

Fitness Tests for Netball

As with most team sports, there are many components of fitness that are important for success. In netball, speed and agility are very important, though aerobic and anaerobic fitness is too. See our discussion of the [Fitness Components for Netball](#).

Having a very good aerobic fitness level is a very important attribute, and on the other hand being very quick and agile is also very important. Player position also affects the relative importance of these fitness components. The following suggested tests reflect this all-round fitness requirement for netball.

Aerobic Fitness

Aerobic fitness is a very important component of fitness for netball. The [shuttle run \(beep\) test](#) or [yo-yo test](#) would usually be the most appropriate test for testing a netball team. There are many other aerobic fitness tests which are also suitable: you can find information on many other aerobic tests [here](#). The test should be performed indoor on the same surface that the game is played on.

Flexibility

Flexibility is important in terms of being injury free and being able to move freely around the court. The [sit & reach test](#) can be done for lower back and hamstring flexibility. Flexibility tests of other body areas that used in the game would also be suitable.

Strength and Power

Vertical jump ability is very critical for netball. Strength and power tests should also be done to determine strength levels and to monitor strength changes in conjunction with training programs. The [vertical jump test](#) can be performed to measure leg power. [Maximal strength tests](#) for specific exercises should be conducted.



Speed

Most of the fast running in netball is conducted over a short distance, with the ability to accelerate quickly very important. Sprint tests should be conducted [over 20m](#), with a split times recorded for the first five and ten meters if possible.

Body Fat

Body fat can be measured using the [skinfold method](#). If this is not available, monitoring [body weight changes](#) would give an indication of body fat changes, assuming no change in muscle mass. Excess body fat would affect the netball player's ability to jump vertically, move freely

around the court, and the extra weight will increase fatigue during the game.

Body Size

Body size measurements such as [height](#) and [arm span](#) are important for success in netball. With junior athletes, these measures can be used for talent identification.

Agility

The ability to quickly change direction is very important for netball. The [5-0-5 agility test](#) measures the ability to change direction 180 degrees. A 90 degree turn test would also be suitable for netball. In addition to a simple agility test, you could also incorporate a ball into the testing, with the player having the change direction in response to a pass. Such additions to a test will decrease reliability but may increase validity.

Example Testing Protocols

The following example fitness testing protocols were published by Netball New Zealand (Kritz & Thompson, 2010).

Senior Rep /National U21/National senior players

- [20m sprint test](#) (5m, 10m splits)
- 2x20m & 4x10m agility sprint test.
- repeated speed test (octorepeater) - consists of eight sprints starting at 25 second intervals. The athlete completes 4 sets of 2 x 20m and 4 sets of 2 x 10m sprints, alternating between the 2 x 20m and 4 x 10m sprints, through four times through with 25 second rest intervals between each 2x20 & 4x10 sets. It is important to conduct the agility test before the octorepeater test as it is used to calculate the fatigue index.
- aerobic test - either the [Yo-Yo IR1](#), [beep](#) or [1500m run](#)
- strength endurance tests:
 - [press-up test](#) (max number)
 - [horizontal pull-up test](#)

- [prone bridge test](#)
- wall pass test - the player stands 3 meters from a wall, and throws as many chest passes as they can in one minute. Throwing technique is also assessed.
- lower body power tests:
 - vertical jump ([both legs](#) and each [single leg](#))
 - [standing long jump](#)

For senior club players:

- repeated speed test (octorepeater)
- aerobic test - either the yo-yo, beep or 1500m run
- strength endurance test
- lower body power tests

For secondary school/U/17/U19/U21 players:

- aerobic test - either the yo-yo, beep or 1500m run
- strength endurance test (if there is no gym available, you could do press-ups, wall pass or prone bridge)
- lower body power tests