

Appendix D

The Arm (Bicep) Curl Test

The Arm Curl test is a test of upper body strength, and is part of the Senior Fitness Test (SFT) and the AAHPERD Functional Fitness Test, and is designed to test the functional fitness of seniors. This test is also used for subjects or clients with MS. There are slight differences between the protocols for the Senior and AAHPERD tests, such as the weight used for women. The differences are indicated below.

- **Purpose:** This test measures upper body strength and endurance.
- **Equipment required:** 4-pound weight (women, AAHPERD), 5-pound weight (women, SFT), 8-pound weight (for men). A chair without armrests, stopwatch.
- **Pre-test:** Explain the test procedures to the subject. Perform screening of health risks and obtain informed consent. Prepare forms and record basic information such as age, height, body weight, gender, test conditions. Ensure that the subjects are adequately warmed-up
- **Procedure:** The aim of this test is to do as many arm curls as possible in 30 seconds. This test is conducted on the dominant arm side (or stronger side). The subject sits on the chair, holding the weight in the hand using a suitcase grip (palm facing towards the body) with the arm in a vertically down position beside the chair. Brace the upper arm against the body so that only the lower arm is moving (tester may assist to hold the upper arm steady). Curl the arm up through a full range of motion, gradually turning the palm up (flexion with supination). As the arm is lowered through the full range of motion, gradually return to the starting position. The arm must be fully bent and then fully straightened at the elbow. The protocol for the AAHPERD test describes the administrator's hand being placed on the biceps, and the lower arm must touch the tester's hand for a full bicep curl to be counted. Repeat this action as many times as possible within 30 seconds.
- **Target population:** the aged population which may not be able to do traditional fitness tests.
- **Comments:** It's important that the upper arm is stable throughout the test, and doesn't swing.
- **Scoring:** The score is the total number of controlled arm curls performed in 30 seconds. Below is a table showing some recommended ranges for this test based on age groups (Rikili and Jones, 2002).

Men's Results

Age	below average	average	above average
60-64	< 16	16 to 22	> 22
65-69	< 15	15 to 21	> 21
70-74	< 14	14 to 21	> 21
75-79	< 13	13 to 19	> 19
bo80-84	< 13	13 to 19	> 19
85-89	< 11	11 to 17	> 17
90-94	< 10	10 to 14	> 14

Women's Results

Age	below average	average	above average
60-64	< 13	13 to 19	> 19
65-69	< 12	12 to 18	> 18
70-74	< 12	12 to 17	> 17
75-79	< 11	11 to 17	> 17
80-84	< 10	10 to 16	> 16
85-89	< 10	10 to 15	> 15
90-94	< 8	8 to 13	> 13