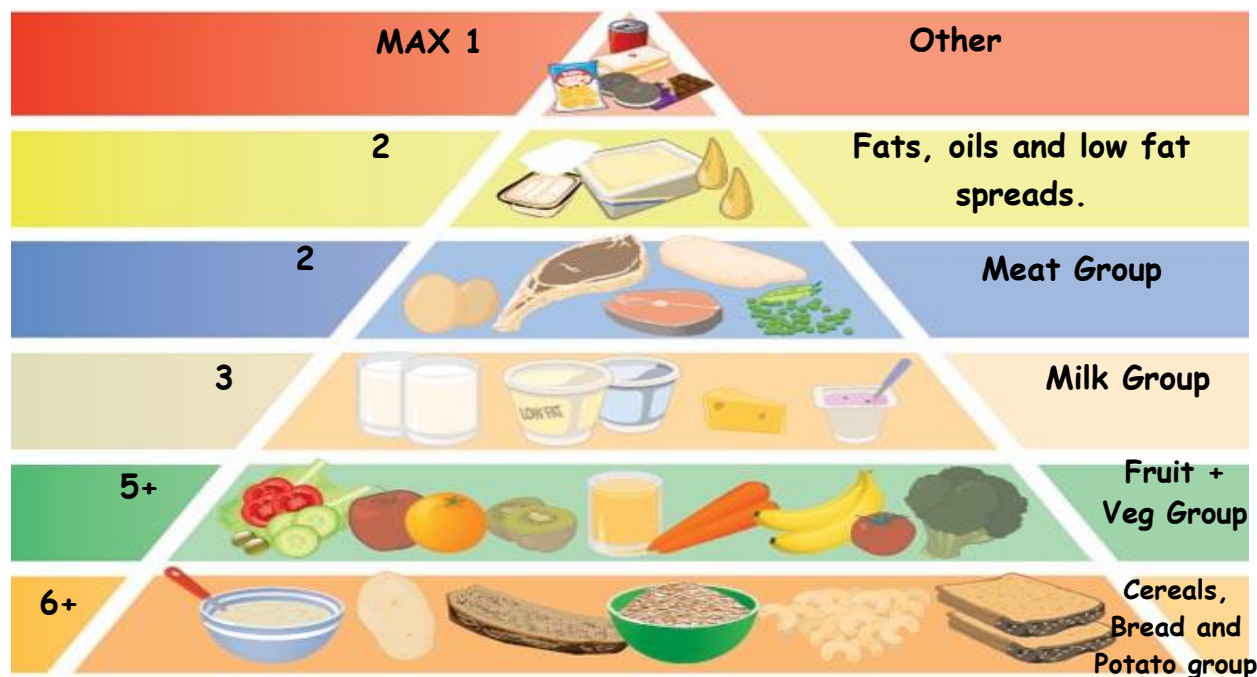


The NEW Healthy Food Pyramid!!

Two things that can guide us towards a healthy balanced diet:

1. The Food Pyramid.
2. The Healthy Eating Guidelines.



- The food pyramid helps us plan for a healthier **BALANCED** diet.
- The food pyramid tells us the name of the food groups and the number of portions we should be getting from each food group.
- ****This picture is different from the picture of the food pyramid in your book. A new shelf was added to the food pyramid in 2013.****
- The second shelf above is the new shelf which was added to the food pyramid.
- Fats, oils and low fat spreads were separated out into their own shelf as they provide us with the important nutrient--fat--, however it is important that these foods are eaten in moderation.

Healthy Eating Guidelines

- Eat less fat
- Eat less sugar
- Eat less salt
- Eat more fruit and veg
- Eat a variety of foods
- Drink more water
- Drink alcohol in moderation

Key Terms

Balanced Diet

Eating the correct amount of foods for what our bodies need.



Chapter 1: Food and Nutrition

Why do we eat food?

- ✓ Food helps the body to grow.
- ✓ Provides the body with energy and warmth
- ✓ Protects the body against disease.

Factors which affect our choice of food.

- Our Senses
- Lifestyle (Family and Friends)
- Nutritional Value
- Cost
- Culture
- Religion
- Availability (Staple foods/in season).
- Advertising

The table below has a key terms which you need to know in order to understand the study of nutrients

Nutrient	A chemical found in food that nourishes the body
Composition	What the nutrients is made up of
Source	A food that contains the nutrient
Function	The job the nutrient has in the body
Recommended Daily Allowance (R.D.A)	The amount of each nutrient we should eat each day
Deficiency Disease	An illness that occurs in the body caused by the lack of a nutrient
Classification	Putting things into groups based on something that they have in common.

Classification of the 6 Nutrients

There are six nutrients that our bodies need. These are protein, carbohydrates, fat, vitamins, minerals and water.

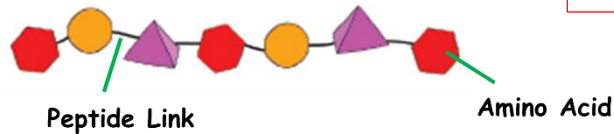
Macronutrients	Micronutrients
Needed by the body in large amounts	Needed by the body in small amounts
They are too big to be absorbed by the body so they must be broken down	They are small enough to be absorbed by the body once eaten.
Protein, fats and carbohydrates.	Minerals and vitamins

Structure and Composition

- Proteins are made up of basic units called Amino Acids.
- Amino Acids are small units that join together like beads on necklace.
- They are joined together by **peptide links** to form chains of protein.
- Each Amino Acid is made up of the elements:

1. Carbon
2. Hydrogen
3. Oxygen
4. Nitrogen

N.B
Nitrogen is needed for growth



Classification

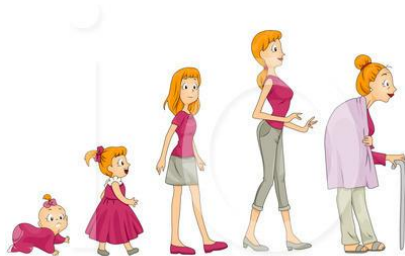
- There are different types of Amino Acids, and some amino acids are of **better quality** and therefore **more essential in the diet**.
- These high quality amino acids are called **ESSENTIAL amino acids**.
- Proteins are classified according to their quality (i.e. the amount of essential amino acids they contain).

High Biological Value Protein (HBV)	Low Biological Value Protein (LBV)
Contains all essential amino acids	Do not contain all essential amino acids
Normally comes from animal foods	Normally come from vegetable foods

Protein

Function

- Growth
- Repair of worn out or damaged cells e.g. healing wounds
- It forms hormones and enzymes

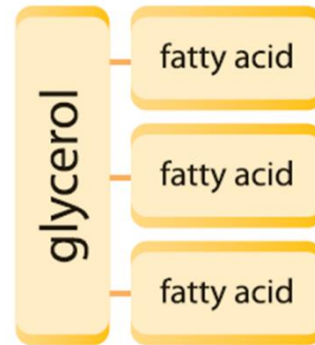


Sources

High biological value sources of protein	Low biological value sources of protein
Meat, Fish, Eggs, Cheese, Soya Beans. 	Peas, Beans, Nuts

Structure and Composition

- Fats are made up of fatty acids and glycerol.
- These link together to form an E-shaped structure.
- Each molecule of glycerol is attached to three fatty acids.
- Glycerol and fatty acids contain carbon, hydrogen, oxygen.



Classification and Sources

Saturated Fat	Unsaturated Fat
<p>Milk, Cheese, Meat, Butter</p>	<p>Oil, Oily Fish, Nuts, Seeds</p>

Fat

Function

- Heat and energy
- A layer of fat in the skin **insulates** our body keeping us warm.
- Delicate organs in the body like the heart and kidneys are protected by a layer of fat around them. Also helps the nerves in our body.
- We get fat soluble vitamins A,D,E,K from fats

How to reduce fat intake in the diet

- Grill instead of frying
- Cut visible fats off meat
- Use low fat foods
- Cut down on fatty foods like chips etc..

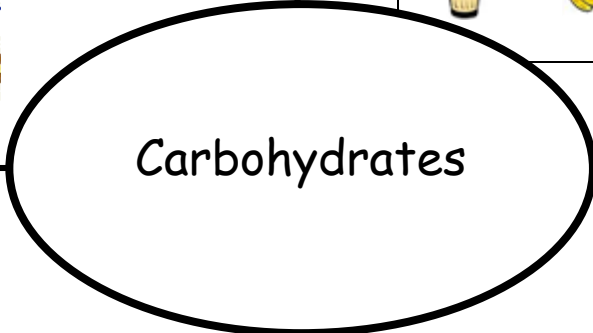
Structure and Composition

- The most basic unit of carbohydrates are simple sugars, for example glucose is a simple sugar.
- When several simple sugar units join together they form a chain of starch.



- Carbohydrates contain the elements Carbon, Hydrogen, and Oxygen.

Starch (Stored sugar in plants)



Classification and Sources

Sugars	Starch	Dietary Fibre
Honey, Fruit, Ice cream, soft drinks	Potatoes, Pasta, Rice, bread.	Brown Bread, Whole meal pasta / rice.

Functions

- Provides energy
- Fibre rich foods gives a feeling of fullness
- Fibre helps prevent constipation and other bowel problems.

How to increase Fibre Intake

RDA: 30g for an average person

- Eat more whole meal cereals like bran, brown rice instead of white
- Eat high fibre breakfast cereals
- Eat more fruit and vegetables
- Eat more nuts and seeds

