

Health and Fitness

HEALTH RELATED FITNESS

involves exercise activities that you do in order to try to improve your physical health and stay healthy. The different components are :

- **Cardiovascular fitness** is the ability to exercise the whole body for long periods of time and is sometimes called stamina.
- **Muscular strength** is the amount of force a muscle can exert against a resistance. It helps sportspeople to hit, tackle and throw.
- **Muscular endurance** is the ability to use voluntary muscles many times without becoming tired. It helps sportspeople to sprint or repeat quick actions for longer.
- **Flexibility** is the range of movement possible at a joint. It helps performers to stretch and reach further.
- **Body composition** is the percentage of body weight which is fat, muscle or bone. It helps sportspeople depending on the type of sport they play, eg heavy rugby players are more effective in the scrum than lightweight players, but light long distance runners will always beat heavyweights.

FITNESS TESTING

Sit and reach - flexibility

Ball toss test - coordination

12 min Cooper test - Cardiovascular endurance

1min Sit up test - muscular stamina

1min press up test - muscular stamina

Hand grip test - muscular strength

Ruler drop test - reaction time

Stork test - balance

Types of trainig

Aerobic - which is steady and not too fast, the heart is able to supply enough oxygen to the muscles. Improves cardiovascular fitness.

Anaerobic exercise is performed in short, fast bursts where the heart cannot supply enough oxygen to the muscles. Anaerobic training improves the ability of the muscles to work without enough oxygen when lactic acid is produced.

SKILL RELATED FITNESS

is the ability to do well in everyday life activities and sports.

- **Agility** - the ability to change the position of the body quickly and with control. This helps team players dodge their opponents.
- **Balance** - the ability to retain the centre of mass above the base of support when stationary (static balance) or moving (dynamic balance). This helps gymnasts maintain their position and prevents games players from falling over at speed.
- **Co-ordination** - the ability to use two or more body parts together. This helps all athletes to move smoothly and quickly especially when also having to control a ball.
- **Power** - the ability to use strength at speed. This helps athletes to jump high, throw far or sprint quickly. Power = Strength x Speed.
- **Reaction time** - the time between the presentation of a stimulus and the onset of a movement. This helps swimmers to make a fast start.
- **Speed** is the differential rate at which an individual is able to perform a movement or cover a distance in a period of time or how quickly an individual can move. This helps all games players to move into position or get away from opponents quickly.

METHODS OF TRAINING

- **Circuit training** involves performing a series of exercises in a special order called a circuit. Each activity takes place at a 'station'.
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- **Continuous training** involves working for a sustained period of time without rest. It improves cardio-vascular fitness.
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- **Cross training** involves using another sport or activity to improve your fitness. It happens when an athlete trains in a different environment.
- **Interval training** involves alternating between periods of hard exercise and rest. It improves speed and muscular endurance.