During the course of a basketball game it's normal for a player to run nearly two miles. Although the action is stop and go, making cardiovascular endurance of smaller initial importance when compared to other basketball skills, there are many benefits you will receive from an endurance training program. Endurance training, or aerobic exercise, improves the efficiency of the heart and lungs, which supply oxygen to exercising muscles. Because endurance training allows you to perform more work with less effort, you will be able to recover more quickly from exercise, be better prepared for higher intensity exercises, and more efficiently decrease weight and body fat.

Applications of Endurance Training

Running, cycling, step machines, swimming, and aerobic classes are all forms of endurance training. These activities are a good alternative or supplement to traditional training exercises since they provide aerobic benefits and help to develop coordination. For endurance training to be effective, exercise must

be continuous for at least
twenty minutes.

Here are some tips to keep in mind when conducting endurance training:

- Warm up, cool down, and stretch before and after each session.
- Wear appropriate foot gear. Basketball players are attached to their shoes, but unfortunately, basketball shoes aren't made for prolonged endurance runs. For long training runs, consider an appropriate running shoe. For step machines or cycling, however, basketball sneakers are fine.
- When running, try to stay on softer surfaces such as tracks or asphalt. If you choose to cross-train to mix up your workout every few days, try and avoid bumpy or irregular surfaces that can cause ankle or knee injuries.
- An average of 3 to 5 days per week of endurance training will develop your cardiovascular system as well as shed unwanted pounds and fat.
- Continuous activity for 20 to 30 minutes and not more than 45 minutes is adequate. This is especially important when it comes to running due to the fact that a higher risk of injury occurs as time and distances increase.

There are two ways to maintain a pace that will allow you to gain aerobic benefits. The simplest form is the "talk" pace, which means that you should easily be able to converse while working out without losing your breath. The preferred method, however, is to establish your target heart rate, or the ideal amount of beats per minute. By doing the following simple calculation you can establish your personal target heart rate by which to judge your aerobic activity. For a correct number, locate either the carotid artery in the neck, or the radial artery in the wrist. To determine your target heart rate, use this formula:

220 – your age = max heart rate
Max heart rate x 60 percent = lower end of your target heart rate
Max heart rate x 80 percent = upper end of your target heart rate

Example using a 15-year-old player:
220 – 15 = 205.
205 x 60% = 123
205 x 80% = 164

Using this formula, a 15-year-old player will have a target heart rate in the range of 123 and 164 beats per minute. Anything below the minimum will have little affect on

endurance capabilities. On the other hand, anything above the maximum can be dangerous.

Application of Target Heart Rate

Begin your chosen activity at a comfortable pace. After 2 minutes check your pulse. You should count the number of beats for 15 seconds and multiply that number by 4. You will then see where the number is in relation to your previously established target heart rate. If the number is too low, you will need to increase the pace. If it's too high, you should slow down. If you have low endurance or are just starting out, begin the program at the lower end of your target heart rate and gradually progress from there.

Increase the intensity and duration by no more than 10 percent per week. This will aid in preventing injuries and staleness.

Supplemental Training

At 1 to 2 times per week include Fartlek type training in your workout. Fartlek training is a series of continuous endurance activities that vary in speed. You can apply this on a road, for example, by running for 5 minutes at a steady pace and then increasing the speed, but not sprinting, for the distance between 2 telephone poles. Run another 5 minutes and then increase the pace between 3 telephone poles. Continue in a similar fashion for at least 20 to 30 minutes. This training can also be performed on a bike or step machine by manually increasing your speed or by choosing an interval program. The time interval for the speed increase is up to you, but should be in the range of 15 to 60 seconds.