

## **VO2 TESTING FOR IMPROVED PERFORMANCE**

**Have you checked under the hood lately?**

### **TRAIN SMART**

Target Heart Rate Charts are Inaccurate

### **AVOID OVER TRAINING**

Too fast too soon can lead to injury and poor performance

### **GET TESTED!**

Tune into your physiology

Whether you are a seasoned endurance athlete or a beginner looking to complete your first 5K run, metabolic testing will put you on the fast track to your best performance. The VO<sub>2</sub>/Anaerobic Threshold metabolic test will arm you with information that will ensure you are training in the most efficient manner possible.

Anyone looking to be more efficient with their training program will benefit from both tests. If you've found yourself at a plateau in your performance these tests will help to unravel the mystery. Each testing session includes a thorough explanation of your test results with suggestions on integration of these results with your training plan.

### **VO<sub>2</sub>/Anaerobic Threshold Testing**

This test will reveal your Maximum Aerobic Capacity (VO<sub>2</sub>max) as well as how much of that capacity (Anaerobic Threshold/AT) you are able to tap into based on your current fitness level. You may have a high VO<sub>2</sub>max (which is partially hereditary) but if you are not training in a manner to utilize a high percentage of your VO<sub>2</sub>max (AT) your performance will be sub-optimal. The data derived from your test will be used to calculate your precise heart rate training zones. VO<sub>2</sub> testing is the most accurate way to determine training intensity. Any other method of determining your heart rate zones such as a field test or calculation is a shot in the dark.

### **Testing Protocol – What You Can Expect**

You will be taken through a systematic warm up on the treadmill or bike before starting the test. (approx 10 min.) Once the warm up is complete you will be fitted with a mask that has a hose attached to a metabolic cart. This metabolic cart will be analyzing your O<sub>2</sub> and CO<sub>2</sub>. You will begin the test at a slow pace with a gradual increase in intensity every minute. The test typically takes 10-12 minutes on the treadmill, a little longer on the bike. Toward the end of the test your breathing will be labored and you will be working at a strenuous pace.

## What Else?

In addition to getting 5 precise heart rate training zones you be armed with lots of useful information , such as . . .

**Aerobic Threshold** – the intensity at which you are burning almost entirely fat as your fuel source. This is the pace you should be able to hold for a long distance race

**VO2max** – how much oxygen you can utilize ---your value and how yours compares to others your age and gender

**Anaerobic Threshold** – this represents how much of your VO2max you can utilize based on your training. The corresponding HR is used to calculate your training zones. This is also the point where you start the shift to using a higher percentage of carbs than fat as your fuel source.

**Fuel Sources Used at Various Intensities** – the percentage of fats and carbohydrates you use at various heart rates (are you a good fat burner?). As you start to train more efficiently within your customized HR zones you will see your fat burning zone increase which means you can run farther/faster before you start to run out of gas.