

**LITERACY
ACROSS THE
CURRICULUM**

SUBJECT TERMINOLOGY FOR FOOD TECHNOLOGY



The
Appleton
School

Additives

Natural or synthetic chemical substances added to food during manufacture or processing to improve the quality, flavour, colour, texture or stability of the product.

Aeration

Incorporating air into a mixture.

Agitate

To stir, shake or disturb a liquid.

Al dente

'Firm to the bite', a description of the texture of correctly cooked pasta.

Allergies

An immune system reaction that occurs soon after eating a certain food and can cause severe symptoms.

Ambient

Foods that can be stored, at room temperature (ordinary room temperature 19°C to 21°C), in a sealed container. All foods found on supermarket shelves are ambient foods.

Amino acids

The building blocks of proteins.

Anaemia

Diet related health condition caused by the lack of iron in the body, where the body lacks enough healthy red blood cells or haemoglobin.

Animal welfare

A duty of care on people to ensure that animals are as well treated as possible.

Antioxidant

A molecule that is able to stop the oxidation process in other molecules and therefore can be useful in stopping foods from deteriorating. Antioxidants can prevent or slow down damage to the body which otherwise can lead to diseases such as heart disease. Antioxidants also improve our immune system.

Antioxidant vitamins

Vitamins A, D and E, found in fruits and vegetables.

Au gratin

A dish sprinkled with breadcrumbs or cheese and breadcrumbs and browned under the grill.

Bacteria

Pathogenic microscopic living organisms, usually single-celled, that can be found everywhere. They can be dangerous, such as when they cause infection, or beneficial, as in the process of fermentation (for wine).

Baking

Convection-conduction, cooking foods in a hot oven.

Balanced diet

A diet which provides all the necessary nutrients in the correct amount/proportions to meet the body's needs.

Basal Metabolic Rate (BMR)

The number of energy kilojoules the body needs to stay alive.

Basted

When fats or juices are poured over something (usually meat) while cooking in order to keep it moist, eg roasting meats.

Batter

A mixture of flour, milk or water, and usually an egg.

Best before date

Date on food products after which a non-high risk food will be safe to eat, but not be at its best.

Bind

To bring the ingredients in a mixture together using an ingredient, eg egg.

Biological catalysts

Substance which speeds up a chemical reaction.

Biological raising agent

Using yeast to produce CO₂ gas.

Biological value

The number of amino acids that a protein food contains.

B group of vitamins

Vitamin B1 (Thiamin): enables energy to be released from carbohydrates in the body, found in a variety of foods, eg meat, dairy, fruit, wholemeal products. Deficiency of this is called Beri-Beri.

Blanching

A method of cooking where food is cooked very quickly in boiling water for a short period of time. It stops enzyme actions which can cause loss of flavour, colour and texture. Conduction-convection.

Bone health

Health of the skeleton.

Braising

Conduction-convection, sealing meat/vegetables in hot fat, then cooking slowly in a covered dish with some cooking liquid.

Bridge hold

Use thumb and forefinger and grip either side of the ingredient, use knife under the bridge to cut.

Buddhism

An Eastern religion. Its followers consider living beings to be sacred. Many Buddhists are vegetarian or vegan.

Calcium

Main mineral in the body, teeth and bones. It needs vitamin D to help absorption.

Caramelisation

Breaking up of sucrose molecules (sugar) when they are heated. This changes the colour, flavour and texture of the sugar as it turns brown into caramel.

Carbohydrates

Macronutrients required by all animals; made in plants by the process of photosynthesis.

Cardiovascular disease (CHD)

A narrowing of the arteries that supply your heart with oxygen-rich blood, due to the build-up of fatty deposits within the artery walls.

Casserole

Food that is completely covered in liquid and then cooked in the oven.

Caught ingredients

Animals, birds, fish and shellfish hunted and caught in the wild for eating.

Chemical raising agent

Uses baking powder or bicarbonate of soda to produce CO₂ gas.

Cholesterol

Carried in the blood attached to proteins called lipoproteins. There are two main forms: LDL (low density lipoprotein) and HDL (high density lipoprotein).

Choux pastry

A light, crisp, hollow pastry used to make profiteroles, eclairs and gougères.

Claw grip

Tips of fingers and thumb tucked under to hold the ingredient before chopping.

Climate change

A large-scale, long-term shift in the planet's weather patterns or average temperatures, which can lead to unusual weather conditions.

Coagulation

The setting or joining together of lots of denatured protein molecules during heating or change in PH. An irreversible change to the appearance and texture of protein foods.

Coat

To add another ingredient to create an attractive finish, or to create a protective layer on food when cooking.

Coeliac

Cannot absorb the protein gluten. Can result in Coeliac disease: a chronic intestinal disorder caused by sensitivity to the protein gliadin contained in the gluten of cereals.

Colourings

Added to intensify the colour of food to attract consumers. Can be natural or artificial.

Conduction

Transfer of heat through a solid object into food.

Consistency

Thickness or viscosity.

Convection

Transfer of heat through a liquid or air circulation into food.

Conventional farming

A term used to designate farming techniques that are traditionally, and often controversially, orientated towards using technology, pesticides, chemicals and other synthetic tools in the cultivation of crops.

Cook's knife

A large general purpose knife with a deep blade, used for cutting, chopping, slicing and dicing.

Cuisine

A traditional style of cooking and eating that has developed in a country or region of the world.

Danger zone

Range of temperatures between 5°C to 63°C at which bacteria begin to multiply rapidly.

Date marks

How long a food product will last.

Deficiencies

A state of lacking or incompleteness. For example, deficiencies in the consumption of certain vitamins can cause health issues.

Deglazing

To loosen the browned juices on the bottom of the pan by adding a liquid to the hot pan and stirring while the liquid is boiling.

Denaturation

Chemical bonds in the protein food have broken, causing the protein molecule to unfold and change shape.

De-seed

To remove seeds before using.

De-skin

To remove the skin by either putting the fruit or vegetable into boiling water or, for peppers, placing on direct heat.

Dextrinisation

Breaking up of the starch molecules into smaller groups of glucose molecules when exposed to dry heat, eg toast.

Dietary fibre

Complex carbohydrate/non-starch polysaccharide, eg whole grain cereals and cereal products.

Dietary guidelines

Advice on diet, use of the 'eat well guide'.

Dietary Reference Values (DRVs)

An estimate of the nutritional requirements of a healthy population.

Disaccharide

A carbohydrate made from two sugar molecules.

Discrimination tests

Test used to find out whether or not people can tell the difference between similar samples of food.

Dovetail

When making two or more dishes by splitting the tasks within the recipes to make the best use of your time. For example, if making a cake and soup, the sponge mix for the cake could be made while the vegetables for the soup are sautéing.

Dry-frying

Heating food on a low heat without any fat or oil. Conduction.

Eating patterns

The way a person or group eats, considered in terms of what types of food are eaten, in what quantities, and when.

'Eat well guide'

Informs individuals of the variety of food groups required for a healthy balanced diet.

Efficacy

Power or capacity to produce a desired effect; effectiveness.

Enzymic action

Causes fruit to ripen, change colour, texture, flavour and aroma; maturing of fruits and vegetables.

Enzymic browning

The discolouration of a fruit or vegetable due to the reaction/chemical process where oxygen and enzymes in the plant cells of the food react and cause the surface to become brown. This process cannot be reversed.

Emulsification

Refers to the tiny drops of one liquid spread evenly through a second liquid. An emulsifier (such as egg yolk) is used to stabilise an insoluble mixture.

Environmental issues

The impact of human activities on the natural environment.

Enzymes

Biological/natural substances (catalysts) which speed up biochemical reactions without being used up themselves.

Estimate Average Requirement (EAR)

A useful indication of how much energy the average person needs.

Excess protein

A diet which contains too much protein.

Factors which influence food choice

Food choice according to lifestyle, attitudes, activities, likes, dislikes, beliefs, cultures.

Fairtrade

A partnership between producers and consumers; selling on Fairtrade terms provides farmers with a better deal and more income. This allows them the opportunity to improve their lives and plan for their future.

Fats

Macronutrient which supplies the body with energy.

Fat soluble vitamins

Vitamins (the A, D E, and K groups) that dissolve in fat.

Filleting knife

A thin, flexible, narrow blade knife used to fillet fish.

Fish fillet

A cut of fish that is free from bones.

Flavourings

Improve or modify the natural flavours and odours in food.

Fluoride

Strengthens the bones and teeth, helps prevent tooth decay.

Foam formation

Foams are formed when gases (mainly air) are trapped inside a liquid, for example meringue, whisked sponge.

Folic acid

Works with Vitamin B12 to make red blood cells. Found in leafy green vegetables, whole grains and some fruit.

Food intolerance

A long-term condition, which after some time may cause the consumer to feel unwell and have a range of symptoms.

Food marketing

Advertising and promoting a food product to encourage its purchase.

Food poisoning

Illness caused by pathogenic bacteria/toxins, for example e-coli: salmonella, listeria, staphylococcus aureus.

Food processor

A piece of equipment with various attachments that can prepare a variety of foods, such as slicing and grating vegetables.

Food provenance

The place where food originates (where is it grown, raised or reared).

Food security

Ability of people to buy sufficient safe, nutritious and affordable foods.

Fortification

Adding vitamins and minerals to foods during its manufacture.

Free range

A method of farming husbandry where the animals, for at least part of the day, can roam freely outdoors.

Free sugars

All monosaccharides and disaccharides added to foods by the manufacturer, cook, or consumer, plus sugars naturally present in honey, syrups, and fruit juices.

Fruit sugars

Carbohydrate, which is the natural sugar in fruit –mostly in the form of fructose, or glucose.

Garnishes

Decorations on savoury food.

Gelatinisation

When starch granules swell when cooked with liquid, then burst open and release the starch, causing the liquid to thicken.

Genetically Modified (GM)

A scientific technique that enables a particular characteristic from one plant or animal to be inserted into the genes of another.

Gliadin and glutenin

The core proteins of the gluten part of wheat seeds.

Global warming

The heating up of the earth creating a greenhouse effect.

Gluten formation

Formed from the two wheat proteins gliadin and glutenin, in presence of water. Gluten is developed by kneading.

Gluten free

Food which does not contain gluten (crucial for those with Coeliac disease).

Grading tests

Put in order particular characteristics of a food product.

Grilling

Radiation cooking foods under intense heat.

Grown ingredients

Plants grown for food.

Hedonic rating test

People give their opinion of one or more food products by filling out a table that uses a preference scale.

High Biological Value (HBV)

Protein foods that contain all the essential amino acids.

High risk foods

Foods that are high in moisture and nutrients, especially protein (perishable foods: meat, shellfish, cooked rice, eggs, milk, cream). They support the growth of pathogenic microorganisms, such as bacteria.

Hinduism

An Eastern religion. Many Hindus are vegetarian and many practice fasting. In Hinduism, the cow is sacred and is not eaten.

Infuse

To flavour liquid with aromatic ingredients by slowly heating to a boiling point and then allowing it to cool.

Iodine

Helps to produce hormone thyroxin, needed for stable metabolic rate.

Infused liquids

Liquids with seasoning, spices, herbs or wine added.

Intensive farming

Farming that aims to produce as much as possible, usually with the use of chemicals.

Iron

Needed to make haemoglobin in the red blood cells, requires Vitamin C for absorption.

Islam

Semitic religion. Muslim dietary laws require that poultry/meat is slaughtered in a special ritual called Zibah. Certain foods are forbidden.

Judaism

Semitic religion which has a number of food laws called the Kashrut. Kashrut food is called Kosher foods.

Julienne

Cutting vegetables into matchstick strips.

Knead

To manipulate dough by pushing it across a work surface and pulling it back. This is essential to develop the gluten.

Knock back

To knead out the carbon dioxide in risen dough to remove large air pockets to ensure an even texture.

Lactose

A natural sugar found in milk and dairy products.

Lactose intolerant

A condition which means you cannot digest disaccharide sugar lactose.

Layer

To make up a dish with differing ingredients one on top of another.

Life stages

Phase of development of people through their lives (young children, teenagers, adults, elderly).

Locally produced

Buying of food from local producers to avoid the environmental impact of food miles.

Low Biological Value (LBV)

Protein foods that are missing one or more essential amino acids.

Macronutrient

A type of food (eg fat, protein, carbohydrate) required in large amounts in the diet.

Mandatory information

Must be done, or is demanded, by law on a food label.

Marinade

To soak foods such as fish, meat, poultry and vegetables in a liquid to help develop the flavour, tenderise and in some instances colour the food before it is cooked. The liquid can be acidic or a salty solution. Protein is denatured by marinating.

Mash

To reduce to a soft mass by using a masher.

Mechanical raising agent

Whisking, beating, sieving, creaming, rubbing in or folding to trap air into the mixture.

Micro filtered

All bacteria in milk are removed, by forcing it through filtration membranes, then pasteurised and homogenised.

Micronutrients

Nutrients required in small quantities to facilitate a range of physiological functions.

Microorganisms

Tiny forms of life, usually single cell microscopic organisms such as bacteria, moulds and fungi.

Milk sugars (lactose)

A single molecule of glucose linked to a single molecule of galactose to form a carbohydrate, known as lactose.

Milling

Breaking cereal grains (seeds) down and separating the layers, turning grain into flour.

Minerals

Chemical substances found in a wide variety of foods.

Mise en place

Preparation before starting to cook.

Mix

To combine two or more ingredients together to become one.

Monosaccharide

A simple carbohydrate. Mono means one, saccharide means sugar.

Monounsaturated fats

Fats that contain one double bond in the molecule.

Moral and ethical beliefs

Relate to what people believe are right or wrong, may be concerned how food is produced.

Mould

A type of microorganism fungus that grows and multiplies in filaments creating a fuzzy appearance on food. It is a soft, green or grey growth that develops on old food.

Can produce toxins (poisons) which may cause food poisoning.

May give some cheeses their characteristic colours and flavours.

Mould in cheese

Two types of pathogenic microorganisms are involved, bacteria and moulds.

Mycoprotein

A food made from the fungi family which contains all the essential amino acids needed by the body. Suitable for lacto-ovo vegetarians.

Nutrients

The properties found in food and drinks that give nourishment – vital for growth and the maintenance of life. The main nutrients needed by the human body are carbohydrates, proteins, fats, vitamins and minerals.

Nutritional analysis

Nutritional information for different foods, creating a nutritional profile of the specific nutrients in the food.

Nutritional guidelines

Food choices determined by life stage.

Nutritional labelling

Informs consumers about the nutritional profile of the product, the types and amounts of different nutrients a food contains.

Nutritional value

Information about the energy (measured in kilocalories/kilojoules), the macronutrients (carbohydrates, protein, fats), micronutrients (vitamins and minerals) and how they impact on the body.

Obesity

Diet-related disease where the body contains too much stored fat.

Oil in water emulsion

Keeping drops of oil or fat suspended in a liquid to prevent them from joining together, for example butter.

Olfactory systems

The receptors found in the back of the nose that are responsible for our sense of smell/aromas.

Organic

Food produced by methods that comply with the standards of organic farming. Standards vary worldwide, but organic farming in general features practices that strive to cycle resources, promote ecological balance, and conserve biodiversity.

Organic farming

Farming that produces food using natural methods without the use of chemicals, fertilisers and pesticides.

Organoleptic qualities

Characteristics of food that affect our organs or senses.

Osteoporosis

Reduction in mineral content of the bones, this occurs gradually, usually in the elderly.

Oxidation

Substances pick up oxygen from the air; they then oxidise to undergo a chemical reaction, resulting in food losing freshness and colour.

Paired preference

People given two similar samples of food and they have to say which one they prefer.

Paring knife/vegetable knife

A small multi-purpose knife mainly used for slicing and dicing.

Pasteurisation

The process of heating a food to a specific temperature for a specific period of time in order to kill microorganisms that could cause disease, spoilage or undesired fermentation.

Phosphorous

Helps calcium to mineralise the teeth and bones.

Physical Activity Level (PAL)

Energy balance (% of energy from nutrients), the amount of energy the body uses for movement and physical activity daily.

Poaching

A method of cooking where food is cooked in a liquid that is just below boiling point. Conduction-convection.

Polysaccharide

A complex carbohydrate: many sugar molecules joined together, they do not taste sweet.

Polyunsaturated fats

Fats that contain several double or even triple bonds in the molecule.

Plasticity

The ability of fat to soften over a range of temperatures to hold its shape, or be shaped and spread.

Presentation style

Distinctive way food is presented in different cuisines.

Preservatives

Used to prevent food from spoilage by microorganisms; increases the shelf life of commodities.

Primary processing

The conversion of raw materials into food commodities, for example milling of wheat grain into flour.

Profiling

People asked to rate the intensity of a food product from 1–5 against a set of sensory descriptors.

Protein

A macronutrient that is essential to building muscle mass.

Protein alternatives

Manufactured protein food products consumed in place of meat or fish.

Protein complementation

Eating a combination of low biological value foods together to provide all the essential amino acids that the body requires.

Provenance

The place of origin of something.

Proving

The last rising of the bread dough in its final shape before it is baked.

Radiation

A heating process that does not require physical contact between the heat source and the food being cooked. Instead, energy is transferred by waves of heat or light striking the food. Two kinds of radiation heat are used in the kitchen: infra-red and microwave.

Ranking

People asked to rank order samples of food according to a criteria.

Rastafarianism

Follow the rules of I-tal. Food must be natural, clean and contain fruits, vegetables and herbs.

Rating

People asked to rate a food sample for a specific characteristic.

Raising agents

An ingredient or process that introduces a gas into a mixture so that it rises when cooked.

Reared ingredients

Animals, birds and fish specially bred in captivity to be eaten.

Reduction

The process of simmering a liquid over heat until it thickens. It is also the name of the concentrated liquid that forms during this process.

Reference Nutrient Intake (RNIs)

An estimate of the amount of proteins, vitamins and minerals that should meet the needs of most of the group to which they apply.

Religion and cultures

The way of life, general customs and beliefs of a particular group of people at a particular time. Relating to the core of their traditions. Dietary laws, rules and advice which dictate the type of foods to be eaten.

Rickets

Deficiency of calcium in the bones, reducing peak bone mass.

Roasting

Convection-conduction, cooking foods in oil or fat in a hot oven.

Saturated fats

This type of fat is mostly from animal sources; they are normally solid fats. All of the carbon atoms in the fatty acid molecules are linked by single bonds.

Scientific principles

Demonstrates how science of the ingredients are at work in producing, processing, preparing, preserving, and metabolising foods.

Seasonal foods

Foods that are at the stage of their natural life cycle when they are ready for harvest or to be caught.

Secondary processing

Primary processed foods into other food products, for example flour into biscuits.

Segment

To peel and pull apart, for example an orange.

Sensory properties

Smell, appearance and texture, mouth feel influence what we select to eat.

Sensory testing methods

A way of measuring the sensory qualities of food and is used by chefs, food manufacturers and retailers to analyse a food product.

Shallow frying

A quick method of cooking where a small amount of fat is used to cook food in a frying pan.

Shortening

The ability for fat to shorten the length of the gluten molecules in pastry or shortbread, for example butter, lard or other fat that remains solid at room.

Shred

To slice into long, thin strips.

Sikhism

Eastern religion in which many are vegetarian and do not drink alcohol, tea or coffee.

Simmering

Water that is heated to just below boiling point.

Skewer

A long metal or wooden pin used to secure food on during cooking; to skewer is to hold together pieces of food using a metal or a wooden pin.

Sodium (salt)

Controls the amount of water in the body.

Soya bean

An Asian bean plant.

Snip

To cut (usually with a pair of scissors) with a small, quick stroke.

Stabilisers

Help stop substances separating again after they have been mixed stabilise an emulsion.

Starch

A polysaccharide, a complex carbohydrate.

Steaming

A method of cooking where food is cooked in the steam coming from boiling water. Conduction-convection.

Sterilised

Heated in sealed bottles to 110°C for 30 seconds.

Stir-frying

A quick method of cooking where small pieces of food are fast-fried in a small amount of oil in a wok.

Sustainability

Human activity that is not harmful to the environment and does not deplete natural resources, thereby supporting long-term ecological balance. For example, sustainable fishing.

Tagine

A glazed earthenware pot with a distinctive lid. It is also used to describe the food cooked in it.

Taste receptors

Special cells on the tongue that pick up flavours.

Tasting panel

A process of testing foods. The process must be fair and realistic controlled conditions.

Temperature control

Range of temperature for the storage of food correctly.

Temperature probes

Give an accurate reading of the core temperature (centre) of the food. Food probes must be used correctly.

Textured Vegetable Protein (TVP)

Vegetable protein, especially from soya beans, that is used as a substitute for meat, or is added to it.

Tofu

A high protein food made by coagulating soya milk and pressing the resulting curds into soft white blocks.

Transportation

The distance foods travel, measured in air miles.

Triangle test

People given three samples of a food product to try. Two samples are identical, the third something is different; they need to discriminate between the samples.

Type 2 diabetes

A person with type 2 diabetes has insulin resistance, meaning their pancreas doesn't produce enough insulin or the body doesn't react properly to insulin.

Ultra Heat Treatment (UHT)

Heated very quickly in a heat exchanger to 72°C for 15 seconds cooled rapidly to below 10°C (normally 4°C).

Unsaturated fats

Fats that contain a high ratio of fatty acid molecules with at least one double bond. Unsaturated fats are normally liquid oil.

Use by date

Date by which high risk perishable foods should be eaten. They may not look different but are unsafe.

Vegan

People who do not eat flesh or any animal products. They can eat plant protein soya, TVP, tofu.

Vegetarian

A lacto-vegetarian diet includes dairy products and plants, and a lacto-ovo vegetarian diet includes eggs, dairy products and nuts.

Vitamin B2 (Riboflavin)

Enables energy to be released from carbohydrate, fat and protein in the body found in many foods, such as milk, eggs, rice. Deficiency is rare.

Vitamin B3 (Niacin)

Enables release of Vitamin C (ascorbic acid) needed for absorption of iron, to maintain body cells. Found in citrus fruits, green vegetables.

Vitamin B12

Works with folic acid, found in meat, fish fortified cereals.

Water based

Using liquid to transfer heat via convection.

Water in oil emulsion

Where liquid is suspended in oil or fat and prevents them from separating out, for example mayonnaise.

Water soluble vitamins

Soluble vitamins (the B group and vitamin C) in water of energy in the body. Found in wheat flour, eggs, milk some meats. Deficiency is called pellagra.

Wraps

Fillings that are wrapped in soft flat breads such as tortillas or pittas.

Yeasts

A microscopic fungus consisting of single oval cells that reproduce by budding, and capable of converting sugar into alcohol and CO₂ gas. Also ferments in the correct conditions to make bread rise.