



Science

Year 3

Know Your Nutrients

Shakespeare Primary School and Nursery



How can our food choices keep our body and world healthy?

Movement and nutrition for the human body

While plants can make all the food they need using water, air and sunlight, humans, like other animals, cannot. The different types of food we eat contain different **nutrients**. These are useful for our bodies in different ways.

Carbohydrates give energy to the body which is used for movement and keeping warm.

Proteins are essential for healthy growth and repairing our muscles.

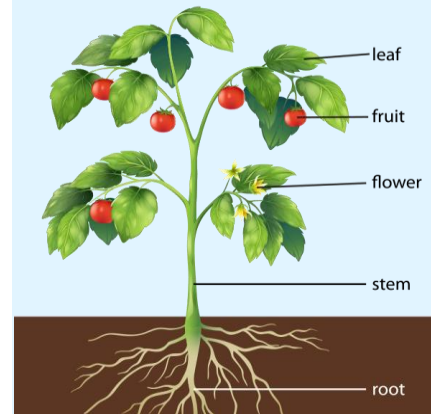
Fats and oils are used to provide **energy** and to keep us warm.

Fibre keeps our digestive system healthy. It helps to move the food we eat through our digestive system.

Vitamins and minerals keep our body healthy. Vitamin C, for example, is used to keep our gums, skin and joints healthy.



Flowering plants and plant growth



Leaves capture sunlight. The energy from the sunlight is used to produce the plant's food. Leaves have tiny little holes in them which allow air into the plant. The energy from the sunlight is used to turn air and water into the plant's food.

Roots **anchor** the plant into the soil. Roots absorb water and minerals from the soil. This water is transported to the leaves and flowers via small tubes in the stem. The stem also provides support for the plant and holds the leaves and flowers up.

Plants which are able to get more sunlight, water and **nutrients** will grow faster and bigger than the others.

A Scientist Just Like Me!



Dr Angie Burnett is a plant biologist from England. Plant biologists are interested in understanding how plants work. Angie grows plants and sees how they react to different conditions that make it more difficult for them to grow.

Working Like a Scientist and Working Scientifically

Scientists are able to identify parts of a flowering plant and measure the growth of the plant. They need to observe plants over time to see how they have grown. Scientists need to record their data in different ways and then share this with others, either through written explanations or scientific diagrams.

Careers: plant biologist, botanist, nutritionist

If you want to be a plant biologist scientist, you need...

- to be **patient** as plants can take a long time to grow!
- to be good at writing** - they write about what they've found out so other plant biologists can learn about it.
- to enjoy working with your hands** as plant biologists are very practical and do hands-on experiments.



Speak Like a Scientist

Previously learned vocabulary:

diet, flower, root, stem, leaves

New vocabulary:

nutrient, energy, anchor, fat, proteins, carbohydrates, vitamins and minerals, fibre

Project Questions

What nutrients are found in food?
How do nutrients benefit the human body? Give two examples.
What are the sections of the eat well plate?
What is the function of a plant's leaves?

Nutrients

Examples

Carbohydrates



Protein



Fats and Oils



Fibre



Vitamins and minerals

