# The Massachusetts General Hospital Clinical Research Center

### **Exercise Testing**

Also known as VO<sub>2</sub> Max or treadmill test

**What it is:** Exercise testing is designed to determine your maximal capacity to perform aerobic exercise. The test involves a graded exercise test on a treadmill or stationary bicycle. The exercise intensity is progressively increased while measuring heart rate, blood pressure, EKG results and tracking oxygen and carbon dioxide intake and output. Depending on the study, we will be looking for certain end points such as reaching a percentage of your maximal heart rate.

#### How to prepare:

Get enough sleep the night before so you are well rested and ready to perform your best.
Wear comfortable clothes that you can exercise in. Be sure to bring sneakers, socks, a sports bra, and other appropriate running attire such as a t-shirt and shorts.
Come well hydrated. Drink <i>at least</i> 8 ounces of water thirty minutes before the test, in addition to your regular intake.
Have a light meal or snack 2-3 hours before the test. It is important to eat before the test so you have energy to perform. Avoid eating too close to the test time to prevent cramps or nausea. If you have to have fasting blood work before the test, be sure to have a snack after the blood work, before the exercise test.
Please come clean, dry and free of lotion, as electrodes for the EKG will need to be attached to your chest.

### What you can expect:

- Please inform the study team of any injuries or underlying conditions.
- The test will be explained prior to starting, feel free to ask any additional questions.
- You will be hooked up to an EKG. Electrodes will be places on your chest and wires will
  be attached from the electrodes to a computer. Please come clean, dry and free of
  lotion to ensure the electrodes adhere well. Men may be requested to shave their chest
  if hair interferes with the attachment. They will be secured on you using a specially
  designed belt.
- A blood pressure cuff will also be attached to your arm and may be secured to your arm using tape to help keep it in place during the test.
- You will be fitted with a face mask which will be connected to the metabolic cart. This
  will be used to monitor your breathing and gas exchange (oxygen and carbon dioxide)
  throughout the test.





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- You will be monitored by the study team including nurses, dietitian and study doctor or nurse practitioner throughout the study. Vitals signs will be checked and the participant may be connected to an EKG throughout the test.
- Throughout the test you may be asked to rate how hard you feel you are working using a scale. The scale will be explained to you prior to the start of the test.
- At the end of the test you will be asked to perform a cool down exercise (for example
  walking if you had been running) so that you can be monitored as you decrease and stop
  activity.
- After the test you may asked to sit for an additional 10-15 minutes to be monitored once the exercise test has been completed to ensure that you are recovering as expected.
- A light snack and beverages will be available after the test.





