



The Tecumseh Step Test

The purpose of the Tecumseh step test is to provide a submaximal measurement of cardiovascular fitness. The fitness classifications were constructed from average values based on a large sample from a Community Health Study in Tecumseh, Michigan, and can be used with adult men and women of all ages.

Required Resources

- Portable step 8 inches high (20.3 cm)
- Metronome or stop watch



How to conduct the test

The test requires the individual to step up and down on a step for 3 minutes at the rate 24 steps per minute. Begin by demonstrating the alternating stepping cadence using a metronome set to 96 beats per minute. In time with the beat step one foot up on the step (1st beat), step up with the second foot (2nd beat), step down with one foot (3rd beat), and step down with the other foot (4th beat).

At the completion of three minutes of stepping, the person remains standing and the pulse is located. Exactly 30 seconds after stopping, the pulse rate is measured for 30 seconds. Use that number in the chart below to determine their cardiovascular fitness classification.

Interpretation

	Men			
Age	20-29	30-39	40-49	50+
Outstanding	34-36	35-38	37-39	37-40
Very Good	37-40	39-41	40-42	41-43
Good	41-42	42-43	43-44	44-45
Fair	43-47	44-47	45-49	46-49
Low	48-51	48-51	50-53	50-53
Poor	52-59	52-59	54-60	54-62

	Women			
Age	20-29	30-39	40-49	50+
Outstanding	39-42	39-42	41-43	41-44
Very Good	43-44	43-45	44-45	45-47
Good	45-46	46-47	46-47	48-49
Fair	47-52	48-53	48-54	50-55
Low	53-56	54-56	55-57	56-58
Poor	57-66	57-66	58-67	59-66

Essentials of Exercise Physiology. 2nd ed. William D. McArdle, Frank I. Katch, Victor L. Katch. Publisher: Lea and Febiger, Philadelphia, 1994, pages 354-355.

[Health Expo/Scr Equip/HER-Tecumseh Step Test]