

## Topic 1: Getting Ready to Cook

**Personal Hygiene** – before starting to cook, you need to get yourself ready:

1. Taking off outdoor clothing (coats, blazers, jumpers and ties) and putting on a clean apron
2. Tying up long hair
3. Cleaning hands with hot soapy water

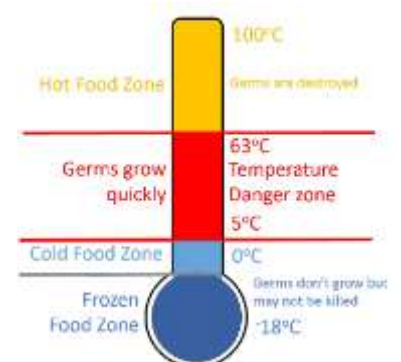


Good personal hygiene will stop you cross-contaminating food with the harmful bacteria that causes food poisoning. When preparing food you should not be eating your ingredients or licking your fingers.

**Food Safety** – some foods are ‘high risk’ because, if they are not stored, prepared and cooked properly, there is a high risk of them causing food poisoning. Food poisoning is caused by harmful bacteria (pathogens) which produce toxins when they reproduce. Common pathogens include salmonella (found in raw eggs), campylobacter (found in raw chicken) and E. Coli (found in uncooked meat).

**Food Poisoning** – when you eat food contaminated by bacteria the consequences can be serious. Symptoms include upset stomachs, headaches and dizziness. Bacteria needs food, moisture, warmth and time to reproduce. To prevent bacterial growth you need to use temperature control - keeping foods out of the ‘danger zone’ (5-63C) and following the 4Cs:

1. **Chilling** – when food is kept cold in the fridge (0-5C) bacterial growth slows down. Freezing food (-18C) stops growth but the bacteria will start to grow again when food is defrosted
2. **Cleaning** – removes bacteria from hands and work surfaces in the kitchen
3. **Cooking** – heating food to 75C+ kills bacteria. Once cooked, food should be kept warm above 63C
4. **Cross-contamination** – stops bacteria from spreading from high risk foods to other foods



Using the correct chopping board is one important way of avoiding cross-contamination. You should also clean your hands after touching raw meat and fish.

## Topic 2: Healthy Eating

We need food for growth and repair of cells, energy, warmth, protection from illnesses and keep our bodies working properly.

Food is made of 5 nutrients. Each nutrient does a different job in the body. Eating a balanced diet means we get all the nutrients we need for a long and healthy life.



The amount of energy we need depends upon our age, gender, activity level and body size. If we eat more food than we need, and don't use it up by exercising, any energy that's left is turned into fat and we put on weight. If we eat less food than we need, the fat stores are used up and we may end up losing weight.

The Eatwell Guide shows how eating different foods can make a healthy and balanced diet. It divides up different food groups and shows how much of each group is needed. Extra information about the amount of water we need and the labels on food packaging is also provided.



There are also eight guidelines for a healthy lifestyle. They are:

1. Eating at least 5 portions of fruit and vegetables every day
2. Eating higher fibre starchy foods like potatoes, bread, rice or pasta
3. Eating less food high in fats and sugar
4. Eating less salt
5. Eating more fish – including one portion of oily fish
6. Drinking plenty of fluids (at least 6 to 8 glasses a day)
7. Being more active
8. Eating breakfast every day

### 8 healthy eating tips



## Topic 3: Fats and Oils

A small amount of fat is an essential part of a healthy, balanced diet. Fat is a source of essential fatty acids, which the body cannot make itself. It also provides energy and is converted into body fat to keep us warm and protect our vital organs.

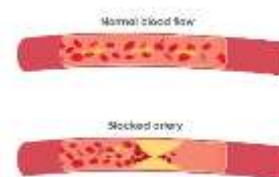
Fat helps the body absorb vitamin A, vitamin D and vitamin E. These vitamins are fat-soluble, meaning they can only be absorbed with the help of fats.

The main types of fat found in food are:

- saturated fats from animal sources, including meat and dairy products, as well as some plant foods, like palm oil and coconut oil
- unsaturated fats found primarily in oils from plants and fish

As part of a healthy diet, you should try to cut down on foods and drinks high in saturated fats and replace some of them with unsaturated fats, for example using a low-fat spread instead of butter or olive oil instead of lard.

There's good evidence that replacing saturated fats with some unsaturated fats can help lower cholesterol which is a major cause of heart disease as it can block up your arteries. Too much fat in the diet can also lead to obesity and Type 2 diabetes.



Fats are used to spread on bread, as a cooking medium and for shortening and aeration. Deep-fat and shallow frying are popular ways of cooking food that add colour, flavour and texture to food - but it also adds unnecessary calories.

Shortening is when you add fat to biscuits or pastry to give them a crumbly texture. When fat is rubbed into the flour using the fingertips, it surrounds the flour particles with a waterproof coating – fats with high levels of plasticity, for example butter, are best for this. This stops water becoming absorbed and gluten being formed (the protein in flour). Gluten makes dough stretchy and baked products chewy and is ideal in bread making but not desirable in pastry which should be melt-in-the-mouth.



Fat also helps to trap air in a mixture to give a light, springy texture (aeration). In cake making, fat and sugar are creamed together and bubbles of air enclosed in the mixture to make a stable foam.

## Topic 4: Healthy Eating – Micronutrients and Water

We need food for growth and repair of cells, energy, warmth, protection from illnesses and keep our bodies working properly.

Food is made of 5 nutrients. Each nutrient does a different job in the body. Eating a balanced diet means we get all the nutrients we need for a long and healthy life.



Some of these nutrients you need in large amounts (protein, carbohydrates and fats) – these are called macronutrients. Some of these nutrients we need in small amounts (vitamins and minerals) – these are called micronutrients.

Vitamins A, D, E and K are fat soluble and can be stored by the body in our body fat. A fat soluble example is **Vitamin A** which is needed for healthy eyesight, healthy skin and a healthy immune system. Its antioxidant properties also helps to protect the body from cancer and cardiovascular disease (CVD)

Vitamins B and C are water soluble and need to be consumed every day because they cannot be stored by the body. A water soluble example is **Vitamin B12** which is needed to help release energy from foods such as carbohydrates and to help the nervous system function normally. It is also needed to form red blood cells.



You also need minerals such as calcium and iron, for example **Calcium** is needed for bone density and to maintain healthy, strong teeth and **Iron** is needed to make red blood cells which transport oxygen around the body.

Water is not a nutrient but it is required for life. You need to stay hydrated because your body is 70% water and you need to replace water you lose when you breathe, sweat or urinate. Water is needed to cool the body, remove waste and to digest and transport nutrients around the body. It is recommended that you drink 6-8 glasses of water a day.

