

Bread: Functions of ingredients

Strong plain flour - contains gluten to give a supportive structure that can hold the bubbles of carbon dioxide.

Yeast - helps the bread rise to give a lighter texture.

Water - binds the ingredients to form a dough; allows the yeast to respire; when the dough is baked, water turns to steam and helps it rise.

Salt - for flavour; strengthens gluten.



Bread: Processes in making

Kneading—stretching the dough to develop the gluten; yeast is distributed throughout the dough to give an even rising.

Proving—time for the yeast to ferment to produce bubbles of carbon dioxide which makes the dough rise.

Knocking back— a second kneading to break down the large bubbles of carbon dioxide into smaller, more evenly sized bubbles.

Baking— in the oven, the dough rises quickly at first. Then, the yeast is killed by the heat.

Sauces

Sauces are thickened by:

the gelatinisation of starch



reduction



emulsification.



Gelatinisation

When heated to about 60°C starch granules swell and absorb liquid until they are 5 times their original size. They then burst, releasing starch into the liquid which thickens the mixture. This process is fully complete when the mixture reaches boiling point (100°C).

Different cooking methods

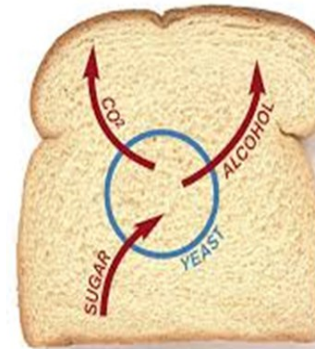
Foods can be cooked using **water, fat** or **dry heat**.

Cooking method	Description
Boiling	Cooking in liquid at boiling point (100°C).
Simmering	Cooking in liquid just under boiling point.
Shallow Frying	A small amount of fat is used to cook food in a frying pan.
Roasting	Cooked in an oven and basted in fat.
Baking	Cooked in dry heat in a hot oven.

Yeast: Fermentation

Fresh or dried yeast ferments to produce carbon dioxide which makes the bread rise, giving a lighter texture. The ideal conditions for fermentation are:

- **Warmth**
- **Moisture**
- **Food**
- **Time**



Factors to consider when choosing a cooking method

- Time available, dietary requirements e.g. low fat, type of ingredients, equipment available, sensory characteristics, skill of the cook.



Key vocabulary

Function	Purpose; job.
Gluten	Is formed from two proteins found in wheat.
Fermentation	When given warmth, moisture, food and time, yeast produces CO ₂ and alcohol.
Finish	To complete the presentation of a product to a high standard e.g. glazing, dusting.
Sauce	A well-flavoured liquid that has been thickened.
Emulsion	A sauce made with oil and vinegar and shaken together with an emulsifier.
Reduction	A sauce made when liquid has been evaporated over heat, leaving a concentrated mixture.
Gelatinisation	Thickening that happens when liquid and starch are heated.
Roux	A mixture of fat and flour, used to make a white sauce. The flour thickens the sauce.
Viscosity	Thickness.