

PACER

Progressive Aerobic Cardiovascular Endurance Run



Aerobic Capacity Overview

Aerobic capacity is evaluated using estimates of VO_{2max} (also known as maximal oxygen uptake). This indicator reflects the maximum rate that the respiratory, cardiovascular, and muscular systems can take in, transport, and use oxygen during exercise.

Good aerobic capacity (cardiorespiratory fitness) has been shown to **reduce the risk** of high blood pressure, coronary heart disease, obesity, diabetes, the metabolic syndrome, and some forms of cancer.

The FitnessGram program provides **three field tests** to assess aerobic capacity; **PACER**, **1-Mile run**, and the **Walk test**. All Aerobic Capacity Healthy Fitness Zone® scores are reported as estimates of VO_{2max}. Higher VO_{2max} scores reflect a greater ability to take in and use oxygen and a greater potential to perform endurance exercise.

In the **FitnessGram** software, estimates of VO_{2max} from the PACER test do not require height and weight. However, the One-Mile run requires height and weight and the Walk test requires weight and heart rate.