



Fitness Testing

Reasons For Fitness Testing

- You are able to identify any progress
- It can be used as part of a training session in order to make the session more fun
- Goals can be based on the outcomes of tests
- Comparisons can be made between athletes
- It can help to adapt training programmes to an athlete's needs
- You can identify an athlete's fitness level in order to make future comparisons
- You are able to identify the strengths and weaknesses of an athlete/ programme

There is a range of different fitness tests which can be used to evaluate the different components of fitness. These are outlined below and the advantages and limitations of fitness testing are provided to the side.



Reasons Against Fitness Testing

- An experienced tester is needed in order to produce valid results
- The tests often don't use movements which are used within the sport that the athlete plays
- If a test is not sport-specific, it is not very useful
- Performance within testing conditions may be different to an athlete's performance in a competitive environment
- Many tests use indirect methods

Agility → Illinois agility test

A multi-directional course which must be completed in the quickest time possible. The participant's time is compared to the national average.



Balance → Stork Balance

Requires the participant to stand on the ball of one foot for as long as possible. The time that they manage is compared to the national average.



Power → Vertical Jump Test

Requires the participant to reach as high as they can on a wall and then perform a standing vertical jump. The distance (cm) between their jump height and standing reach is measured and compared to the national average.

Coordination → Wall Toss Test

The participant must throw a ball against a wall and catch it in their opposite hand as many times as possible in 30 seconds. The number of complete catches is compared to the national average.



Flexibility → Sit and Reach Test

Requires the participant to sit with their legs outstretched against a box and attempt to reach as far forward as possible. The distance (cm) onto the box that they reach is compared to the national average.



Maximal Strength → One Rep Max Test

Requires the participant to perform one repetition at the heaviest weight (kg) possible.



Strength → Handgrip Dynamometer

Requires the participant to grip a dynamometer as hard as possible in their hand. The best score (kg) from three attempts is compared to the national average.



Cardiovascular Endurance → Multistage Fitness Test

Requires the participant to run for as long as possible between two cones in time with the 'beeps' of a recording. The time between the beeps is reduced at each stage and the stage at which the athlete drops out at is compared to the national average.

Reaction Time → Ruler Drop Test

Requires a tester to place a ruler between the fingers of the participant. The ruler is then dropped and the participant should grab the ruler as quickly as possible by closing their fingers. The distance (cm) the ruler travels is compared to the national average.



Fitness Data Collection

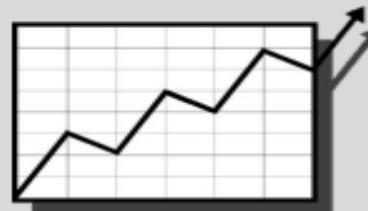
There are two types of data that can be collected from fitness testing: 'qualitative' and 'quantitative'. These terms are explained below.



Qualitative data can be collected by an athlete making notes about how tired they feel during training sessions and competition.

- Quantitative data is a measurement that involves numerical data
- Qualitative data is a measurement based on observational data

Due to the nature of the two types of measurement, quantitative can be compared to national averages whereas qualitative cannot.



Quantitative data can be collected when a player wears a heart rate monitor to track their heart rate during training and competitions.

Muscular Endurance → Sit-up Bleep Test

Requires the participant to perform sit-ups in time with recorded 'beeps' which get progressively faster. The stage the participant reaches is compared to the national average.

