

Follow these Rules

Before beginning any sort of physical assessment make sure you are physically able to perform the tests safely. [See PAR Q From in links](#). If you have any concerns about your ability ask your wellness team for assistance. This is a self directed test. Use good judgement. If you feel pain, dizziness or nausea, discontinue the assessment. As soon as your form is compromised or if you have any pain or unusual sensation stop the test.

A FIT TESTING

AEROBIC ABILITY

WHAT IS AEROBIC ABILITY?
 Aerobic capacity is a measure of your body's ability to take oxygen from the atmosphere and use it to produce energy for your muscle cells. Many consider the most important fitness metric. Having good cardiovascular fitness has many health benefits, for example, it decreases your risk of cardiovascular diseases, stroke, high blood pressure, diabetes and other diseases as well as impacting life span and all cause mortality. Many factors influence aerobic fitness, including your lung efficiency, cardiac function, gender, age and genetic makeup. High-intensity exercise increases VO2 max. Maximal aerobic power is typically expressed as mL/kg-1/ min-1. An individual's VO2 max can be measured or estimated by a variety of techniques, including treadmill running, cycle ergometer, arm cranking, stair stepping, rowing, and walking. However, the gold standard is progressive treadmill testing by walking or running to exhaustion.

MACHINE TESTS

The **MACHINE TESTS** below has you exercising at an intensity you can sustain for 3 minutes after a couple warm up stages on a treadmill or an exercise machine. **A.** Has you exercising at a SOMEWHAT HARD INTENSITY, just above MODERATE (RPE=5 see chart). This is suitable for most people who exercise. **B.** Has you exercising at your PEAK ability (only attempt if you are use to exercising VERY HARD, near PEAK, RPE=8-10).

RPE SCALE	
1	Nothing
2	Very Easy
3	Easy
4	Comfortable
5	Somewhat Difficult
6	Difficult
7	Hard
8	Very Hard
9	Extremely Hard
10	Maximal/Exhaustion

A. NON-PEAK Aerobic Ability Test using your SOMEWHAT HARD MPH SPEED walking/running on Treadmill or NON-PEAK MET on an exercise machine

On an exercise machine of your choice determine your aerobic ability by finding out your SOMEWHAT HARD INTENSITY (effort RPE=5) MPH SPEED (only machines) or METS (other machines) that you can sustain for 3 minutes after warming up and doing a 2 or more incremental stages. **Female reached desirable level if >4.2 MPH or 7.4 METS if 20-30 yrs old, >4.0 MPH or 7.0 METS if 30-40 yrs old, >3.6 MPH or 6.7 METS if 40-50 yrs old, and >3.3 MPH or 6.2 METS if 50-60 yrs old. Male reached desirable level if >4.8 MPH or 9.0 METS if 20-30 yrs old, >5 MPH or 8.7 METS if 30-40 yrs old, >4.6 MPH or 7.5 METS if 40-50 yrs old, and >4.1 MPH or 7.0 METS if 50-60 yrs old.** If you met the desirable level you can place a check in the checkbox.

How to work up to your Non-PEAK and PEAK MPH level: if you if you find working hard to be a 4 MPH should start at 2.7 MPH for 3 or more minutes, then 3-3.3 MPH for 3 or more minutes, before attempting harder stages. * Record your heart rate at PEAK MPH. This value will allow you to gauge your training and progress. In other words at 5 MPH you had a HR of 150. Several weeks later at the same MPH level you have a HR of 140. This is a sign that you are getting fitter. *Treadmill-if you feel you can work better with an incline calculate your MET level at this [webpage](#) (input speed and incline). Then use this MET value to understand your score.

B. PEAK Aerobic Ability Test using your PEAK MPH speed walking/running on Treadmill or PEAK MET on an exercise machine

On an exercise machine of your choice determine your aerobic ability by finding out your PEAK MPH (treadmill) or MET value that you can sustain for 3 minutes after warming up and doing a 2 or more incremental stages. Most exercise machines display a MET value. **Female reached desirable level if >5.9 MPH or 10 METS if 20-30 yrs old, >5.7 MPH or 9.7 METS if 30-40 yrs old, >5 MPH or 8.8 METS if 40-50 yrs old, and >4.6 MPH or 8.1 METS if 50-60 yrs old. Male reached desirable level if >7.3 MPH or 12.1 METS if 20-30 yrs old, >7 MPH or 11.7 METS if 30-40 yrs old, >6.5 MPH or 10 METS if 40-50 yrs old, and >5.9 MPH or 10.1 METS if 50-60 yrs old.** If you met the desirable level you can place a check in the checkbox.

There are many other options that you can do to test your aerobic fitness. Pick one then determine if you met the desirable level (above average or the 60 percentile for your age). I recommend the first one (Rockport Walking Test) for most. The Rockport Walking Test is a simple walking test of a mile, the second is a 1.5 mile run, the third is a standard graded treadmill test.

STANDARD AEROBIC ABILITY TESTS

1. 1 MILE WALK TIMED
2. 1.5 MILE RUN TIMED
3. GRADED TREADMILL TEST

1. Rockport Walking Test

I recommend the Rockport Test for many who can not run because it is a safe walking test. **How to do the Rockport Walk Test:** After a brief warm up walk as briskly as possible for one mile with a heart rate monitor or measure pulse over 15 seconds when completing the mile to derive beats per minute by multiplying by 4. Use your time and heart rate to determine your aerobic fitness by calculating your score or email us your data and we will determine your score (see [Walk Test Link](#)). If you met the desirable level of above average or better you can place a check in the checkbox

2. Cooper 1.5 Mile Walk/Run Test

Cooper 1.5 mile walk/run test (see [Cooper Run Test Link](#)). Female desirable level reached if 1.5 mile walk/run time value is < 13:26 if 20-30 yrs old, < 14:34 if 30-40 yrs old, < 15:18 if 40-50 yrs old, and <17:20 if 50-60 yrs old. Male reached the desirable level if 1.5 mile walk/run time value (minutes) is < 11:28 if 20-30 yrs old, < 11:50 if 30-40 yrs old, < 12:26 if 40-50 yrs old, and < 13:54 if 50-60 yrs old. If you met the desirable level you can place a check in the checkbox.

https://www.humankinetics.com/AcuCustom/Sitename/DAM/082/Cooper_Walk_Run_Test.pdf

3. Graded Exercise Treadmill Test

You can also do a standard treadmill protocol (see [Walking protocol link](#)) to determine your VO2 PEAK. If you met the desirable level of above average (60%) you can place a check in the checkbox.