

FITNESS APPRAISAL PROCEDURE AND STANDARDS

1. PUSH-UPS

Push-ups are a test of muscular strength which is defined as the maximum tension or force a muscle can exert in a single contraction (Whitney, Hamilton, Rolfes, 1990).

Procedure:

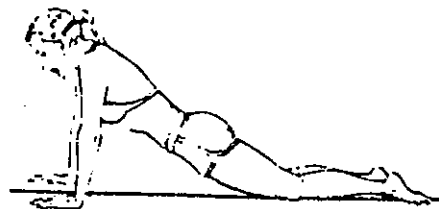
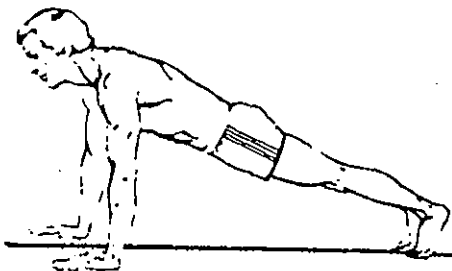
It is important that the participant be instructed as to the correct performance of the push-up prior to beginning the test. The push-ups are to be performed consecutively and without a time limit. The test is terminated when the participant has completed as many push-ups as possible, his/her form deviates too much from the procedure or he/she pauses at the top for more than two seconds.

Males:

The participant lies on his stomach with his legs together. His hands are pointing forward and are positioned under the shoulders. To begin the participant pushes up from the mat by fully straightening the elbows, using the toes as the pivotal point. The participant returns to the starting position, chin to the mat, and repeats the procedure. The upper body must be kept in a straight line and neither the stomach nor the thighs should touch the mat.

Females:

The participant lies on her stomach with her legs together. Her hands are pointing forward and are positioned under the shoulders. The participant begins by pushing up from the mat by fully straightening the elbows, using the knees as the pivotal point. The participant returns to the starting position, chin to the mat, and repeats the procedure. The upper body must be kept in a straight line and the stomach should not touch the floor. The participant has the choice of either bending her legs at the knees or having the lower leg remain in contact with the floor.



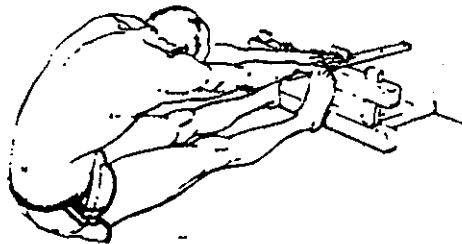
2. TRUNK FORWARD FLEXION

The trunk forward flexion test measures the flexibility of the hamstring and lower back muscles. Flexibility depends upon the elasticity of the muscles, tendons and ligaments and is the ability to bend without injury (Whitney et al., 1990).

Procedure:

Participants should be encouraged to warm-up prior to completing this test and to stretch between attempts. Each participant takes a turn and then the procedure is repeated. Both results are recorded with the higher result scored.

The participant, barefoot, sits with his/her legs fully extended with the soles of the feet placed flat against the crossboard of the flexometer. Keeping knees fully extended, arms evenly stretched, palms down, the participant bends and reaches forward without jerking. The position of maximum flexion must be held for approximately two seconds. Advise the participant that lowering the head will maximize the distance reached.



3. CURL-UPS

Endurance is the ability to sustain an effort for an extended period of time (Whitney et al., 1990). The curl-up tests the muscular endurance of the hip flexor and abdominal muscles. The test is terminated if the participant is unable to maintain correct rhythm, falls behind two repetitions, or displays poor technique (a maximum of three corrections is allowed by the appraiser).

Procedure:

The participant lies in a supine position with his/her head resting on the mat. Arms are straight at his/her sides and parallel to the trunk, palms of hand in contact with the mat and fingertips at the zero mark. The knees are bent at 90 degrees.

The participant begins by "flattening-out" the lower back and then follows with a slow "curling-up" of the upper spine. The participant slides his/her hands along the graduated tape strip until the fingertips of both hands touch the 12 centemetre mark (use the 8 centemetre mark for participants 40 years of age or older). The participant then returns to the starting position.

The time to perform the raising and lowering phases should be equal.

The curl-up is performed in cadence with a metronome set at 50-beats-per-minute. The curl-ups should be performed at a steady rate, without pausing to a maximum of 75.

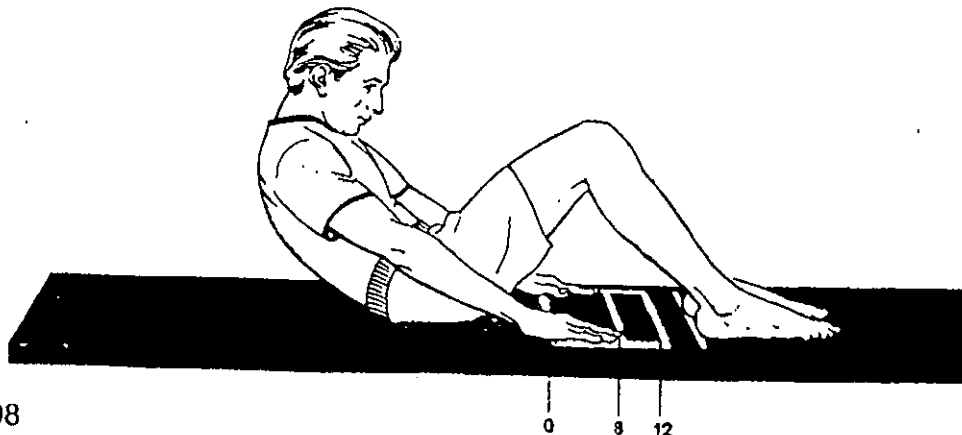
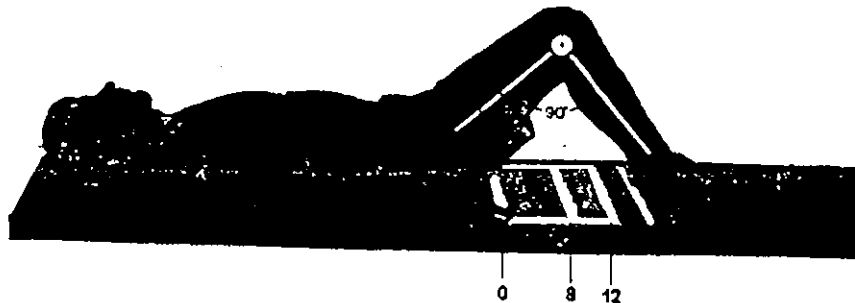
The following are some things to ensure during the curl-up test.

DO:

- verify metronome accuracy with a stopwatch (50 beats-per-minute)
- keep the knees bent at an angle of 90 degrees
- keep the heels in contact with the tape strip on the mat at all times
- make sure the shoulders are relaxed neither depressed nor elevated
- return to the starting position (fingertips touch/feel the 0 cm mark, head resting on the mat)
- keep the arms straight

DON'T:

- slide the seat from its starting position (knees must remain at 90 degrees)
- lift or slide the heels from the tape strip on the mat
- bend the elbows or lose contact between the palms of the hand and the graduated tape strip
- slide the fingertips past the 12 cm (or 8 cm if 40 years of age or older) mark on the graduated tape
- pause during the movement at either the top or bottom position
- go ahead of or fall behind the correct cadence



4. 1.5 MILE RUN

The 1.5 mile run is a test of aerobic fitness or cardiovascular endurance. The 1.5 mile run, therefore, tests the combined efficiency of the lungs, heart, bloodstream, and local muscles in getting oxygen to the muscles and putting it to work.

Procedure:

The participant is required to cover an accurately measured 1.5 mile distance in as short a time as possible.