

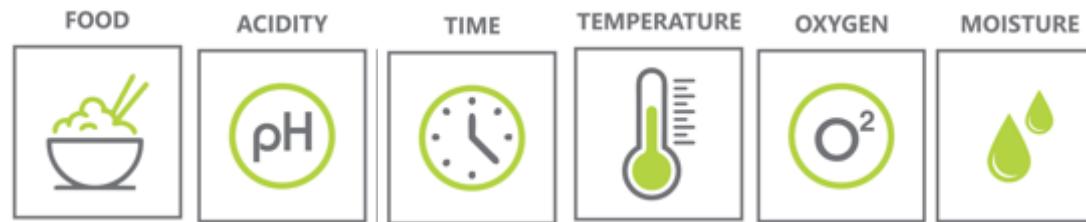
Year 9 Food – Knowledge Organiser

Understand the 4 C's Concept

- C** – Good Hygiene practice prevents Cross Contamination
- C** – Effective Cleaning removes harmful bacteria and stops them spreading
- C** – Effective Chilling prevents harmful bacteria multiplying
- C** – Thorough Cooking kills bacteria

Clean hands. Hair tied back. Wear an apron. Wear blue plasters. Don't cough/sneeze over food. Use the bridge and claw grip methods for cutting/chopping.

What bacteria needs to multiply



Most bacteria grow rapidly at body temperature (37°C), but can grow between 5°C and 63°C. This is known as the danger zone. The more time food spends in the danger zone the greater the risks of harmful bacteria growing. Therefore it is vitally important that we try to keep food out of the danger zone during the production processes.

METHODS OF COOKING

- Heat transfers in three ways:
- Conduction**
Metal is a **conductor** of heat and carries the heat from the heat source to the food
 - Convection**
When heated, gas or air particles expand and rise, causing colder particles to sink, creating convection currents which distribute heat.
 - Radiation**
Heat is transferred directly onto the surface

Storage of Food

To prevent cross contamination (the spreading of bacteria), foods must be stored separately. Follow the rules of food storage within a fridge.

Key facts - Bread

- Wheat flour** – when mixed with water the proteins in the flour combine with water to make gluten.
- Gluten** – protein - makes the dough stretchy and elastic – this traps a lot of the carbon dioxide gas produced by the yeast.
- Yeast** - single celled living organism that requires certain conditions for growth.
- Carbon dioxide** –produced by the yeast – aerates the dough and makes it rise.
- Kneading** - to work the dough, usually by hand, for the purpose of developing the glutes in the flour to form the structure.

Fat

Saturated: Animal
Unsaturated: Plant
Trans-fats are unhealthy
1g fat = 9 Kcal

The three main types of vegetarian

- are: lacto-vegetarian, lacto-ovo vegetarian and vegan.
- lacto-vegetarian** –will not eat any meat, fish or eggs, but will consume milk and dairy products.
- lacto-ovo vegetarian** –will not eat any meat, or fish, but will consume eggs, milk and dairy products.
- Vegan** – will not eat any food that is made directly or indirectly from an animal. They also refuse to use product such as soap and cosmetics which involve the use of animal oils or fats.

Vegetarian

	Do not eat the meat of any animal (meat, poultry or fish) or eggs, milk, cheese and honey.
	Do not eat the meat of any animal (meat, poultry or fish), but they do eat eggs, milk, cheese and honey.
	Do not eat red meat or poultry but they do eat fish, eggs, milk, cheese and honey.

You should store meat and poultry on the bottom shelf of the fridge to prevent liquid dripping on to other food. Store in a clean, sealed container. Keep cooked and raw meats separate to avoid **cross contamination**. The fridge temperature should be between 1 and 5 degrees Celsius.

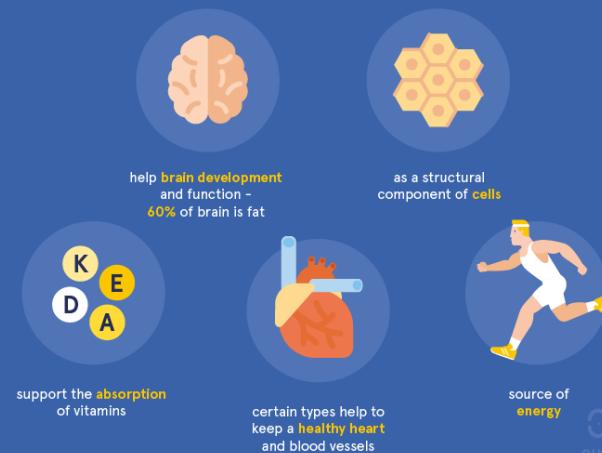
TYPES OF CONTAMINATION

- PHYSICAL:** Hair, jewellery, plasters, glass, plastic
- CHEMICAL:** cleaning products, pesticides
- BIOLOGICAL:** bacteria, fungi, mould

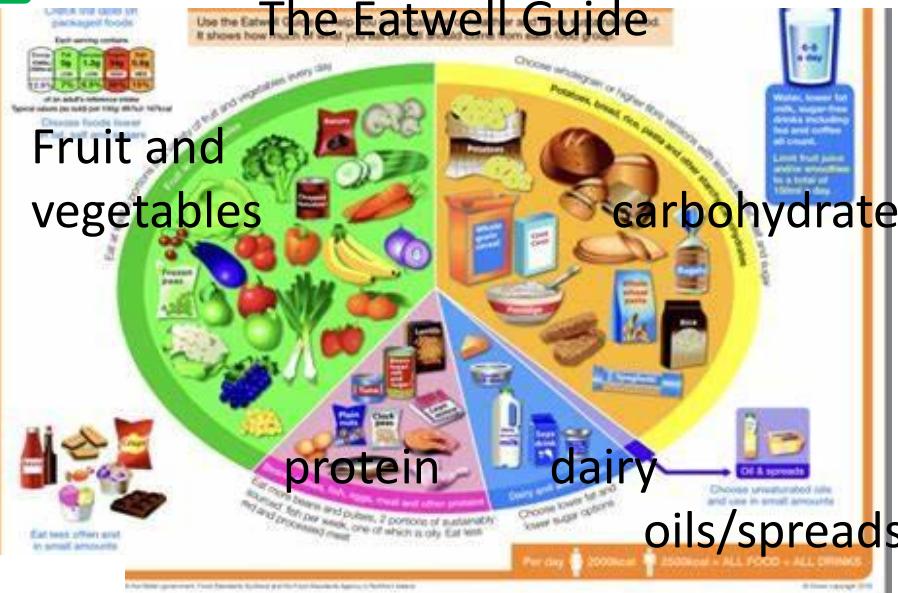
PREVENTING CROSS CONTAMINATION

- Washing hands before and during food preparation.
- Washing hands after handling raw foods.
- Using colour coded chopping board.
- Wearing correct clothing (apron).
- Keeping raw foods separate from cooked foods.
- Cleaning equipment thoroughly.
- Keeping food stored at the correct temperature.

WHY DO WE NEED FATS?



The Eatwell Guide



Wider thinking/further reading: www.foodafactoflife.org.uk www.food.gov.uk

