

## Food and Nutrition

For a child to survive and grow bigger, they must eat food and drink liquid. This seems obvious to all of us, but why do we need to eat? The answer is that the food we eat contains **nutrients**. These are the materials necessary to support life and for a child's body to grow bigger.

To build a house, you will need bricks, glass plastic and wood.

To build an adult from a small child, you will need lots of **nutrients**.

There are six groups of essential **nutrients**:

**1. Water-** Water is a very important part of your body. Water is lost from your body when you have a wee (this is called urine). Water is also lost from your skin in sweat and when you breathe. Because water is constantly lost from your body, you need to replace it by drinking lots of fluids. You will die in a few days without a drink.

**2. Carbohydrates** – These give us a lot of our energy so we can run around. Sugars like glucose and fructose are in sweets and soft drinks. Other carbohydrates are in bread and cakes and potatoes. If you stop eating carbohydrates you will not die, but you will not feel well. Your body will get energy from other nutrients such as protein and fat.

**3. Fat-** Many people think all fat is very bad, but eating some fat is essential for your body. Fat can be used by your body for energy when you are exercising. But if you don't do much exercise and still eat lots of fatty foods, then your body stores the extra fat under your skin. If you keep eating more fat gets stored. Eventually your body gets bigger and bigger and people might say you are fat.

**Interesting Fact – Your brain is mostly made of water and fat. The nerves have a fatty layer and so the brain is roughly 80% water, 10% fat and 8% protein 2% salt. .**

**4. Protein** – These are a very important part of our diet. Protein is found in many foods such as eggs, meat, beans and nuts. We need the protein to grow our muscles skin, hair and nails.

**5. Minerals** – These are the salts our body needs. We don't need much, many people will tell you too much salt is bad for you.

**6. Vitamins** – These are needed in very small amounts. Vitamins are often given letters such as vitamin A, vitamin B, vitamin C etc. Oranges and other fruits contain something called vitamin C. This is essential to our bodies because we cannot make this ourselves.

You might have noticed that dogs don't eat fruit, and so they don't get much vitamin C in their diet. They don't get poorly because they can make it inside their body.

Many common health problems can be prevented with a healthy diet. A poor diet can make you ill. You can get diseases such as

**Scurvy**- You can get scurvy if you don't eat enough fruit. It is caused by a lack of vitamin C. It makes your lips bleed.

**Beriberi** – You can get Beriberi if you have a very poor diet. If you only ate rice for example. This is caused by a lack of vitamin B1. It makes you tired, weak and lose weight. Don't worry because if you eat nuts, meat, cereal or fruit you will be ok.

**Obesity** – If you eat too much, and do not exercise then the fat you eat goes under your skin and stays there. If you get fatter and fatter like this you are called **obese**. This can make you ill because it is bad for your heart.

## Questions

**Remember to read the question carefully, read ALL the options, then pick the one that is the best answer.**

- 1 Name three ways water is lost from your body.
  
- 2 Why do we need to eat vitamins?
  - a) Because they are given letters A, B C ,D
  - b) Because they are in fruit
  - c) Because our bodies need them and we cant make them ourselves.
  - d) Because dogs like them.
  
- 3 Why do we need fat in our diet?
  - a) We like fatty foods?
  - b) Fat is stored under the skin
  - c) Our brains are high in fat, and without eating some fat our brains cant function
  - d) Because Fried Chicken is high in fat.
  
- 4 Which of the following is true?
  - a) Minerals are salts
  - b) If you don't eat carbohydrates you will die
  - c) You can live for a year without drinking
  - d) Protein is not an important part of our diet.

- 5 If you eat too much, and do not exercise enough, what happens?
- a) Nothing happens, you will stay thin.
  - b) You will get scurvy
  - c) Fat gets stored under your skin and you get heavier, this is called obesity.
  - d) Everyone will run out of food.
6. Dogs don't eat fruit, why don't they get scurvy?
- a) Dogs eat meat.
  - b) Dogs bark a lot and this makes them ok
  - c) Fat gets stored under your skin and you get heavier, this is called obesity.
  - d) Scurvy is caused by a lack of vitamin C. Dogs can make their own vitamin C inside their bodies so they don't need to eat it.

7. What are nutrients?

Nutrients are the \_\_\_\_\_ we need to grow and support life.

Write down six things you will need to build a house.

Write down six things you will need to grow a human.