for vigorous sport and recreation activities often use special anaerobic training techniques, such as interval training. Interval training involves repeated high-intensity exercise alternated with rest periods or bouts of lower-intensity exercise. There are many different kinds of interval training, including high-intensity interval training (HIIT) that alternates bouts of exercise at various intensities and lengths. The FIT formula for the most commonly used type of interval training is as follows.

- **Frequency** = three to six days a week
- **Intensity** = upper level of the target heart rate zone (because your exercise bouts are short)
- **Time** = multiple exercise bouts of 10 to 60 seconds alternated with 1- to 2-minute rest periods or bouts of moderate exercise (totalling at least 10 minutes of exercise)

Depending on your goal, the length of exercise may vary from the durations given in the preceding formula. This type of training is appropriate for people who have already achieved the good fitness zone for cardiorespiratory endurance and who have regularly been doing vigorous-intensity physical activity. Before beginning this type of training, consult your doctor, teacher, or coach or other qualified expert in kinesiology.

Student Activity

While participating in an intermittent activity—such as basketball, soccer, or tennis—count your heart rate right after several vigorous bursts of activity. Determine whether the intensity of the activity is near the upper level of your target heart rate zone for aerobic activity.



Skateboarding

As you probably know, skateboarding is a popular recreational activity among teens. Competitive skateboarding is now considered an extreme sport. Therefore, it can be considered both a recreational activity and a sport (for high-level competitors). Like in-line skating, skateboarding is a risky activity, so you should use proper safety equipment and seek proper instruction. You also need to find a proper place to perform skateboarding, and many cities offer planned skate parks to provide safe places to skate.

Skating

Types of skating include in-line, roller, and ice. In-line skating was originally developed as a method of training for cross-country skiers in the summer, but its popularity has grown, and in-line sports (for example, hockey) have been developed. One study by a sports medicine group found that in-line skating was the most risky of the many participation activities studied, possibly because people fail to use proper safety equipment or because they try advanced skills too soon. The risk involved in skating activities makes it especially important for you to follow the safety guidelines described later in this chapter.

Skiing

Kinds of skiing include cross-country skiing (a type of Nordic skiing), downhill skiing, snowboarding, and ski jumping. Cross-country skiing is typically done at a steady pace over a relatively long distance. For this reason, it could be considered a vigorous aerobic activity. Downhill skiing typically involves faster skiing, sometimes over moguls (bumps) and jumps. Snowboarding is like skateboarding on snow and has become extremely popular. It has joined the



Skiing can be considered both a vigorous sport and a form of vigorous recreation.

other forms of skiing as an Olympic sport, and some forms of snowboarding (halfpipe, superpipe, and slopestyle) can also be considered extreme sports. Ski jumping is also an Olympic sport, involving skiing down a ramp and jumping, trying to land as far down the hill as possible. All types of skiing could be considered sports, but they are included here because so many people do them just for fun and recreation, although ski jumping isn't typically a recreational activity for most people.

Lesson Review

1. What are the three major categories of vigorous-intensity physical activity (one from step 2 and two from step 3 of the Physical Activity Pyramid)?
2. What are three types of vigorous aerobic activity? Thinking about each activity individually, why would you consider each a vigorous-intensity aerobic activity?
3. What are four categories of vigorous sport? Give an example of each.
4. Define *recreation* and *leisure*.
5. What are three examples of vigorous recreation?



SELF-ASSESSMENT: Assessing Jogging Techniques

If you're looking for an excellent vigorous-intensity physical activity that requires little skill and no equipment—except for a good pair of running shoes and proper clothing—then jogging might be for you. Millions of people jog (that is, run recreationally and noncompetitively), and millions more run competitively (and are called runners rather than joggers). Learning to jog properly can help you make the activity safe and fun. Guidelines for jogging have been developed on the basis of the principles of biomechanics and exercise physiology. Look over the two sets of principles, and then study table 9.1 to learn about jogging guidelines.

Biomechanical Principles

- Changing velocity (acceleration) is less efficient than maintaining a constant velocity.
- Applying force in the direction of movement is more efficient than moving to the side.
- Friction is necessary in order to apply force and to prevent slipping.
- Action (foot striking) results in a reaction (impact to the sole of the foot or heel).
- Stability requires a wide base of support.
- Proper leverage increases efficiency.
- Proper posture increases efficiency.

Exercise Physiology Principles

- Muscle contractions not used to produce movement are inefficient.
- You must do more than normal to improve (this is the overload principle).

Work With a Partner

- Jog about 90 metres (100 yards) while your partner stands behind you and checks your technique.
- Have your partner answer the questions in table 9.1 after watching you jog. Your instructor may provide a worksheet that contains the questions.
- Now have your partner jog while you evaluate her or his technique.
- Discuss the assessment with your partner.
- Keeping in mind what you just discussed, both you and your partner can perform the jog a second time.
- Try to correct your technique and have your partner check you again. Do the same for your partner.

The partner assessment will help you jog more efficiently and can also reduce your risk of injury. Improper jogging technique can cause injuries such as sore shins, sore calves, and even a sore back. Having your feet and legs out of alignment can cause unnecessary strain on your joints and muscles.



Proper technique is important for everyone, from beginning joggers to elite runners.

TABLE 9.1 Jogging Self-Assessment Guidelines and Checklist

Guideline	Principle	Checklist	✓
Use proper foot action. Land on your heel or your entire foot. Then rock forward and push off with the ball of your foot and your toes.	Leverage	Do you land on your heel or whole foot? Do you push off with the ball of your foot and toes?	
Swing your legs and feet forward. Do not let your feet turn out to the sides.	Force application	Do your legs and feet swing and land straight ahead?	
Swing your arms forward and backward. Do not swing them across your body or to the sides.	Force application	Do your arms swing straight forward and backward?	
Keep your trunk fairly erect. When jogging, do not lean forward as you would when starting to run fast. Keep your head and chest up.	Proper posture	Is your body erect or leaning forward only slightly? Are your head and chest up?	
Use a longer step than your normal walking step.	Leverage	Is your jogging stride longer than your walking stride?	
Keep your arms bent at the elbow and your hands relaxed. Try to keep your shoulders relaxed. Avoid jogging with a clenched jaw to allow your upper body to relax more.	Efficient muscle use	Are your elbows bent properly (90°) with your hands relaxed? Is your jaw relaxed?	
Jog at a steady pace. Avoid speeding up and slowing down. Correct jogging pace can vary from person to person. Find your own pace that elevates your heart rate into your target zone. If you are panting or gasping for breath, you are jogging too fast.	Velocity Overload	Is your pace steady? Is your heart rate in your target zone after several minutes of jogging? Is your pace slow enough to prevent gasping for breath?	
Wear shoes with a wide sole and heel, good heel cushions, and outer soles designed for running.	Stability Friction	Do your shoes have a wide heel and sole and good tread?	

Beginner's Jogging Workout

This workout helps you learn about how fast to jog in order to get a fitness benefit (by reaching your target heart rate). Try this workout after you've practiced your jogging technique.

1. Determine your target heart rate.
2. Jog for five minutes, trying to get your heart to the target level. 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 moving away from your starting point and the other half returning to your starting point. If you are not near your starting point at the end of five minutes, walk the rest of the way back.
3. Focus on using the jogging techniques that you learned earlier in the partner assessment.
4. At the end of five minutes, determine your one-minute exercise heart rate. Determine whether your rate was in your target heart rate zone.
5. Jog for five minutes again. If your exercise heart rate was lower than your target heart rate on the first jog, jog faster this time. If your exercise heart rate was higher than your target rate on the first jog, jog more slowly this time. If your exercise heart rate was in the target zone on the first jog, jog at the same speed this time. After your second run, count your exercise heart rate again.
6. Record your results.