

# **GLOSSARY OF TERMS**

These terms are used in the Food Science and Technology syllabus and have specific meaning in the context of this syllabus.

DRAFT

**Advocacy**

A structured method/plan including persuasive points which support a cause or issue. Methods of approach might include protests and demonstrations (designed to influence government, corporations and policy creators), the organisation of petitions or the construction of research articles.

**Aeration**

Describes the mechanical, chemical or biological method of adding air into a mixture. The size of a mixture is increased through the heating of gas (air, carbon dioxide and steam).

**Aesthetics**

An appreciation of the presentation of food in terms of visual appeal. Consider colour, plate cleanliness and arrangement and portion size.

**Attitudes**

The way in which people view or feel about others, issues or events. Attitudes may be positive or negative and in food selection attitudes reflect beliefs and values which can shape behaviour.

**Beliefs**

Perceptions of fact. What is considered to be real and true.

**Biodiversity**

The types of life forms e.g. plants, animals, micro-organisms—their genes and their ecosystems that can be found in the environment. In food production biodiversity refers to farms providing many different species of plants and animal (intentionally bred or natural).

**Biotechnology**

The use of biology in processes e.g. in agriculture, the breeding of livestock. Biotechnology uses living organisms to create new products. Referred to as genetic engineering.

**Caramelisation**

Occurs when sugar is strongly heated to create a brown substance. Caramelised foods include toffee, fruitcake, caramel sauce.

**Chemical properties of food**

These enable food materials to change during processing and storage. Chemicals involved are enzymes, pigments, alkalis, flavours and nutrients.

**Coagulation**

The thickening of protein and liquid through heat application e.g. scrambled egg, custard.

**Commodity groupings**

Foods which are traded and purchased, either fresh or processed such as:

- cereals, bread, rice, pasta, noodles
- vegetables, legumes, fruit
- milk, yoghurt, cheese
- meat, fish, poultry, eggs, nuts, legumes
- fats and oils.

**Consumer**

A person who buys or uses goods, products and services.

**Contemporary innovations**

Products or techniques which are current new ideas or creations.

**Cross contamination**

The transfer of micro-organisms from one food to another e.g. from raw to cooked food.

**Crystallisation**

The boiling of supersaturated sugar to create sugar crystals e.g. candied fruit. Acids help prevent crystallisation in supersaturated foods like honey and jam.

**Denaturation**

Describes the change in protein molecules in food through heating. The outcome cannot be reversed e.g. hardboiled eggs, firm meat from cooking.

**Design brief/specifications/task**

Guidelines for a task usually in statement format.

**Dextrinisation**

The process of cooking starch by dry heat methods. Dextrinisation enables starch to become brown e.g. toasted bread.

**Emulsification**

Prevents mixtures containing dissimilar liquids, such as oil and vinegar, from separating. Egg yolks are an emulsifier used to stabilise mayonnaise—an oil and vinegar emulsion.

**Enzymes**

Natural chemicals which cause food to ripen and age.

**Ethics**

A group or person's values and customs. They are what is considered to be right or wrong.

**Fair trade**

Seeks equity in international trade. It contributes to sustainable development by offering better trading conditions for producers and workers in the developing world.

**Food additives**

Substances added to food by the manufacturer to improve storage, taste or nutrition.

**Food chain**

Encompasses the whole process of food production, from the paddocks on the farm and the food the animals eat, through to food manufacturing, processing and distribution to consumers.

**Food handling skills**

Working methods which produce safe food and prevent cross contamination.

**Food hygiene**

The practice of cleanliness in relation to food.

**Food intolerances**

Allergies, adverse reactions to certain foods e.g. nuts

**Food poisoning**

Illness caused by eating food which is contaminated by harmful bacteria.

**Food processing**

Extends the life of perishable foods by transforming raw plant or animal produce into edible produce and made available to consumers throughout the year.

**Food security**

Ensures that people's dietary needs are always met and that they have access to culturally acceptable safe and nutritious food through non-emergency sources.

**Food selection models**

Healthy Eating Pyramid, The Australian Guide to Healthy Eating.

**Food spoilage**

Damage to food which causes deterioration in the colour, flavour, odour, or consistency of a food product.

**Food sustainability**

The continuation of food production and distribution to ensure adequate nutrition and with minimal long-term effect on the environment.

**Fortification**

The deliberate addition of specific nutrients to processed foods as a means of providing an increased level of intake e.g. vitamins are added to cereals.

**Free-range**

Farm animals and birds that have access to the natural environment.

**Functional foods**

Foods eaten for specific health purposes because they contain one or more nutrients which may have health benefits e.g. probiotic yoghurt.

**Functional properties**

When carbohydrates, proteins and fats are heated, cooled or exposed to air, acids or alkalis during processing, preparation, presentation or storage, the physical and chemical changes that occur are due to the functional properties of the macronutrients in the food.

**Gelatinisation**

Starch grains when mixed with a liquid and heated, burst and absorb the moisture, resulting in the thickening of the liquid e.g. sauce making.

**Genetically modified food**

Genetically engineered foods have ingredients in them that have been modified by a technique called gene technology e.g. soya bean, canola, wheat. The reasons for genetic modification include increased yield, increased insect resistance and reduced time for plants to reach harvest.

**Globalisation**

The movement of people, money, goods and services due to increased trade and investment. It is moving towards living in a world without borders.

**HACCP (Hazard analysis of critical control points)**

A food safety control system which identifies hazards that can occur at all stages of food development and identifies the controls that minimise contamination risk.

**Innovation**

New foods and technologies which affect production, distribution, marketing and storage of food.

**Leavening**

The introduction of gases into a baked product, for volume, shape and texture. It causes mixtures like cake and bread to rise.

**Large-scale food systems or services**

Functions or food demonstrations for a minimum of 20 people.

**Macronutrients**

Nutrients required in large amounts e.g. proteins, fats, carbohydrates.

**Micro-organisms**

Very small organisms which usually contain one cell—bacteria, yeasts and moulds.

**Micronutrients**

Nutrients which are required in small quantities to ensure good health e.g. vitamins and minerals.

**Mise-en-place**

A French term that means to have in place. It refers to everything that must be made ready before food service.

**Novel foods**

Foods and ingredients which are not traditionally used in Australia. They may be genetically modified or not been proven safe to use.

**Organic foods**

Foods that have been produced without artificial fertilisers and that have not been treated with synthetic pesticides or growth promoters of any type.

**Oxidation**

Some foods exposed to oxygen activate enzymes which cause browning. It occurs in peeled raw fruits and vegetables e.g. bananas, apples, potatoes.

**Physical properties**

Food properties which determine texture, shape, size and colour.

**Production plans**

A plan which assists in the management of creating more than one recipe in order to meet a time frame.

**Rancidity**

Decomposition of fats and oils when exposed to oxygen, causing an unpleasant odour and flavour.

**Sensory properties**

The characteristics of food which encompass all of the senses—sight, smell, taste, touch and hearing. All of our senses work in the enjoyment of food.

**Service**

An experience, an action or activity/an organised labour system.

**Small-scale food productions**

Functions for less than twenty people.

**Stabilisers**

Substances added to foods to prevent parts of the product separating. They work in combination with emulsifiers. Many stabilisers are derived from seaweeds or gums.

**Staple foods**

Typically starchy food of vegetable origin, e.g. potatoes, wheat, rice, pulses, which are high in carbohydrates and can be stored for long periods.

**Sustainability**

Ensures that items are available for future generations by preserving natural and built environments.

**Systems**

People and components functioning together to produce a product.

**Technology process**

Investigation and research to find a range of solutions and evaluate the results of endeavours and adopted procedures.

**Values**

Assessment of items or qualities in food production i.e. their worth, usefulness or desirability. The values of consumers and developers affect the development of food products. For instance, if concern for the environment is an issue, developers may reduce emissions energy use and waste during production. Consumers may not buy products that damage the environment.