Teacher Resource Bank

GCSE Design and Technology: Food Technology

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- Glossary of Terms

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GLOSSARY OF TERMS

This glossary has prepared in support of AQA's new GCSE Design and Technology: Food Technology specification. It has been devised to provide 14-16 year olds with a definition and an explanation of key words in the Specification. The definitions and explanations should not be considered to be either definitive and exhaustive. Candidates should also use them to assist with further support.

A

Additive: a natural or synthetic substance which is added to food for a specific purpose

Aeration: when air is trapped in a mixture

Aesthetic: attractive

Ambient temperature: normal room temperature (20-25ºC)

Anaerobic: not needing oxygen

Analysis of brief/task: breaking down the design brief/task to identify key points

Annotation: add explanatory notes

Antioxidant: a substance that stops fat in food going rancid

Antibacterial: substance that will usually destroy bacteria

Appliance: a piece of electrical equipment

Aseptic packaging: preserves foods without using preservatives or chilling

Assembling: putting component parts together

Attributes: particular characteristics of a food

B

Bacteria: single-celled organisms present in air, soil, animals and the human body

Balanced diet: a diet which provides adequate amounts of nutrients and energy

Biodegradable: broken down totally by bacteria

Bland: lack of flavour/taste

Blast chilling: quick freezing – small ice crystals form and there is less damage to the food than in slow freezing

C

Calcium: a mineral element which is essential for strong bones and teeth

Calorie: a unit of energy which is used to give the energy yield of foods and the energy expenditure by the body

Caramelisation: process of changing the colour of sugar from white to brown when heated

Carbohydrate: the major source of energy for the body

CAM Computer Aided Manufacture: the use of a computer to control all the processes involved in the manufacture of a product

Clostridium: a form of bacterial food poisoning

Coagulation: the change in the structure of protein brought about by heat, mechanical action or acids

Coeliac disease: caused by an intolerance of the protein gluten present in the cereals wheat, barley and rye

Cook-Chill: a method of food preparation in which the food is cooked then rapidly chilled and stored below 5ºc thus increasing the keeping quality of the product for a short time

Colloidal structure: when two substances are mixed together

Colloids: formed when one substance is dispersed through another

Communication: pass on information, ideas and thoughts

Consistency: ensures products are the same

Consistent: the same quality each time a product is made

Consumer: a person who buys or uses products and service

Contaminate: to spoil or dirty something

Critical Control Point (CCP): when a food safety hazard can be prevented/reduced to an acceptable level

Cross contamination: the transfer of food spoilage/poisoning from one food to another

Cryogenic freezing: food is immersed or sprayed with liquid nitrogen

D

Danger zone: the temperature range (5 to 63ºC) in which bacteria grow

Date marking: of manufactured foods. Best before is the date up until the food will remain in peak condition. Perishable foods have a Use By date up to which the food can be kept if stored appropriately

Descending: from the largest to the smallest

Descriptors: a word describing a sensory characteristic, e.g. spicy

Design task: a statement which provides the situation for your designing and making

Design criteria: a list of general points from which a range of different ideas can be made

Deteriorate: starting to decay and losing freshness

Development: make changes to a food product which will affect its characteristics

Dextrinisation: when starch converts into a sugar

Diabetes: a metabolic disorder caused by the poor absorption of glucose; this can be due to the failure to produce insulin (in insulin dependent diabetes) or the poor response of tissues to insulin (in non insulin dependent diabetes). Type1 diabetes mellitius develops in childhood. The onset of Type 2 is in middle age

Dietary Fibre: material, mostly from plants, which is not digested by humans but which absorbs water and binds other residues in the intestine thus aiding the excretion of waste material from the body

Dietary Guidelines: advice from the Government on recommended food intake in order to achieve dietary goals

Dietary Reference Values (DRVs): scientifically calculated estimates of the amounts of nutrients needed for good health

Difference test: a method of finding out if there are any differences between product samples

Diverticular Disease: a disease caused by a lack of fibre in the diet

E

E numbers: the classification system of permitted additives produced by the European Union

Eatwell plate: a healthy eating model, to encourage people to eat the correct proportions of food to achieve a balanced diet

Emulsifier: a substance that stops oil and water from separating

Emulsifying agent: a substance that will allow two immiscible liquids (substances that do not mix) to be held together, e.g. lecithin in egg yolk

Emulsion: a mixture of two liquids is called an emulsion

Enrobing: coating and surrounding a product with another ingredient

Enzymic browning: reaction between a food product and oxygen resulting in a brown colour, e.g. sliced potato has brown patches when sliced and left in the air

Estimated Average Requirement (EARs): the average need for a nutrient. Values calculated for energy requirements of groups of people. They represent the needs of most people in a particular group and decisions

Evaluation: summarise information and make conclusions, judgements

F

Fair testing: to compare like with like using only one variable

Fermentation: when yeast produces carbon dioxide

Fibre: indigestible parts of food – usually cellulose, which remains in the intestine after digestion

Finishing: completing the presentation of a food product to a high standard

Flavour enhancers: tasteless substances used to enhance the taste of savoury foods

Foams: a mixture of gas and liquid is called a foam, e.g. air whisked into egg white creates a foam

Food additive: a substance added to a food product to improve its quality

Food spoilage: caused by the natural decay of food or by contamination by micro organisms

G

Gelatinisation: heated starch granules absorb liquid and swell, and burst to thicken liquid

Gels: a small amount of a solid mixed in a large amount of liquid that then sets e.g. jam.

Gluten: protein found in flour

Guideline Daily Amounts (GDAs): guide to the amounts of calories, sugar, fat, saturated fat and salt a person should try not to exceed so as to have a healthy balanced diet

H

Halal: food which is selected and prepared according to Islamic dietary law

Hermetically: airtight

Higher level making skills: food preparation and cooking skills which require care, precision and understanding and which can be carried out to a high standard

High-risk food: food which is an ideal medium for the growth of bacteria or micro-organisms

Hygienically: to prepare food in a clean environment to stop food spoilage or poisoning occurring

I

Impermeable: cannot penetrate

Irradiation: a process used to reduce spoilage in some foods

Iron: a mineral present in the blood and stored in the liver. Prolonged lack of iron leads to anaemia

J

Joule: a unit of energy. Used to show the energy content of foods

K

Kosher: food which is selected and prepared in accordance with Jewish dietary law

L

Landfill sites: large holes in the ground where bags of household waste are buried

Lard: saturated animal fat produced from pigs

Lecithin: present in egg yolk and soya and used as an emulsifier in manufactured foods

Listeria monocytogenes: common food-poisoning bacteria

M

Making skills: practical skills which show your ability to make food products

Market research: the study of consumers' needs, preferences and lifestyles

Micro organism: tiny living things such as bacteria, yeasts and moulds which cause food spoilage. Can only be seen through a microscope

Micronutrient: vitamins and minerals which are needed in small quantities for health

Minerals: substances used by the body to control processes; they form an essential part of body fluids **Modification:** simple changes which have little effect on the structure and composition

Modified Atmospheric Packaging (MAP): used to extend the shelf life of food. The packs are gas flashed to reduce the amount of oxygen and replace it with carbon dioxide or nitrogen

Modified starches: starches that have been altered to perform additional functions

Monitoring: keeping constant watch

N

Net weight: not including packaging

Non starch polysaccharide: the part of food that is not digested by the body

Nutrient: the part of a food that performs a particular function in the body

Nutritional analysis: using resources to find out the nutritional content of a product

Nutritional content: the type and quantity of nutrients which the product supplies

Nutritional labelling: the information relating to nutrients and energy in the food which is stated on packaging

O

Obesity: excessive fatness. Measured as a ratio of weight to height

Organic food: plants grown without the use of synthetic pesticides fungicides or organic fertilizers. They must have been prepared without preservatives

Organoleptic: sensory qualities (texture, flavour, aroma, appearance) of a food product.

P

Pasta: the collective name given to a number of wheat flour products which are cooked by boiling. They are made from dough containing durum wheat

Pasteurisation: the process of prolonging the keeping quality of products such as milk by heating to destroy harmful bacteria

Pastry: dough made from flour, fat and water

Pathogenic: causing disease

Pathogens: bacteria which cause disease

pH: a measure of acidity or alkalinity

Preservative: a substance that extends the shelf life of a food

Preservation: the protection of perishable foods from deterioration by removing the conditions necessary for the growth of micro-organisms

Preservatives: substances added to some processed foods to prevent spoilage

Prior knowledge: knowledge you already have which does not require research

Product Analysis: examining a food product to find out the ingredients, packaging characteristics and properties

Product Specification: a list of features/characteristics/properties which a food product must meet

Profiling test: sensory evaluation test to identify individual specific characteristics of product

Proportion: relative quantities of ingredients in a recipe, expressed in numbers

Protein: the nutrient required for growth and repair

Prototype: the first version of a product that is being developed

Pulses: peas, beans and lentils. They provide a good source of protein and B vitamins

Q

Quality Assurance: a guarantee by retailers and manufacturers that products are safe and of a good quality

Quality Control: steps taken to check a product at various stages of making to ensure a consistent and high quality outcome is achieved

Questionnaire: questions asked to a range of people. Results can be used to inform ideas

R

Raising agent: increases the volume of doughs, batters and mixtures by promoting gas release (aeration)

Ranking test: a method of putting in order the intensity of particular characteristic of a product

Rating test: a method of rating a particular attribute or preference for a product on a word or numbered scale

Recycled: to make into something else

Reference Nutrient Intake: (RNI): the amount of a nutrient that is enough for most people in a group

S

Salmonella: a type of bacterial food poisoning

Sample: small amount of the product

Scaling up: multiplying up proportionally. Increasing a recipe for bulk production, keeping the ratio and proportions the same

Sensory Analysis: identifying the sensory characteristics of products, i.e. taste, texture, appearance, mouth-feel, colour

Sensory evaluation: using the range of senses to assess a food product – appearance, smell, taste

Sensory qualities: the look, smell, taste, feel and sound of food products

Shelf life: the length of time a food product can be kept and be safe to eat

Shortening: when fat coats the flour particles preventing absorption of water resulting in a crumbly mixture

Solution: when a solid dissolves in a liquid, e.g. salt in water

Specification: details which describe the desired characteristics of a product

Stabilizers: substances which absorb water and are often used as thickening agents; many can produce gels and also act as emulsifiers

Standard component: pre-prepared ingredient that is used in the production of another product

Staple food: a food that forms the basis of a traditional diet – wheat, barley, rye, maize or rice, or starchy root vegetables such as potatoes

Sterilisation: a method of increasing the keeping quality of products by destroying all micro organisms by heating to a high temperature

Suspensions: a solid held in a liquid

Sustainability: to continue to support

Symptoms: a sign of something

Syneresis: usually refers to eggs; if overcooked, the proteins shrink as they coagulate and separate from the watery liquid

T

Tampering: to interfere with

Target Group: the specific group of people at which you are aiming the product

Test kitchen: the place where a food technologist experiments and develops new products

Textured vegetable protein: protein produced from soya beans. It is either extruded or formed into chunks. Used as an alternative protein and as a meat extender

Tolerance levels: the amount of difference allowed when making

U

Ultra Heat Treatment (UHT): the high temperature, short time sterilization of milk known as long life milk.

V

Vacuum packaging: a method of preserving food by removing air

Vegans: people who eat no products of animal origin

Vegetarians: those who for a variety of reasons, choose not to eat meat

Viscosity: the thickness of a liquid or a mixture, such as a sauce

Command words for Question Papers

Analyse: separate information into components and identify their characteristics

Comment: present an informed judgement

Compare: look for similarities and differences and, usually, reach a conclusion

Consider: review and respond to given information

Contrast: set in opposition in order to bring about which is preferable

Define: give the precise meaning of a word or phrase

Describe: give a detailed or graphic account of; set out characteristics

Discuss: investigate or examine through argument. Give reasons both for and against. Present salient points

Evaluate: appraise the worth of something

Examine: investigate closely

Explain: give reasons, make plain

Identify: select key characteristics

Illustrate: make explicit, present clarifying examples

Outline: explain the main features

Prove: use factual evidence to show the truth

State: present in a concise and clear form

Summarise: give a concise account of the main points