

aeration

the process of adding air to a substance

ageing process

a method which allows natural enzymes to break down the tough connective tissue in meats and for water to evaporate, leading to a more concentrated flavour

amino acids

the molecules that form the basic building blocks of protein

antioxidant

a chemical that stops oxidation, preventing oxidative damage in the body or, in food, preventing fats and oils becoming rancid

bacterial culture

in cheese making this term refers to the lactic acid bacteria that change the milk sugar to lactic acid

carbohydrate

one of the main nutrients needed by the body, providing energy and fibre

catalyst

a substance that helps a chemical reaction to occur

coagulation

when a protein separates from other nutrients and turns from a liquid to a solid

crystallisation

the formation of solid crystals that occurs when a very concentrated (supersaturated) sugar solution cools

denaturation

occurs when the helix structure of the protein breaks apart

dextrin

the half-way stage in the breakdown of starch to glucose

dextrination

the process in which starch breaks down into dextrans

emulsifier

a substance that has an attraction for both lipids and water; these substances cause stable mixtures to form

emulsion

a stable lipid and water combination

enzyme

a chemical substance that acts as a catalyst

enzymic browning

a process that takes place when the enzymes in fruit and vegetables react with oxygen, producing a brown colour on the surface of the food

foam

formed when air is beaten into a liquid

gel

an elastic solid that can be formed when protein, starch or pectin surrounds small droplets of water

gelatinisation

the process that starch goes through as it absorbs water in the presence of heat, resulting in the thickening of the liquid

gelation

the process of forming a gel

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| gluten            | a type of protein found in grains that will stretch and form the structure of a flour product  |
| helix             | a shape similar to a spiral  |
| homogenisation    | the process in which the size of the fat globules is reduced to small, uniform particles, which are then distributed evenly throughout the liquid                  |
| lipids            | the general name given to a range of substances that include fats, oils, fatty acids, phospholipids, sterols, glycolipids and waxes; most of these are not soluble |
| Maillard reaction | the browning that occurs when a protein and sugar are heated   |

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| pectin       | a polysaccharide found in fruit and some vegetables; used to make jams set  |
| peptide bond | a bond that holds amino acids together in a polypeptide chain   |
| protein      | one of the main nutrients needed by the body to repair and build cells, produce enzymes and hormones, and which can be used as a source of energy |
| rancid       | food that has the unpleasant smell or taste of decomposing oils or fats   |
| roux         | a combination of butter and flour, cooked until it bubbles  |

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| starch | a polysaccharide of glucose that forms the energy stored in plants |
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