

COMPONENTS OF FITNESS

Aerobic Endurance	the ability of the cardiorespiratory system to supply oxygen and nutrients to the muscles to sustain low to medium intensity work to delay fatigue. Aerobic endurance – the ability of the cardiorespiratory system to supply oxygen and nutrients to the muscles to sustain low to medium intensity work to delay fatigue.
Muscular endurance	the ability of the muscular system to continue to contract at a light to moderate intensity to allow repetitive movements throughout a long event or game.
Muscular strength	the maximum force that can be generated by a muscle or muscle group to improve forceful movements within an activity.
Speed	distance divided by time to reduce time taken to move the body or a body part in an event or game.
Flexibility	the range of motion possible at a joint to allow improvements in technique.
Body composition	the relative ratio of fat mass to fat-free mass in the body allowing variation in body composition dependent on the sport.
Power	the product of speed and strength to allow for explosive movements in sport.
Agility	the ability to change direction quickly to allow performers to outmanoeuvre an opponent.
Reaction Time	the time taken between a stimulus and the start of a response, useful in fast-paced sports to make quick decisions about what to do.
Balance	the ability to maintain centre of mass over a base of support, useful to maintain positions in performance sports (static balance) or when on the move in any other sporting situation (dynamic balance).
Coordination	the ability to move two or more body parts at the same time smoothly and efficiently, to allow effective application of technique.

FITNESS TESTS

Aerobic Endurance	12 Minutes Cooper run, multistage fitness test
Muscular endurance	One minute press up test, one minute sit up test
Muscular strength	Handgrip dynamometer, 1 RM
Speed	30m sprint test
Flexibility	Sit and reach
Body composition	Body Mass Index, Bioelectrical impedance analysis, waist to hip ratio
Power	Vertical jump test, standing long jump
Agility	Illinois agility test, T test
Reaction Time	Ruler drop test, online reaction time test
Balance	Stork stand test, Y balance test
Coordination	Alternative wall toss test

PRINCIPLES OF OVERLOAD (FITT)

Works with the principle of PROGRESSIVE OVERLOAD.

F = Frequency - refers to how often someone trains. As fitness increases a performer can start to train more often.

I = Intensity - refers to how hard a performer trains e.g. how fast they run, how heavy the weight is that they can lift. As fitness increases, the intensity should be suitably increased.

T = Time - refers to how long you train for. As fitness increases, the length of time spent training may well increase.

T = Type - refers to the type of training used e.g, HIIT. The training type must remain suitable to gain the specific fitness benefits that are required