# **Year 10 Food Preparation & Nutrition: Fruits and vegetables**

# **Knowledge Organiser**

## Macronutrients- needed in larger amounts

Nutrient	Function	Sources
Carbohydrate (Starch and sugars)	Energy	Bread, pasta, rice, cakes, biscuits
Protein	Growth, repair and maintenance	Meat , fish, dairy, eggs
Fat (Saturated and unsaturated)	Energy, warmth, protection of organs, a carrier for fat soluble vitamins—A, D, E and K	Sausages, bacon, lard, dairy products, nuts, seeds, avocados

#### Processed fruits and vegetables

Pre-prepared •Canned •Frozen •Dried •Juiced

Advantages of using these might be:

- Convenience
- Available all year round
- Increased shelf life
- More affordable
- Frozen fruit and vegetables are thought to be more nutritious
- Access to a greater variety of foods that you wouldn't buy locally e.g. exotic fruit



Fibre is found in foods that come from plants. Fibre keeps our digestive system healthy by absorbing water and speeding up removal of waste. It prevents:

- Weight gain
- Constipation
- Diverticulitis
- Piles
- Bowel cancer
- Heart disease
- Diabetes







### Micronutrients- needed in smaller amounts

Nutrient	Function	Sources	
Vitamins			
Α	Immune system, helps us to see in dim light	Dairy, eggs, leafy vegetables, carrots	
В	Energy release, healthy nervous system	Eggs, milk, fortified cereals	
С	Fights infection, heals wounds, helps to absorb iron from foods	Citrus fruits, kiwi, strawberries, potatoes	
D	Healthy bones and teeth, helps the body to absorb calcium	Oily fish, eggs, fortified margarine and cereals	
Minerals			
Calcium	Strong bones and teeth, to help with normal growth in children	Dairy, green leafy vegetables, fish with edible bones	
Iron	Helps to make haemoglobin in the red blood cells which carry oxygen around the body	Red meat, beans, nuts, green leafy vegetables, dried fruit	
Sodium	Helps control the amount of water in the body	Processed food, salt, stock cubes	

### Key vocabulary

Soluble fibre	Dissolves in water and is easier to digest.	
Insoluble fibre	Fibre which the body cannot absorb.	
Function	What something does or why it's needed.	
Source	Where something originates or can be obtained.	
Composite food	A food that includes more than one section of the Eatwell Guide e.g. lasagne.	
Deficiency	Lacking something e.g. iron deficiency anaemia.	
Fortified	Adding nutrients to increase its nutritional value.	
Food miles	The distance food has travelled to get from where it was produced to where it is consumed.	
Enzymic browning	A chemical process where oxygen and enzymes in the food react causing the surface to brown.	
DRV	Dietary Reference Values—an estimate of the nutritional requirements of a healthy person.	

## The effect of cooking on fruits and vegetables

- <u>Colour</u>—in order to preserve colour, boil quickly in as little water as possible.
- <u>Flavour</u>—cooking intensifies flavours. E.g. carrots and parsnips become sweeter.
- . Texture—Cooking softens the cell walls.
- Nutritional value—Water soluble vitamins are lost when cooking. Use minimum water for minimum time.

## Importance of fruit and vegetables

- Provide carbohydrates
- Contain a range of vitamins and minerals
- . Low in fat
- . High in fibre
- . High water content
- Low in calories
- Contain only natural sugars

### Food hygiene and safety

-18°C or below = freezer

 $0-5^{\circ}C = fridge$ 

5-63°C = danger zone—ideal temperatures for bacterial growth!

 $63^{\circ}C+ = hot hold$ 

75°C+ = core temperature of cooked food

