SPARTANfit
FITNESS & WELLNESS PROGRAM

At-Home Fitness Assessment

This fitness assessment will help determine your current level of fitness using a series of resting and exercising assessments. The assessment will help establish baseline measurements which can then be used to set goals, monitor performance, and assess progress throughout your SPARTANfit health and wellness journey. Following your assessment, you will need to e-mail your testing data to Brittany (rich1087@msu.edu) and then you will receive a computerized, age adjusted fitness profile displaying your results.

- Resting Heart Rate
- Height & Weight (self-reported)
- Rockport 1-mile Walk Test – V02Max
- Push up & Sit up Test
- Sit-and-Reach

On the days of your scheduled PRE and POST test assessments, please follow the below steps for preparation:

1. Wear athletic apparel and athletic shoes.
2. Drink plenty of fluids over the 24-hour period preceding the test to ensure normal hydration prior to the testing.
3. Avoid heavy meals, tobacco, alcohol, and caffeine for at least 3 hours before testing.
   - You may have a small snack 30 minutes to 1 hour before the test.
4. Avoid exercise or strenuous physical activity the day of the test.
5. Get an adequate amount of sleep (6 - 8 hours) the night before the test.
6. Void (urinate) completely prior to testing.

Resting Measurements

- Resting Heart Rate
- Height & Weight (self-reported)

Resting Heart Rate

You can measure your heart rate via your wrist or neck. At the wrist, turn one hand over, so it is palm-side up. Use the opposite hand to lightly press the index and middle finders just below the base of the thumb. If using the neck, lightly press the side of the neck using the index and middle fingers, just below the jawbone, on either side of the windpipe. Count the number of beats in 30 seconds and multiply by 2 to calculate beats per minute (bpm).

Video Demo: https://www.youtube.com/watch?v=JQwc-DtY5zA

Exercising Measurements

Cardiorespiratory Fitness (CRF)

CRF reflects the functional capabilities of the heart, blood vessels, lungs, and skeletal muscle to perform work. CRF is often considered one of the best indicators of the collective health and function of the entire body. CRF is the ability to perform large-muscle, dynamic, moderate-to-high intensity exercise for prolonged periods. The results from CRF tests are used to determine specific intensities for cardiovascular exercises in a fitness or weight loss program.

With CRF testing we are assessing the clients V02 Max. VO2 (or oxygen consumption) is a measure of the volume of oxygen that is used by your body to convert the energy from the food you eat into the energy molecules, called adenosine triphosphate (ATP), that your body uses at the cellular level.

VO2max (or maximal oxygen consumption) is simply the maximum possible VO2 that a given person can achieve. VO2 and VO2max are important in the context of exercise, because they are a measure of your body's ability to generate ATP, and ATP is the energy source that allows your muscles to continue working while you are exercising. Therefore, by definition, a VO2max measurement is ultimately a measure of your cardiorespiratory fitness level.

Testing Measure and Instructions:

- *Rockport 1-mile Walk Test:* Walk 1 mile as fast as possible. Immediately upon completion, measure heart rate for 15 seconds and multiple by 4. Record your time and heart rate on your data sheet. We will calculate your V02Max.
- Video Demo: https://www.youtube.com/watch?v=tuuDdHHPYtg
- Campus Walking Loops Map: Clicking on the loop will give you the distance. Grand River Ave Loop is the closest to 1 mile.
- The walk may also be completed on a treadmill or a 1-mile route of your choosing.

Muscular Endurance

The ability of a muscle or group of muscles to sustain repeated contractions against a resistance for an extended period. Testing measures that will be performed:

- *Push-Up Test- ACSM Protocol:* Timed 1 minute, as many as you can perform. Men will assume a traditional push-up position and females will use the modified push-up position (on knees). You may rest as needed, but the time doesn't stop.
- Video Demo: https://www.youtube.com/watch?v=9fAPPuJoIq4

- *Sit-Up Test – YMCA Protocol*: Timed 1 minute, as many as you can perform.
  - Arms across chest, knees bent
  - All the way down, all the way up
  - You may rest as needed, but the time doesn't stop
- Video Demo: https://www.youtube.com/watch?v=4dAfseVaqUw

Flexibility

Flexibility, referring to the degree to which a joint moves through a normal, pain-free range of motion, can be a determining factor in the performance of Activities of Daily Living (ADLs) as we age. A reduction in tissue elasticity and deterioration of joint anatomy with age has been shown to decrease flexibility and may lower the performance in ADLs, which can decrease quality of life. Because flexibility can vary joint to joint, there is no single test for overall flexibility. The sit-and-reach test is a commonly used test for assessment of flexibility of the hamstrings, hips and lowers back.

Testing Measure and Equipment Needed

- *YMCA Sit-and-Reach*
  - Equipment needed: measuring tape or yardstick and tape
  - Tape the yardstick to the ground at the 15-inch mark
  - You must sit without shoes. Heels need to bisect the yardstick and should not pass the 15-inch mark that is taped off
  - Keep legs straight; only slight bend in knee
  - Place (stack) hands on top of each other straight out in front
  - Slowing reach forward, as far as comfortably possible, holding down on the yardstick for 2 seconds
  - The best of two trials performed is recorded.
- Video Demo: https://www.youtube.com/watch?v=fWStLeloRDM

*If you complete the At-Home Fitness Assessment and wish to set goals & receive an individualized training plan, you may register here for the ACTIVE Spartans VEP Program. You do not need to complete the fitness assessment in order to register for ACTIVE Spartans VEP. The At-Home Fitness Assessment is a free tool you may utilize to track and monitor your progress.

If you have additional questions, please contact Brittany at rich1087@msu.edu