

# Fitness Testing



According to Army **FM 21-20**, Physical Fitness Training, "VO2 max, also called aerobic capacity, is the most widely accepted single indicator of one's CR (cardio respiratory) fitness level."

There are five components of physical fitness: cardiovascular, muscular strength, muscular endurance, flexibility, and body composition. The comprehensive fitness testing program offered at Army Wellness Centers provides state of the art testing such as direct gas VO<sub>2</sub> max. In as little as 10 minutes, the AWC staff can determine when your body burns fat and when it transitions to burning carbohydrates. The results will show the exact target heart rate best suited for your goal. The key to this program's success is the emphasis placed on *individualizing* the recommended program plan

## What are the Benefits?



- ◆ A personalized exercise regimen based on true VO<sub>2</sub> max is essential to optimum cardio training.
- ◆ Knowing the unique anaerobic threshold can be used to design a workout plan that will improve fitness and maximize calories burned.
- ◆ The test report includes a table indicating how many calories you burn at every exercise hear rate level. With this information, there is no longer a need to rely on generalized estimates of calories burned provided by a bike or treadmill.

## What is an Anaerobic Threshold?

Anaerobic threshold is the point at which your body switches from burning primarily fat stores to using the quick energy your muscles have stored. This is frequently referred to as your target heart rate. Exercising at or below your anaerobic threshold allows you to exercise for longer peri-

MALE						
Age	Very Poor	Poor	Fair	Good	Excellent	Superior
13-19	0-34.9	35.0-38.3	38.4-45.1	45.2-50.9	51.0-55.9	56.0+
20-29	0-32.9	33.0-36.4	36.5-42.4	42.5-46.4	46.5-52.4	52.5+
30-39	0-31.4	31.5-35.4	35.5-40.9	41.0-44.9	45.0-49.4	49.5+
40-49	0-30.2	30.2-33.5	33.6-38.9	39.0-43.7	43.8-48.0	48.1+
50-59	0-26.0	26.1-30.9	31.0-35.7	35.8-40.9	41.0-45.3	45.4+
60+	0-20.4	20.5-26.0	26.1-32.2	32.3-36.4	36.5-44.2	44.3+

  

FEMALE						
Age	Very Poor	Poor	Fair	Good	Excellent	Superior
13-19	0-24.9	25.0-30.9	31.0-34.9	35.0-38.9	39.0-41.9	42.0+
20-29	0-23.5	23.6-28.9	29.0-32.4	33.0-36.9	37.0-41.0	41.1+
30-39	0-22.7	22.8-26.9	27.0-31.4	31.5-35.6	35.7-40.0	40.1+
40-49	0-20.9	21.0-24.4	24.5-28.9	29.0-32.8	32.9-36.9	37.0+
50-59	0-20.1	20.2-22.7	22.8-26.9	27.0-31.4	31.5-35.7	35.8+
60+	0-17.4	17.5-20.1	20.2-24.4	24.5-30.2	30.3-31.4	31.5+

## What's YOUR VO2 max?

◆ VO<sub>2</sub> is the rate of oxygen uptake, or consumption, measured during exercise. The maximum rate of oxygen uptake is called the VO<sub>2</sub>max or maximum VO<sub>2</sub>.

◆ VO<sub>2</sub> is the ultimate measure of fitness and is reported in milliliters of oxygen per kilogram of body weight per minute or ml/kg/min.

◆ To achieve a high VO<sub>2</sub>max, a person must have a fit heart and fit lungs and significant lean muscle mass that is well conditioned.

## Don't the Charts at the Gym tell me my Target Heart Rate?

Charts are merely averages of people that are the same age and weight. Studies show that these can be wrong for any given individual by 40—50%. The only way to know your true target heart rate is to measure how much oxygen your body is using as you increase the intensity of your workout. This is precisely the information that the testing gives you.



Army Wellness Center Grafenwoehr  
 Located in BLDG 168, Rose Barracks (Vilseck)  
 Open 0730-1630, M-F  
 Call 47-4795 to book an appointment