KNOWLEDGE ORGANISER

SCIENCE: BODY HEALTH YEAR SIX

KEY KNOWLEDGE:

QUESTION 1: What are the food groups?

ANSWER

Carbohydrates

This group contains starchy foods such as pasta, rice, oats, potatoes, noodles, yam, green bananas, sweet potato, millet, couscous, breads, breakfasts cereals, barley and rye. Carbohydrates give us energy, calcium and B vitamins. Wholegrain ones give us lots of fibre to help keep the digestive system healthy. Many breakfast cereals also have extra iron.

Protein

This group contains meat, fish and eggs as well as vegetable protein, nuts, beans, peas, lentils, dahl, Quorn and soya. These foods give us protein, iron and some other minerals and vitamins. This helps the body to grow and repair itself. They are like building blocks for the body. Meat is a good source of iron.

Milk and dairy products

This group contains milk, yoghurt, fromage frais, milkshakes, cheese – both hard cheese and soft cheese including soft cheese triangles. These foods contain protein and calcium and some vitamins like vitamin B12, vitamin A and vitamin D. Dairy products keep your bones and teeth healthy.

Fruit and vegetables

This group includes fresh as well as frozen, tinned, dried and juices of fruits and vegetables. Fruit and vegetables give you lots of vitamins and chemicals called antioxidants which keep you healthy. These can even stop you getting some cancers. They also contain fibre to keep your digestive system healthy.

Fats and sugars

This group contains butter, margarine, cooking oils, cream, salad dressings, chocolate, crisps, sugary soft drinks, sweets, jam, cakes, pudding, biscuits and pastries. These foods give us a lot of energy (calories) but not many nutrients.

QUESTION 2: What are the benefits of Sport and Exercise?

ANSWER

Taking part in Sports or Exercising regularly:

- improves your muscular and cardiorespiratory fitness
- improves your bone health
- reduces your risk of high blood pressure (hypertension), coronary heart disease, stroke, diabetes and some cancers
- helps manage your weight and reduces your risk of becoming obese
- reduces anxiety and depression, and helps prevent mental health problems
- boosts your mood and wellbeing

QUESTION 3: How is your pulse rate affected by exercise?

ANSWER

Exercise increases the rate at which energy is needed from food. This increases the need for both food and oxygen in the body. This is why your pulse rate and breathing rate increase with exercise. Your pulse is just an indication of your heart rate as your arteries expand each time the ventricles pump blood out of the heart. Your heart speeds up to pump extra food and oxygen to the muscles. Breathing speeds up to get more oxygen and to get rid of more carbon dioxide.

When a fit person, such as an athlete, exercises the pulse rate, breathing rate and lactic acid levels rise much less than they do in an unfit person. The time which it takes for pulse and breathing rate to return to normal is called the **recovery time,** and the fitter you are, the shorter your recovery time.