

## Year 8 Food Preparation and Nutrition Block 1: Knowledge Organizer

### Why do we eat food?

The snacks, meals and drinks that you eat make up your **diet**.  
Your diet should include a variety of foods to make sure you get all the nutrients you need to stay healthy.  
No single food can supply all the nutrients you need.  
The **Eatwell Guide** shows how eating different foods can make a **healthy and balanced diet**

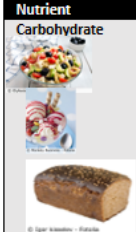


The body needs food for:  
growth and repair of cells  
energy and warmth  
protection from illnesses and to keep the body working properly.

The materials found in food are called nutrients.  
Each nutrient has a function:  
**Protein** is needed for growth and repair of cells.  
**Fat** is needed for warmth and energy.  
**Carbohydrate** is needed for energy.  
**Vitamins** and **minerals** are needed for protection from illness and to keep the body working properly.

Nutrient	Function	Sources
Protein	Growth and repair Secondary source of energy	Meat, fish, milk, eggs, cheese, lentils, soya, nuts, wheat, beans and peas
Carbohydrate Starch & sugar	Energy	Potatoes, pasta rice. Sugar, honey, jam
Fat	Protection and insulation (warmth) Energy	Butter, cheese, oily fish, meat
Vitamin A	Helps the eyes see in dim light Healthy skin and tissue	Liver, eggs, butter, soft spreads, orange and yellow vegetables e.g. carrots & apricots
Vitamin B	Transfer and release of energy Formation of red blood cells	Cereals, meat, fish, eggs, dairy products, pulses, yeast products.
Vitamin C	Healthy skin Helps the body heal faster and helps resist infection Absorption of iron	Fruits and vegetables e.g. oranges, lemons, blackcurrants
Vitamin D	Growth and maintenance of strong bones Absorption of calcium	Made by the body when skin is exposed to sunlight Oily fish & eggs
Iron	Formation of red blood cells which carry oxygen around the body	Red meat, dark green vegetables, eggs, chocolate, dried fruit, wholegrain cereals
Calcium	Healthy bones and teeth Healthy muscles and nerves	Dairy foods (milk, cheese, yoghurt) white bread, canned fish, green leafy vegetables

### More facts about carbohydrates

Nutrient	Food source	Main functions
Carbohydrate 	Starch Potatoes Rice Pasta Bread	Starch provides slow-release energy
	Sugar Sugars and syrups, honey, fruit juice	Sugar provides fast-release energy
	Fibre Wholegrain cereals Fruit and vegetables	Fibre keeps the digestive system healthy



**Why do we need energy?**  
We need energy for breathing, keeping our organs working, digesting food, and activities such as walking, running and even sitting down.  
The amount of energy we need depends upon our age, gender, activity level, our health and our body size.

### What is BMR?

**Basal metabolic rate (BMR)** is the rate at which a person uses energy when they are resting.

### What is energy balance?

If we eat the right amount of food for our energy needs, then our body weight is maintained. Energy in = energy out  
If we eat more energy than we need, then we put on weight. Energy in is greater than energy out.

### Food Commodities

**Primary processing** means changing the raw food material into a food that can be either eaten immediately or processed into other types of **foo** products. During the primary processing of wheat it is usually ground down to make flour by the process of **milling**. Flour can then be used to make bread and pasta.