



Fitness Assessment Description

A fitness assessment is a series of measurements that help assess physical fitness. There are several standardized tests in a fitness assessment.

Purpose of Fitness Assessment

- Stratifying risk
- Educate participants about their fitness status relative to health related standards, age/gender norms
- Identify areas that need attention
- Select training protocols
- Evaluate the success of the program in achieving its objectives
- Motivate participants by establishing reasonable and attainable fitness goals

Pretest Instructions

- Wear comfortable, loose fitting clothing and proper shoes (t-shirt and shorts).
- Drink plenty of fluids over the 24-hour period preceding the test to ensure normal hydration prior to testing.
- No food or drink for two hours before testing
- Avoid tobacco, alcohol, or caffeine for at least 3 hours before testing.
- Avoid exercise or strenuous physical activity the day of test.
- Get an adequate amount of sleep (6 to 8 hours) the night before the test.

Health Screening

- Health History Questionnaire
- Demographic Information

Physical Fitness Assessment

- Resting Measurements
 - Heart Rate
 - Blood Pressure
 - Height
 - Weight
 - BMI (Formula)
- Body composition
 - Jackson & Pollack Skin Fold Assessment **or** Circumference Measurements
- Cardiovascular
 - Cooper 1.5 mile Treadmill Run/ Walk Test **or**
 - Three Minute Step Test
- Muscular Strength and Endurance
 - Push-Up Test (untimed) and One Minute Partial Curl-Up Test (timed) **or**
 - 1RM Bench Press and 1RM Leg Press Test
- Flexibility
 - Sit & Reach and/ or optional flexibility assessments

Assessment Descriptions

- **Jackson & Pollack 3-Site Skin Fold Assessment:** This test uses a pair of calipers to pinch the skin and measure skin fold thickness to assess the amount of subcutaneous fat a person carries in certain areas of their body. Men are tested at chest, abdomen and thigh. Women are tested at tricep, suprailliac and thigh. Multiple measurements are taken at each site. An average is recorded for each site. Averages are added and the final number is compared to a chart of norms which is evaluated by gender and age. This body fat percentage is used as indicator of health risk.
- **Cooper 1.5 Mile Treadmill Run/Walk Test:** This is a timed run/ walk to measure the cardiovascular system's capability to transport and utilize oxygen. The test involves the timed completion of a 1.5 mile distance. Subjects are permitted to run, jog and/or walk to complete the 1.5 mile distance but are instructed to do so as quickly as possible. Immediately following completion of the distance the subject time will be recorded. They will then be instructed to sit down and their heart rate taken for 1 full minute and recorded. These numbers are checked against norm values and are used as an indicator cardiovascular fitness level.
- **Three minute Step Test**
- **Partial Curl-Up Test:** This test measures muscular endurance of the abdominal muscles. The test involves the performance of as many partial curl-ups as a subject can perform in 1 minute at a pace of 50 bpm. Knees are bent; hands are at sides— palms down and will move approximately 10 cm. When the participant can no longer curl-up or reaches 25 the test is finished. The final score is then capered to the norm values and the result is a prediction of abdominal endurance.
- **Push-Up Test:** This test measures muscular endurance of the pectoralis major, triceps and anterior deltoid muscles. The test involves the performance of as many push-ups as a subject can **properly** complete in a one-minute period. Men on hands and toes, women on hands and knees. Applicants begin the event in the down position with hands placed under the shoulders. Arms must be fully extended in the up position and the chest (3in) and stomach must be off the floor in the down position. The final number is compared to norm values to predict upper body endurance.
- **1RM Bench Press**
- **1 RM Leg Press**
- **Sit and Reach Test:** This test measures flexibility of the lower back, hamstrings and calves. This test involves sitting on the floor with legs out straight ahead. Feet (shoes off) are placed with the soles flat against the box, shoulder-width apart. Both knees are held flat against the floor by the tester. With hands on top of each other and palms facing down, the subject reaches forward along the measuring line as far as possible. The furthest of three trials is recorded. This number is then compared to a norms chart to assess flexibility.