

LifeStyles Program Fitness Testing Protocols

(Based on tests in the NSCA CPT and CSCS text books)

If a client is unable to perform the suggested test (in **bold**) they may perform one of the suggested alternatives, if listed. If unlisted, the test administrator can substitute another test (of their invention or not) that measures the same type of physical effort (i.e. strength, endurance, power, etc.).

Vertical Jump (Measure of Lower Body Muscular Power)

Equipment

1. Measuring tape
2. 4 Post-It notes per client

Procedure

1. Instruct client to stand perpendicular to a wall, 6-12 inches away, with their dominant hand towards the wall.
2. Instruct the client to hold the Post-It so that the sticky surface is in line with and facing away from the tip of their fingers. Have the client stand on their toes, reach up with their dominant hand, and place the Post-It note as high as possible.
3. Encourage the client to perform a few standing counter-movement jumps to practice. They may not run or take a step before the jump.
4. Instruct the client to hold another note in their hand in the manner described above, perform a counter-movement jump, and place the note as high as possible on the wall.
5. Repeat step 4 two more times.
6. Measure the distance between the initial Post-It and the three others. Record all values including the best result.

5RM Bench Press (Measure of Upper Body Muscular Strength)

Equipment

1. Adjustable barbell and weight plates.

Procedure

1. Provide a spotter and closely observe technique.
2. Follow these steps to determine a 5 RM
 - a. Instruct client to warm-up with a light weight they can easily do for 10-12

reps

- b. Provide a one-minute rest period.
 - c. Estimate a warm-up load that will allow the client to complete 7-9 reps by adding 5-10% for upper body, 10-20% for lower body.
 - d. Provide a two-minute rest period.
 - e. Estimate a conservative, near-maximum load that will allow the client to complete 6-7 by adding 5-10% for upper body, 10-20% for lower body.
 - f. Provide a two to four minute rest period.
 - g. Make a load increase by adding 5-10% for upper body, 10-20% for lower body.
 - h. Instruct the client to attempt a 5RM
 - i. If the client was successful, provide a two to four minute rest period and go back to step 2g. If the client failed, provide a two to four minute rest period, and decrease the load by subtraction 2.5-5% for upper body, 5-10% for lower body *and* then go back to step 2h. Continue increasing the load until the client can complete five repetitions with proper technique. Ideally, the client's 5RM will be measured within three testing sets.
 - j. Record the 5RM value as the maximum weight listed for the last successful attempt.
3. Estimate the 1RM from the 5RM (see "Rep Max Calculation").
 4. Divide the 1RM from the client's body weight to determine relative strength.
 5. Compare relative strength to normative values (see "Normative and Descriptive Data For Fitness Tests").
 6. **Suggested Alternatives:** Machine Chest Press, Overhead Press, Lat Pull-Down, One-Arm Row (average of both sides).

5RM Back Squat (Measure of Lower Body Muscular Strength)

Equipment

1. Adjustable barbell and weight plates.
2. Squat Rack or Power Rack

Procedure

1. Provide a spotter and closely observe technique.
2. Instruct the client to perform a back squat until the thighs are parallel to the floor (unless restricted by injury).
3. Follow the procedure in Bench Press (above) to estimate the 1RM.
4. **Suggested Alternatives:** Front Squat, Trap Bar Deadlift, Seated Leg Press, Lying Leg Press. In all these lifts, the thighs must be parallel to the ground or foot plate (in the case of the leg press) at the bottom of the movement.

Push-Up Test (Measure of Upper Body Muscular Endurance)

Equipment

1. Foam roller (for a female client).

Procedure

1. Have client assume the standard push-up starting position. For men, the hands are shoulder-width apart, the back is straight, and the head is up. For women, modify this position by having the client in a kneeling position, with the knees flexed at 90 degrees and the ankles crossed.
2. For the male client, place a fist on the floor beneath his chest, counting the repetitions only when the chest touches the fist. For a female client, use a foam roller and instruct the female client to lower her torso until she lightly touches it. The body should then be raised to full arm's length.
3. Record the maximum number of repetitions performed without resting.
4. Compared the client's score to the normative data (see "Normative and Descriptive Data For Fitness Tests").

One-Minute Sit-Up (Measure of Abdominal Muscular Endurance)

Equipment

1. Stopwatch
2. Mat

Procedure

1. Have client assume a supine position with arms crossed on chest, touching the shoulders. Hips and knees should be flexed and heels should be approximately

- 12-18 inches from the buttocks.
2. On a “Go” signal, the client raises the torso until it is perpendicular to the floor. The chin should be tucked in to the chest, and the hands should stay in contact with the shoulders. The client then lowers the torso until the shoulders are once again in contact with the floor. Rest periods are allowed.
 3. This is repeated for the maximum number of repetitions in 60 seconds.
 4. Compare the client’s score to normative data (see "Normative and Descriptive Data For Fitness Tests").
 5. **Suggested Alternatives:** Partial Curl-Up Test* (see below), front plank on elbows.

*Partial Curl-Up Test

Equipment

1. Metronome
2. Ruler
3. Masking Tape
4. Mat

Procedure

1. Direct the client to assume a supine position on a mat with the knees at 90 degrees. The arms are at the side (on the floor), with the fingers touching a four-inch (10-centimeter) piece of masking tape (that is placed on the floor perpendicular to the fingers). A second piece of masking tape is placed 8 centimeters away (three inches; for those who are ≥ 45 years) or 12 centimeters (five inches; for those who are < 45 years) beyond (but parallel to) the first.
2. Set a metronome to 40 beats/min and have the individual do slow, controlled, curl-ups to lift the shoulder blades off the mat (the trunk makes a 30 degree angle with the mat) in time with the metronome (20 curl-ups per minute). The low back should be flattened before curling up.
3. Direct the client to perform as many curl-ups as possible without pausing, up to a maximum of 75.
4. Compare the client’s score to normative data (see "Normative and Descriptive Data For Fitness Tests").

Sit-and Reach (Measure of Lower Body Flexibility)

Equipment

1. Yardstick or measuring tape

Procedure

1. Have the client warm-up and perform some moderate stretching prior to the test.
All testing should be done without shoes. The test should be performed with slow, controlled stretches.
2. Place a yard stick or measuring tape across the floor with the 15-in mark at the client's heels. The client then sits with yardstick between the legs. Heels should be 10-12 inches apart.
3. Client's legs must stay extended through the whole test. Allow the client three attempts to slide both hands together over the yardstick as far as they can. Record all attempts and the best attempt.
4. Compare the client's score to normative data (see "Normative and Descriptive Data For Fitness Tests").

Rockport Walk Test (Measure of Cardiovascular Endurance)

Equipment

1. Stopwatch
2. Measured 1.0 mile walking course that is flat and uninterrupted (preferably a track)

Procedure

1. Instruct clients to walk 1.0 mile as briskly as possible.
2. Immediately after the test, calculate client's HR in bpm using a 15-second HR count.
3. Immediately after the test, record the client's time.
4. Compare the client's score to normative data (see "Normative and Descriptive Data For Fitness Tests").
5. **Suggested Alternatives:** Astrand-Rhyming Cycle Ergometer Test, YMCA Step Test.