

**NUTRITION**

**FOOD SAFETY**

**FOOD CHOICE**

**FOOD SCIENCE**

**FOOD IN INDUSTRY**

**FOOD PROVENANCE**

**COOKING AND FOOD PREPARATION**

**Nutrition**

The 5 main nutrients are:

**Carbohydrate** (Sugar, Starch, Fibre)

**Fat**

**Protein**

**Vitamins** (A, B, C, D, E, K)

**Minerals** (Iron, Sodium, Flouride, Calcium)

A

**Macro Nutrients:** Carbohydrate, Fat, Protein

**Micro Nutrients:** Vitamins and Minerals

**Non Nutrients:**

**FIBRE** – Vegetables, wholemeal flours/ pasta – aids digestion

**WATER** - Water, juice, fruit, vegetables - hydration of all cells

**NEA1** – if you choose GCSE Food Preparation you will do a Non-examination Assessment (coursework & Practical) NEA1 called Food Science – this would account for 15% of your GCSE. You would start it in Sept Yr11.

Example of task title: Investigate the chemical and functional role of yeast in bread making

C

**Raising Agents**

A raising agent is an ingredient or process that introduces a gas into a mixture so that it rises when cooked

The gases introduced are air (a mixture of gases), steam

(water in its gaseous state), or carbon dioxide (CO2)

There are 3 ways this can be done

Mechanically e.g. whisking, sieving, folding

Chemically e.g. baking powder, bicarbonate of soda, cream of tartare

Biologically e.g. yeast

D

**Hospitality & Catering.** The Front of House system, kitchen layouts and different chefs.

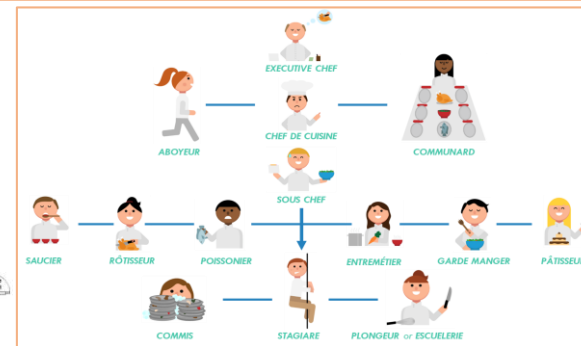
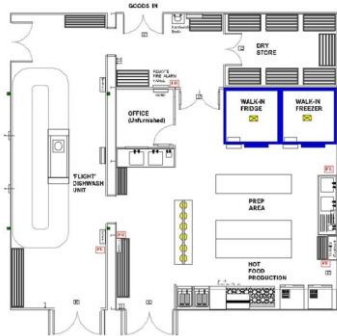
**Residential** – You can sleep there

**Non-residential** – You can't sleep there

**Commercial** – makes a profit (Costa, Travel Lodge)

**Non-commercial** - doesn't make a profit (Hospitals, Schools, Prisons)

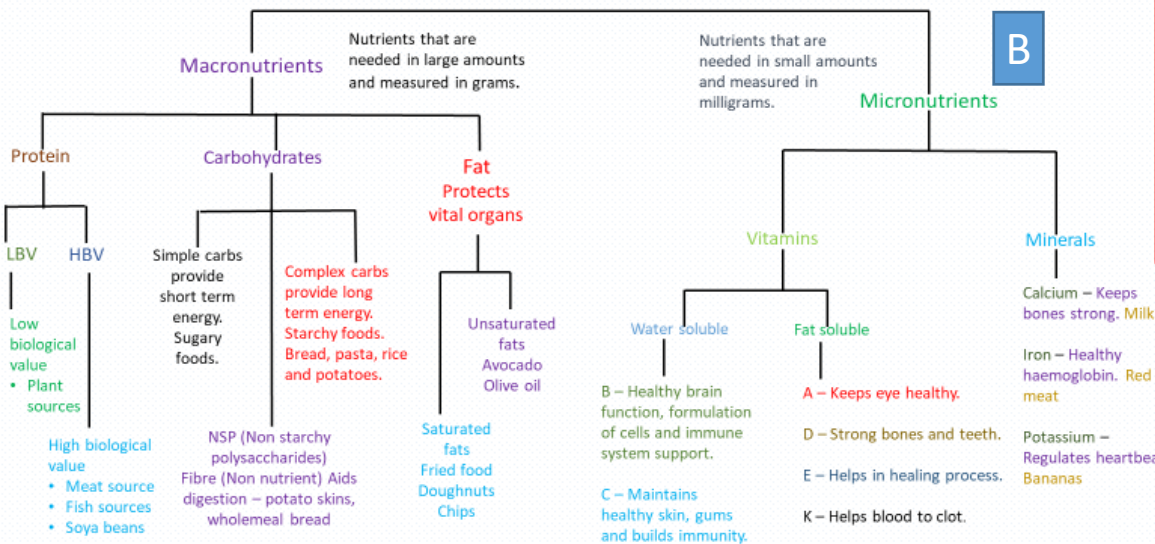
**Head chef, sous chef, saucier** etc



E

- Service types
- Table
- Silver
- Vending
- Family
- Counter
- Buffet

**Nutrients**



B

**Food Poisoning**

	SYMPTOMS	SOURCE	GOOD PRACTICE
<b>F</b> STERIA	diarrhea, fever, muscle aches	unpasteurized milk, soft cheeses	cooking raw food thoroughly
CAMPYLOBACTER	nausea, fever, cramps, diarrhea	raw milk, raw meat	cooking raw food thoroughly
CLOSTRIDIUM PERFRINGENS	nausea, vomiting, pain, diarrhea	stews, soups, gravies held at warm temperature	hold food at below 40°F (4°C) or above 140°F (60°C)
SALMONELLA	diarrhea, chills, fever, vomiting, cramps	undercooked poultry, eggs or products containing eggs	cooking raw food thoroughly
ESCHERICHIA COLI	cramps, diarrhea, fever, vomiting	contaminated ground beef, unpasteurized juice, milk	cooking raw food thoroughly, eat pasteurized food

**The Environmental Health Officer**

- Inspecting business for food safety standards
- Follow up complaints
- Follow up outbreaks of food poisoning
- Collecting samples for testing
- Giving evidence in prosecutions
- Maintaining evidence
- Submitting reports

G

**Knife Skills** – Bridge, Claw, Cross-cutting. Chefs knife, vegetable knife. Cuts – julienne, dice, brunoise

**Sauce making** – Roux, bechamel, reduction, emulsion

H

**Sauces classification**

**Kitchen sauces** are prepared in the kitchen by Chefs for the preparation & completion of various dishes.

**Proprietary sauces** are ones available in shops & are usually prepared commercially. These are usually served on the table in restaurants as a part of accompaniments to certain dishes. The Chef may use some of these sauces in marinades, as seasoning and in preparation of certain dishes.

**Kitchen sauces** may be further classified as:

- Mother/Leading sauces,** Dessert sauces, Miscellaneous sauces and Compound Butters.
- Mother or leading sauces** may be divided into Hot, Warm and Cold sauces
- Hot Sauces:** Béchamel, Veloute, Espagnole & Tomato sauce.
- Warm Sauces:** Hollandaise/ Béarnaise (Emulsion sauce)
- Cold Sauces:** Mayonnaise sauce (Emulsion sauce)

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**COOKING AND FOOD PREPARATION**

*There are many job roles available in the Hospitality & Catering Industry. There are a number of training courses available for different industry sectors..*

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| <p><b>City &amp; Guilds</b><br/>Examples of courses ;</p> <ul style="list-style-type: none"> <li>• Introduction to the H&amp;C industry</li> <li>• Cooking &amp; Service for the Hospitality industry</li> <li>• Culinary skills</li> <li>• Food &amp; Beverage service</li> </ul> | <p><b>Springboard UK</b><br/>Examples of courses ;</p> <ul style="list-style-type: none"> <li>• Springboard FutureChef work in schools</li> <li>• FutureChef competitions &amp; awards</li> <li>• Mentoring industry visits, visiting speakers etc.</li> </ul> |
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| <p><b>Universities &amp; Colleges Admissions service (UCAS)</b><br/>Examples of courses; Higher National Certificates &amp; Diplomas &amp; degrees</p> <ul style="list-style-type: none"> <li>• Hospitality management</li> <li>• Professional Cookery</li> <li>• Culinary Industry Management</li> <li>• Food &amp; Culinary Arts</li> </ul> | <p><b>Chartered Institute of Environmental Health (CIEH)</b><br/>Examples of courses;</p> <ul style="list-style-type: none"> <li>• Level 1 introductory Certificate in Food Safety</li> <li>• Level 2 Foundation certificate in Food Safety</li> </ul> |
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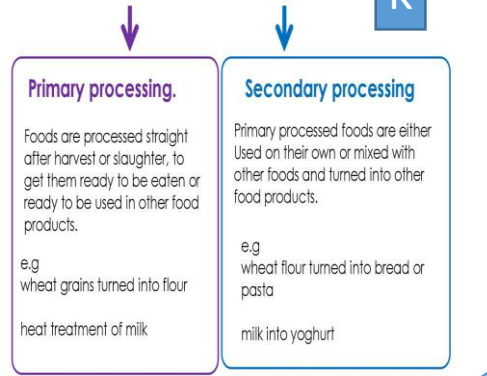
**What personal attributes do you need to work in the industry?**  
 Enthusiastic, hard working, punctual & reliable, willing to learn & develop skills, ability to take initiative, helpful & approachable, sense of humor, ability to take criticism & act on it, good team member, calm & composed, good commitment, good communicator

The food that we eat is either:  
 Grown   
 Reared   
 or Caught 

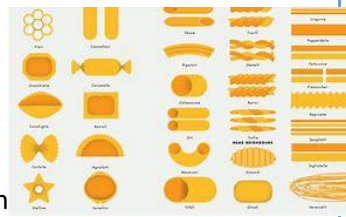
**Food Provenance – Processing and production**

Modern processing techniques have made it possible to produce a wide variety of food products to the same quality, standard, colour, flavour, shape and size every time.

There are **two main stages** in food processing



**Pasta**  
 Pasta is an Italian type of food typically made from an unleavened dough of wheat flour or 00 flour (gluten) mixed with water or eggs, and formed into sheets or other shapes, then cooked by boiling or baking



**Careers - employment contracts**  
 Full-time: hours of work & start/end times are specified.  
 Any shift work is specified. The employee qualifies for sick pay and holiday pay  
 Part-time: days of the week & start/end times specific.  
 Reduced sick and holiday pay  
 Casual work: seasonal or available through an agency e.g. to cover someone who is away due to illness. No sick or holiday pay  
 Zero hours: is an agreement between worker & employer, no specific hours/end/finish times. No sick or holiday pay.

Type of diet	Reason for following diet	Foods that can be eaten	Foods to avoid
Vegan	Health, religious, ethical or other	All plant foods, Protein alternatives: tofu, tempeh, TVP	All animal foods including fish and shellfish
Lacto-ovo Vegetarian	Health, religious, ethical or other	All plant foods, Milk & dairy foods, eggs	Any animal food where the animal has been killed, including fish and shellfish
Lacto-vegetarian	Health, religious, ethical or other	All plant foods Milk & dairy foods	Any animal food where the animal has been killed, including fish and shellfish, eggs
Gluten free	Coeliac disease	Rice, rice products, soya, maize (corn), Cassava (tapioca), linseeds, polenta, beans, peas, lentils, quinoa, sorghum, agar, nuts	Wheat and wheat products, bread, cakes, biscuits, pastries, barley, oats, rye products
Lactose free	Lactose intolerance	Specially produced lactose-free dairy products. All foods with no dairy in them	Milk, milk products (cream, yogurt, cheese, butter), foods containing milk products
High fibre	Diseases of the intestines e.g. constipation, diverticular disease	Fruits, vegetables, wholegrain cereals, breads, pasta, rice, peas, beans, lentils	White flour and white flour products, white rice, smooth fruit juice
Low sugar	Diabetes, weight reduction diet	Fresh vegetables and fruit, milk, unsweetened milk products	Free sugars that have been added to cakes, biscuits, drinks, confectionary, desserts, sauces, ice cream, breakfast cereals, honey, syrup, jam, etc.
Fat reduced	Heart disease, weight reduction diet	Naturally low-fat foods, e.g. fruits, vegetables, cereals, white fish, fat reduce cheese, spreads, milk, etc.	Full-fat dairy foods, pastries, meats, crisps, chips, doughnuts, cakes, biscuits, fried foods, desserts, ice cream
Low sodium (salt)	Heart disease, high blood pressure, kidney disease	Fruits, vegetables, milk, eggs, poultry, unprocessed meat	Yeast extract, cheese, dried fish, canned fish, soy sauce, ketchup, pickles, ready meals, snack foods, cakes, biscuits, scones, ham, bacon, processed meats, e.g. sausages

Advantages and disadvantages of buying local and seasonal food

Can you list which fruits and vegetables are in each season in the UK?

Advantages	Disadvantages
Fresher	May not be much choice
Fewer food miles	Some people do not like the food being different sizes
Reduce carbon footprint	Sometimes more expensive
Less energy used in transporting	
Supports local farmers/UK farmers	



Red Tractor  
Organic  
Fairtrade  
GM free

You need to know what these terms mean and how they link to food choice

Food packaging and labelling

Each burger contains:

ENERGY 924KJ 220kcal 11%	FAT 13g MED 19%	SATURATES 5.9g HIGH 30%	SUGARS 0.8g LOW <1%	SALT 0.7g MED 12%
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% of an adults reference intake.  
Typical values per 100g: Energy 966KJ/ 230kcal

\* These are a legal requirement

P



Information required by law:

- The name of the food
- A 'best before' or 'use by' date (or instructions on where to find it)
- Any necessary warnings
- Net quantity information
- A list of ingredients (if there is more than 1)
- The name and address of the UK business responsible for the information on the food or, if the business is not established in the UK, the name and address of the importer
- the country of origin, if required
- the lot number or use-by date
- any special storage conditions
- instructions for use or cooking, if necessary

Q

Types of pastry

There are four main types of pastry that we use in school:

R

Shortcrust



Rough Puff/flaky



Choux



Filo



Baking blind

Means to partly cook the pastry case before adding the filling.

Fillings can make the pastry very soggy. YOU DON'T WANT A SOGGY BOTTOM!!!

Baking beans on paper are used to stop the pastry rising, then lifted out.



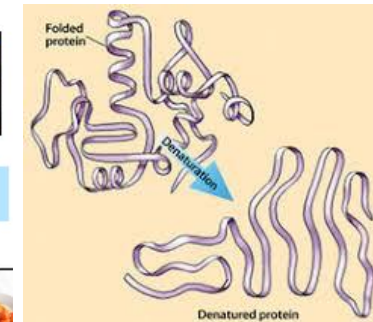
S

GELATINISATION



Denaturation

T



- Food Science:
- Gelatinisation
  - Denaturation
  - Shortening
  - Aeration
  - Layering
  - Elasticity
  - Glazing