

Animals including Humans

Significant Scientist

Elsie Widdowson



Elsie Widdowson (1906-2000) was a British dietician and nutritionist who loved experiments. She wrote a book which told us for the first time what energy and nutrition was in different foods. She also played a key role in wartime rationing.

Enquiry Skills

Observing over time

Identifying and classifying

Fair testing

Pattern seeking

Research

Working Scientifically Skills

Oral and written explanations, conclusion, predictions, classify, collect data and evidence, improve, use secondary sources.

Ask relevant questions.

Data – gather, record, classify, present.

Record – drawings, labelled diagrams, tables.



Key Knowledge

The skeleton protects our internal organs, keeps us supported and helps us to move.

Skeletons move because bones are attached to muscles. When a muscle contracts (bunches up), it gets shorter and pulls up the bone it is attached to. When a muscle relaxes, it goes back to its normal size.

To keep your body fit and healthy you need a balanced diet including all of the food groups:
 Carbohydrates – Main source of energy for our bodies (rice, potatoes, pasta and bread).
 Protein – Repairs and builds muscles, organs and immunity (fish, meat, eggs and cheese).
 Sugar and Fats – Stored for energy and create a layer of fat to keep us warm. Should not have too much of these (chocolate, sweets, butter, oil, cream).
 Vitamins and Minerals – Keep us growing and fighting infections (fruit and vegetables).

Key Vocabulary

endoskeleton	An internal support made of bone that gives the body shape, allows it to move and protects internal organs from damage.
exoskeleton	A hard covering that supports and protects the bodies of some types of animals. The word exoskeleton means 'outside skeleton'.
vertebrate	An animal with an internal backbone.
invertebrate	An animal without an internal backbone.
muscle	An organ of the body which allows for the body to move as it is attached to the skeleton.
contract	When muscles tense.
relax	When muscles are less tense and return to normal size.
nutrition	The study of food and how it works in the body.

