CHESTER STEP TEST - DESCRIPTION:

Chester Step Test (CST) is a multistage, sub-maximal test which requires the subject to step on to and off a low step at a rate set by a metronome or music beat tape. Every two minutes the heart rate and exertion level are checked, recorded on the CST Graphical Data sheet and the stepping rate is then increased slightly. The Test continues in this progressive manner until the subject reaches approximately 80% of maximum heart rate and/or reports a moderately vigorous level of exertion. Aerobic capacity and fitness rating may then be determined. The test is non-diagnostic and suitable for asymptomatic, apparently health adults.

PRE-TEST HEALTH SCREENING:

Ensure there are no medical contraindications to the participant performing this test which requires them to exercise up to 80% of maximum heart rate and a moderately vigorous level of physical exertion.

Most people don't require a medical check-up before taking this test or starting regular, moderate exercise. However, if there are any doubts about the individual's suitability to partake in moderately vigorous physical activity, then please advise the subject to consult a doctor – and do not conduct the Step Test.

AGE AND FITNESS LEVEL:

The test is progressive, starting with a very slow step rate of 15 steps/minute, which increases gradually every 2 minutes. The test is sub-maximal and finishes when the participant's heart rate reaches approximately 75 – 80% of maximum, or their perceived exertion is 'moderately hard'. Together with the choice of step height, this makes the test well suited to both fit and unfit males and females of a wide range.

For the exceptional case who reaches 85% of maximum heart rate and finds the exercise 'moderately vigorous' after the first two minutes of stepping, no aerobic capacity prediction is feasible – and a rating of 'Poor' should be recorded.

NO GENDER BIAS:

The test is well suited to both males and females and has no marked gender bias. Both sexes use the same height and graphical scale as the oxygen cost of stepping is independent of sex.