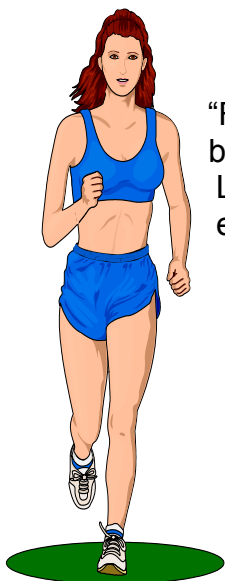


FIRE FITFACTS

FROM THE PHOENIX FIRE DEPARTMENT
AND THE AMERICAN COUNCIL ON EXERCISE

Cardiovascular Exercise ~ The Heart of the Matter



“Fitness can neither be bought nor bestowed. Like honor it must be earned.”

Aerobic Fitness – The body’s maximum ability to take in oxygen from the atmosphere, exchange it to the blood, pump it to the working muscles, and utilize it to produce energy.

Anaerobic Fitness – The body’s ability to produce energy to the working muscles in the absence or shortage of oxygen.

Not Just for the Heart

The human body is an incredible machine. It is built to perform work. In your case this work is exercise. In order to perform any work or exercise the working muscles need energy. The body has two main ways to provide this energy: aerobically and anaerobically.

In aerobic exercise the intensity is low enough that there is adequate oxygen available. With oxygen available it is easier for the muscles to utilize fat as the main energy source. This type of exercise usually involves larger muscle groups and is rhythmic in nature. Examples of aerobic exercise include running, bicycling, hiking, swimming, etc.

In anaerobic exercise the intensity is very high. When this happens the need for oxygen exceeds the supply. This forces the body to use glucose for energy and produces lactic acid. Anaerobic exercise is very intense and has a short duration. Examples of anaerobic exercise include sprinting, heavy weight lifting, basketball, etc.

In fire fighting, as in many sports, both types of fitness are important. Short explosive bouts of anaerobic activity are interspersed with longer less intense bouts of aerobic activity. This is why a successful, well-rounded fitness program includes both types of exercise.