



## AEROBIC POTENTIAL

## INCREASED ABILITY TO HANDLE METABOLIC STRESS

### Aerobic Potential and VO2 MAX

As the intensity of your exercise increases, so does oxygen consumption. The point at which oxygen consumption plateaus defines your VO2 max. This is your maximal aerobic capacity and is generally considered an individual's best indicator of cardiorespiratory endurance and aerobic fitness. It has been shown that certain genetic markers are linked to your maximal aerobic potential.

**Maximize your potential with high-intensity interval training; be sure to incorporate whole body movements to receive the most benefits.**



### YOUR PERSONALIZED GUIDANCE

High-intensity interval training (HIIT) is an effective way to maximize your potential. Be sure to incorporate strength/resistance moves in addition to cardio to work the whole body. This will allow you to receive the maximum cardiovascular benefit.

#### Example:

*H.I.I.T. for 20 Minutes*  
*3 rounds of 45 seconds work and 15 seconds rest*  
*Pushups*  
*Walking lunges*  
*Running in place*  
*Triceps dips*  
*Body squats*

**BEGINNER:** perform each exercise for 20 seconds, 15 seconds rest between exercises, do each set 1-2 times

**INTERMEDIATE:** perform each exercise for 30 seconds, 15 seconds rest between exercises, do each set 2-3 times

**ADVANCED:** perform each exercise for 45 seconds, minimal rest between exercises, do each set 3 times

*Keep track of your reps and try to beat your score each time!*

### THE GENES WE TESTED

The **PPARGC1A** gene codes for a protein that is linked to the ability of the muscles to respond to physical stimuli. This is accomplished by increasing the ability to handle oxidative stress thus increasing aerobic metabolism.

The **PPARD** gene affects the shift between lipid and glucose metabolism. When paired with wild type **PPARGC1A** CC genotype, **PPARG** has a strong correlation with elite level endurance athletes (odds ratio 8.2). With this genotype configuration, you are more likely to achieve your optimal endurance performance with less intense training-induced increases in maximal oxygen uptake and maximal workload.