



# Components of fitness Year 10 Tech Award

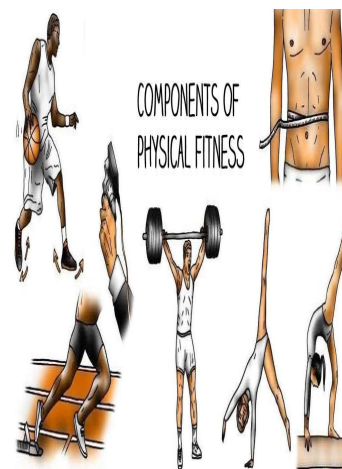


## Key Knowledge

Component	Tests
1. Aerobic Endurance	12-minute Cooper (Run/Swim/Bike)
2. Muscular Endurance	One minute sit-up test
3. Muscular Strength	Hand grip Dynamometer
4. Power	Sargent Jump Test
5. Speed	30m Sprint Test
6. Flexibility	Sit and Reach Test
7. Body Composition	N/A

## Key Sports examples

1. Marathon Runner
2. Footballer
3. Rock Climber
4. Long Jumper
5. 100m sprinter
6. Gymnast
7. Rugby



## Key Vocabulary

- **Component** – part of something
- **Fitness**- meeting the demands of the environment
- **Health** – complete state of physical, emotional and social well being.
- **Dynamometer** – an instrument that measures an output of strength
- **Protocol** – the official procedure/process of an event
- **Normative data**- data taken from a group of people (gender age group)

## Key Terminology

**Name /State**- simple knowledge recall

**Identify/Give** – need to assess factual information (short answer)

**Calculate**- require you to use mathematical skills

**Describe**- give details about key concepts/information

**Explain**- make a statement and justify it

**Discuss**- consider more than one aspect of the situation

**Evaluate**-consider both sides of a given situation or compare two options

**Analyse**- examine and interpret information to help answer the question

Normative data for the Sit & Reach test  
The following table is for 16 to 19 year olds

Gender	Excellent	Above average	Average	Below average	Poor
Male	>14	14.0 - 11.0	10.9 - 7.0	6.9 - 4.0	<4
Female	>15	15.0 - 12.0	11.9 - 7.0	6.9 - 4.0	<4



# Sports Nutrition Year 10 Tech Award

## Key Knowledge

## Key Vocabulary



Nutrient	Benefit	Example
<b>Macronutrients</b>		
<b>1. Carbohydrate</b>	Two main forms are simple and complex. Main source of your bodies energy around 50-60% of diet.	<b>Simple-</b> banana, sweets, chocolate <b>Complex-</b> pasta, rice, bread, potatoes
<b>2. Fats</b>	Split into two forms, <u>saturated</u> and <u>unsaturated</u> . Energy source for low-moderate activity, helps with hormones and building cell membranes, 30% of diet	<b>Saturated-</b> animal fats in red meat, milk, cheese and cream <b>Unsaturated-</b> salmon, pumpkin seeds, almonds, avocado.
<b>3. Protein</b>	12-15 % of diet, helps build and repair tissues such as muscle.	Chicken, eggs, fish, red meat, milk, cheese and soya beans
<b>Micronutrients</b>		
<b>1. Vitamin</b>	<b>A-</b> maintain eyesight <b>B1-</b> helps convert food to energy <b>C-</b> maintains an effective immune system <b>D-</b> keeps bones, teeth and muscles healthy	<b>A-</b> Liver, Mackerel, Milk, Carrots, Spinach <b>B-</b> Rice, bran, pork, beef, beans soya <b>C-</b> Most fresh fruit, vegetables <b>D-</b> Oily fish, red meat, liver, egg yolks, mushrooms
<b>2. Mineral</b>	<b>Potassium-</b> regulates body fluid levels <b>Iron-</b> increases the body's oxygen carrying capacity <b>Calcium-</b> increases bone strength.	<b>P-</b> Bananas, yoghurt, sunflower seeds <b>I=</b> Liver, lean meat, eggs kidney beans, green veg <b>C=</b> Milk and dairy products, whole grains and green veg

## Key Sports Supplements

1. Protein supplements
2. Pre-work out supplements
3. Glucose-based isotonic drinks
4. Caffeine drinks
5. Vitamins B and D



- **Hydration** – the process of causing something to absorb water
- **Nutrient** a substance that provides nourishment
- **Carbo-loading** – consuming an extra/large amount of carbohydrates as glycogen before an endurance event
- **Bowel emptying** – helps digestions and removal of waste products in a timely and comfortable manner.
- **Soluble** – able to be dissolved, especially in water
- **Saturated** - holding as much water or moisture as can be absorbed
- **Amino acids-** Can be both essential (we must have them) and non essential (the liver makes them but is helpful to have)

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