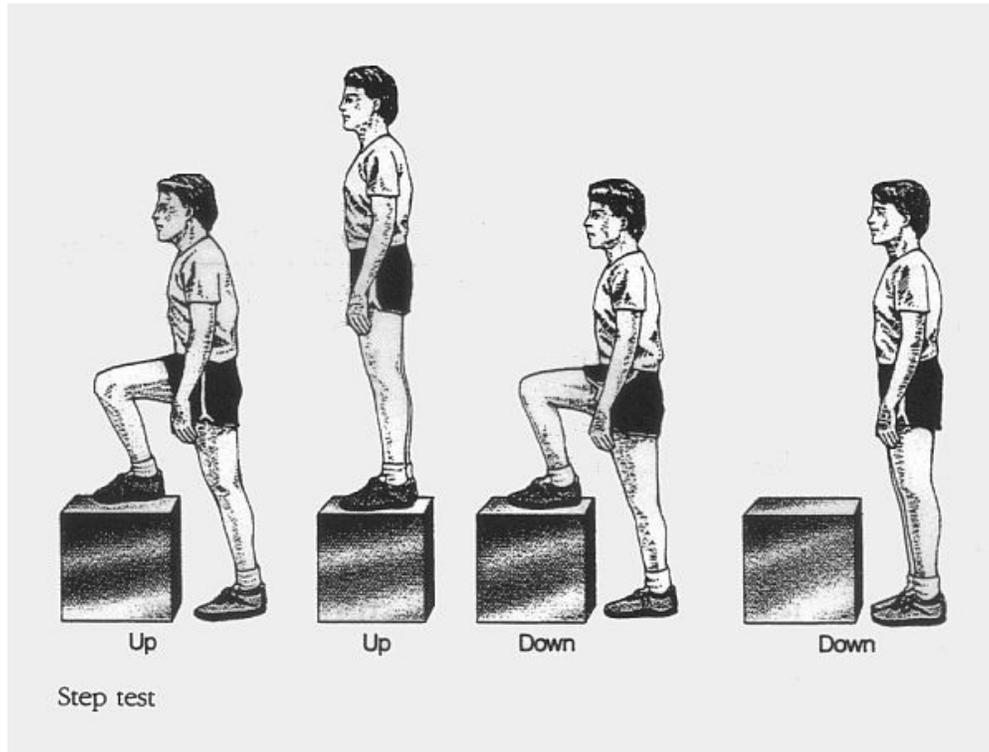


Heart Rate Recovery Test

A useful procedure for assessing your cardio-respiratory fitness is the heart rate recovery test in the form of a step test. Stepping on and off a bench for a 3 to 5 minute time period at a selected cadence has long been used for rating a person's physical capacity for hard work and evaluating the effects of training.



Although not considered the best predictor of cardio-respiratory fitness, the heart-rate during recovery from a standardized step test is a simple way to evaluate the heart's response to exercise. The faster your heart rate recovers after the standardized exercise bout, the higher your fitness rating. The test is easy to administer on an individual basis or to a large group.

It takes little time, does not require special skills to perform, and requires a minimum of equipment. A locker room bench or bleachers, a watch, and a card for recording pulse counts. The testing can easily be done with the procedure described here.

Heart Rate Recovery Test Procedure

1. A locker room bench (generally 18 inches high) is recommended for both men and women. A roll-out bleacher seat (usually 16 inches high) can be used. If neither is available, a sturdy chair (17 inches high) can be used. Step-test ratings presented in the table below are based on stepping up

- on an 18-inch bench.
2. Work with a partner. When the tester gives the signal "Begin," the watch is started and you start stepping onto the bench. First the left foot up, then the right foot up. Then left foot down, right foot down. This complete step represents four counts. Note that it is permissible to change the up foot during the test. Step to the following cadence: 120 counts per minute or 30 complete step executions per minute (One four-count step every 2 seconds - up, up, down, down). In a group situation, the instructor will keep the cadence.
 3. Continue the exercise for 3 minutes. Keep the tempo and be sure to straighten your knees as you step on the bench. After stepping for 3 minutes, sit on a chair or straddle the bench facing your partner.
 4. One minute after the exercise period stops, the tester counts your pulse beats for 30 seconds. He or she should record the pulse for the following periods during recovery.
 - 1 to 1-1/2 minute
 - 2 to 2-1/2 minutes
 - 3 to 3-1/2 minutes

In a group situation, the instructor will call out "Begin" and "Stop" for each 30 second period.

To take your pulse, the tester presses lightly with the index and middle fingers on the inside of the wrist, thumb side.

For added accuracy the performer also can check his or her pulse at the carotid artery site, in the region just below the jawbone and just behind the Adam's apple. This measurement provides a double check for accuracy, and the rate should not differ more than two beats from the tester's count during a 30-second period.

A stethoscope, if available, provides the most accurate measurement.

Improper Procedures

- Not keeping the cadence of 30 step executions per minute.
- Failure to straighten the knees to full extension on the up steps.
- Not counting the pulse accurately.

Scoring

The sum of the three 30 second pulse measurements is your recovery index.

Norms for cardiorespiratory fitness

	<i>Women</i>		<i>Men</i>	
	<i>1.5-mile run (min.)</i>	<i>3-minute step test (recovery index)</i>	<i>1.5-mile run (min.)</i>	<i>3-minute step test (recovery index)</i>
Super	9:54	95	9:00	97
	10:47	107	9:30	107
	11:40	118	10:00	117
Excellent	12:06	126	10:15	122
	12:33	130	10:30	127
	13:00	135	10:45	132
Good	13:26	141	11:00	137
	13:53	147	11:15	142
	14:19	153	11:30	147
Average	14:46	158	11:45	152
	15:12	164	12:00	157
	15:38	170	12:15	162
Fair	16:04	176	12:30	167
	16:31	181	12:45	172
	16:57	187	13:00	177
Poor	17:24	193	13:15	182
	17:50	199	13:30	187
	18:17	204	13:45	192
Very poor	18:43	210	14:00	197
	19:36	222	14:30	207
	20:29	233	15:00	217