

DT / SCIENCE · Y3–Y6

Food Science & Nutrition

Knowledge Organiser — Y3–Y6

Key vocabulary

1

Macronutrients

The three major nutrients: carbohydrates (energy), proteins (growth and repair), fats (energy store, cell function).

Example: Bread = carbohydrate; chicken = protein; butter = fat

2

Micronutrients

Vitamins and minerals needed in smaller amounts. Vital for specific functions.

Example: Vitamin C: immune system (citrus); Iron: blood (red meat, leafy greens)

3

The Eatwell Guide

The UK government guide to a balanced diet: fruit and vegetables (33%), starchy foods (37%), dairy or alternatives (8%), proteins (12%), oils/spreads in small amounts.

4

Fibre

Plant material that cannot be digested. Keeps the digestive system healthy.

Example: Wholegrain bread, vegetables, pulses

5

Denaturation

When heat changes the structure of proteins — causing eggs to set, meat to firm, bread to rise.

Example: A raw egg is liquid; a cooked egg is solid



6

Browning (Maillard reaction)

When sugars and proteins react with heat, producing brown colour and flavour in bread crusts, toast, and seared meat.

Example: Why bread goes golden when toasted

Hygiene essentials

The rules that keep food safe

- WASH HANDS: before touching food, after touching raw meat, after going to the toilet
- RAW MEAT RULE: never let raw meat touch other food. Use separate boards and knives (red = raw meat)
- CHILL: keep refrigerator at 0–5°C. Never leave cooked food sitting out for more than 2 hours
- COOK THOROUGHLY: internal temperature of 75°C kills most bacteria. Check with a probe thermometer
- DANGER ZONE: bacteria multiply fastest between 8°C and 60°C
- BEST BEFORE vs USE BY: best before = quality after that date; use by = safety — never eat past this

