
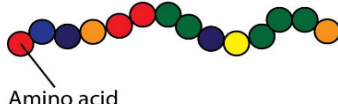



HOMEWORK 1 Why we need food & the Eatwell guide	HOMEWORK 2 Protein
<p>The body needs food for:</p> <ul style="list-style-type: none"> • Growth and repair of cells • Energy • Warmth • Protection from illness • Keeping the body working properly <p>Your diet should include:</p> <ul style="list-style-type: none"> • A variety of foods to make sure you get all of the nutrients to stay healthy. • No single food can supply all of the nutrients that you need <p>Foods are vital for our survival and are made up of different things called nutrients. Each nutrient has its own function in the body</p> <ul style="list-style-type: none"> • Protein - growth and repair of cells, maintenance of the body and to provide energy. • Fat - provide energy, to keep the body warm, to protect internal organs and provide fat soluble vitamins and essential fats • Carbohydrates - needed for energy • Vitamins & minerals - needed to protect the body and prevent illness and disease <p>The Eatwell guide:</p>  <p>Questions:</p> <ol style="list-style-type: none"> 1. Why should you eat a variety of foods? 2. List the 5 main nutrients needed by the body and give a function of each 3. How much water should we drink a day? 4. List the sections of the Eatwell Guide including foods you would find in each section 	<p>There are two main types of nutrients:</p> <ul style="list-style-type: none"> • Macronutrients - needed in large amounts by the body (protein, fats and carbohydrates) • Micronutrients - needed in smaller amounts (vitamins and minerals) <p>Protein is needed for growth, repair, maintenance and a secondary source of energy</p> <p>Some people will need more protein than others e.g. children, teenagers and pregnant women</p> <p>Proteins are made from amino acids and there are 20 of them</p>  <p>Essential amino acids must be provided by food because the body cannot make them</p> <p>10 are essential for children and 8 are essential for adults.</p> <p>High biological value (HBV)</p> <ul style="list-style-type: none"> • Contain all of the essential amino acids • Mainly come from animals e.g. meat fish and eggs <p>Low biological value (LBV)</p> <ul style="list-style-type: none"> • Missing 1 or more essential amino acid • Mainly come from plant foods e.g. peas, beans <p>Complimentary proteins</p> <ul style="list-style-type: none"> • When 2 or more LBV proteins are combined they can make a HBV protein e.g. beans on toast  <p>Questions:</p> <ol style="list-style-type: none"> 1. What is the 4-letter word to remember the functions of protein 2. Which groups of people need more protein in their diet? 3. What are proteins made from and how many are there? Can the body make all of the amino acids?

HOMEWORK 3**Fat**

Many people eat **too much fat** which is **not good** for our health and can lead to several health problems

Fats like butter are **solid at room temperature** and are called **saturated** fats. Oils are **liquid at room temperature** and are called **unsaturated** fats.

Saturated or unsaturated fat:

- Saturated fat - too much in the diet can be harmful to health.
- Unsaturated fat - this type of fat is better for our health and can have several benefits.



Eating this type of fat is **better** for our health and can have several benefits.

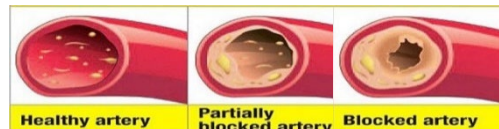
The **functions** of fat are:

- It protects vital organs by covering them with a layer of fat
- It insulates us and keeps us warm
- Provides energy (2 x as much as a gram of carbohydrate)
- It provides fat soluble vitamins A, D, E & K

Cholesterol is a fatty substance **needed** to function properly and help with the **digestion** of fats. Eating foods high in fat can raise cholesterol levels in the blood

Eating too much fat can cause:

- Obesity
- Type 2 diabetes
- Heart disease

**Questions:**

1. What are 3 of the main functions of fat in the body?
2. Name 3 sources of animal fat & 3 sources of vegetable fat
3. Which type of fat should we be eating less of and which should we eat more of?

HOMEWORK 4**Carbohydrate**

The main function of carbohydrate is to provide **energy**! There are **3 different groups** of carbohydrate.

Sugar:

- All sugars, treacle and syrups, honey, jam and marmalade
- Known as **simple** or **double** sugars

**Starch:**

- Potatoes, rice, pasta, bread
- Known as **complex carbohydrates**. Made up of lots of simple sugars joined together

Fibre:

- Found in cell walls of fruit, vegetables and cereals
- Also, a **complex carbohydrate**

There are 2 other types of sugar that we need to be aware of in our diets. These are:

- Free sugars = sugars that are added to foods e.g. sugar, honey and syrup. Can be more harmful to our health if we eat too much.
- Fruit **sugars** = **natural** sugars found in fruits and vegetables e.g. apples. **Better** for us.

We should be getting **50% of our energy from carbohydrate foods**

- 45% of our energy should come from starchy foods
- 5% should come from sugars

If the diet contains too much carbohydrate than we need then it will be turned into fat and stored in the body. This could lead to obesity.

Fibre is needed to keep the **digestive system healthy**. If you don't eat enough fibre, you could become **constipated**.

The recommended amount of fibre for adults is **30g per day**.

Questions:

1. What is the main function of carbohydrate in the body?
2. What are the 3 main groups of carbohydrate?
3. What percentage of our energy should come from carbohydrates?
4. What problems do you think eating too many free sugars could cause in the body?