

.Muscles
Arms-Biceps and Triceps
Legs- Quadriceps and Hamstrings

Bones
Arms-Humerus, ulna and radius
Legs-Femur, Patella, Tibia and Fibula

Fitness Components

Strength = The maximum force that can be generated by a muscle or muscle group.

Muscular Endurance = The ability of muscles to continually contract over a period of time against a light to moderate resistance load.

Power = The product of strength and speed.

STRENGTH, MUSCULAR ENDURANCE AND POWER TRAINING

1. Circuit Training

- ❖ Usually performed in a big indoor space. Participants perform different exercises in a specific order at approx. 8-15 stations.
- ❖ Different areas of the body are worked to improve strength/endurance.

2. Free Weights

- ❖ This type of training can be seen in fitness suite e.g. with the dumbbells.
- ❖ The idea of this training is to develop strength, power or muscular endurance.



3. Plyometrics

- ❖ A type of exercise that involves explosive types of sports specific movements.
- ❖ A lot of jumping, hopping, incline press-ups and lunging.

WARM-UP

1. Pulse Raising Activity

- ❖ Pulse raising activities gently raises the heart rate.
- ❖ E.g. Jogging, cycling, skipping.

2. Stretches

- ❖ Stretches should be dynamic (moving, not held). They prepare the muscles.
- ❖ E.g. High knees to stretch the hamstrings, heel flicks to stretch the quadriceps.

3. Skill-Based Activity

- ❖ This is the final part of the warm-up.
- ❖ This is where you familiarise yourself with the skills and actions that will be needed in the session.
- ❖ E.g. Passing the ball in rugby.



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TRAINING PRINCIPLES - FITT

Frequency – The number of training sessions a person completes in a week.

Intensity – How hard your heart works in relation to your heart rate.

Max. HR = 220 – Age

Time – How long you train for. This depends on what you are training for!

Type – The type of training you do e.g. continuous vs. interval training. This depends on what you are training for.

Progressive Overload = In order to progress, training needs to be demanding enough to cause the body to adapt, improving performance.

AEROBIC ENDURANCE TRAINING

Aerobic Endurance = The ability of the cardiorespiratory system to work efficiently, supplying oxygen to working muscles during exercise.

1. Continuous Training

- ❖ When a person trains at a steady pace at moderate intensity for a minimum of 30 minutes.
- ❖ E.g. Mo Farah will use continuous training.

2. Fartlek Training

- ❖ When the intensity of the training is varied by running at different speeds or over different terrain.

3. Interval Training

- ❖ This is where the individual performs a work period followed by a rest or recovery period.

4. Circuit Training

- ❖ Where different stations/exercises are used to develop strength and endurance.



Aerobic and Anaerobic activity

- Aerobic exercise (in the presence of oxygen) eg long distance running
- Bi product of aerobic exercise is water and carbon dioxide
- Anaerobic exercise (in the absence of enough oxygen eg sprinting)
- Bi product of anaerobic exercise is Lactic acid

Sedentary lifestyle

A sedentary lifestyle is one with no or irregular physical activity and an excessive amount of daily sitting. Consequences-obesity, Depression, Type 2 diabetes, Poor muscle tone, osteoporosis.



Water Safety

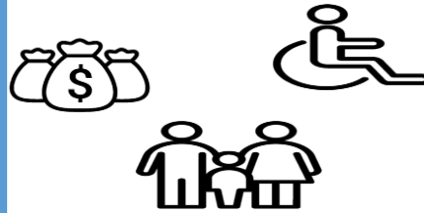
Make sure you have permission to swim at your chosen spot.

- Look out for safety signs!
- If a sign says “no swimming” and/or “danger” don’t swim there. When there are signs, they are there for a reason.
- Avoid weirs, locks and other structures. These can create underwater currents that can pull even strong swimmers underwater.
- Have entry and exit points that are accessible by everybody. You need to be able to enter and exit the water slowly in a safe way. (The majority of accidental drownings involving children occur within 2m of safety, where the child could not get out!). Avoid jumping into the water.
- Children should never swim, or indeed be near open water without parental supervision



Barriers to participation in sport

Lack of transport
Lack of income
Lack of role model
Lack of facilities



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Sportsmanship--When performers act in a **manner with positive etiquette.** Showing good morals and doing the right things.



Gamesmanship

Bending the rules, making use of dubious methods that are not strictly outside of the rules to gain an advantage



Energy balance



Cardiovascular system

- Transport system for oxygen, carbon dioxide and nutrients
- Veins - Carry deoxygenated blood back to the heart
- Arteries -Carry oxygenated blood away from the heart and to the body



Children and adolescents ages 6 through 17 need to be active for 60 minutes every day.



Diet

- Carbohydrates .proteins. Fats, minerals. Vitamins. Fibre. water
- Carbohydrates are primarily involved in energy production. Stored in the muscles and the liver as GLYCOGEN. They provide the energy to exercise and should form 60% of our daily intake.

