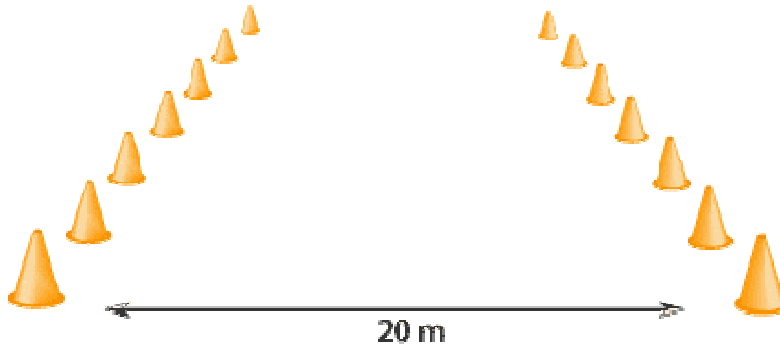




MULTISTAGE FITNESS TEST  
(BEEP TEST)



- *DESCRIPTION:* This test involves continuous running between two lines 20m apart in time to recorded beeps. For this reason the test is also often called the 'beep' or 'bleep' test. The time between recorded beeps decrease each minute (level). There are several versions of the test, but one commonly used version has an initial running velocity of 8.5 km/hr, which increases by 0.5 km/hr each minute (more on test variations).
- *SCORING:* The athletes score is the level and number of shuttles reached before they were unable to keep up with the tape recording. This score can be converted to a  $VO_{2max}$  equivalent score using this calculator.
- *EQUIPMENT REQUIRED:* Flat, non-slip surface, marking cones, 20m measuring tape, pre-recorded audio tape, tape recorder, recording sheets.
- *TARGET POPULATION:* Suitable for sports teams and school groups, but not for populations in which a maximal exercise test would be contraindicated.
- *VALIDITY:* There are published  $VO_{2max}$  score equivalents for each level reached (calculator available here). The correlation to actual  $VO_{2max}$  scores is high.
- *RELIABILITY:* Reliability would depend on how strictly the test is run, and the practice allowed for the subjects.
- *ADVANTAGES:* Large groups can perform this test all at once for minimal costs. Also, the test continues to maximum effort unlike many other tests of endurance capacity.
- *DISADVANTAGES:* Practice and motivation levels can influence the score attained, and the scoring can be subjective. As the test is usually conducted outside, the environmental conditions can often affect the results.
- *OTHER CONSIDERATIONS:*
  - As the audio-tapes may stretch over time, the tapes need to be calibrated which involves timing a one-minute interval and making adjustment to the distance between markers. The recording is also available on compact disc, which does not require such a stringent calibration, but should also be checked occasionally (see calibrating your tape)
  - This test goes by many names, though you need to be careful as the different names also may signify that these are different versions of the test. Therefore you need to be wary when comparing results or comparing to norms.