

Level 2 Food Safety in Catering

Online Training



Course Content



INTRODUCTION TO FOOD SAFETY

BASIC MICROBIOLOGY

FOOD POISONING & FOODBORNE DISEASE

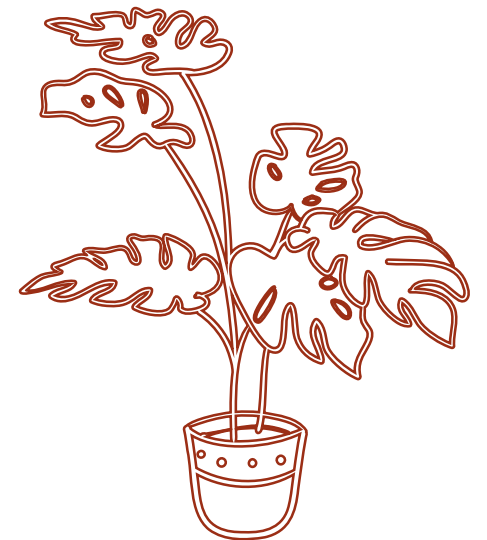
PERSONAL HYGIENE

DESIGN AND CONSTRUCTION

FOOD PESTS AND CONTROL

CLEANING AND DISINFECTION

FOOD SAFETY LEGISLATION



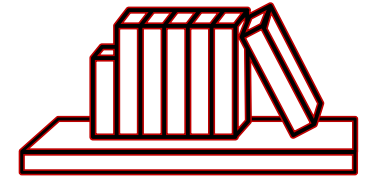
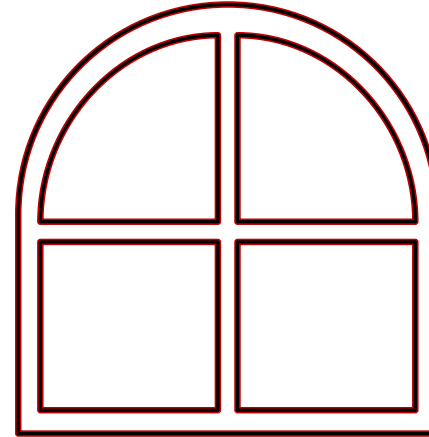
Unit 1 – introduction to Food Safety

PURPOSE

- Unit aims to increase trainees' awareness of food poisoning

LEARNING OUTCOMES

- Give reasons why we need food hygiene
- State the symptoms and causes of food poisoning



Safe food: Definition

Food which is free from contaminants 1) from yourself 2) from the environment, and will not cause illness or harm.

Another definition is all measures necessary to ensure the safety of food.

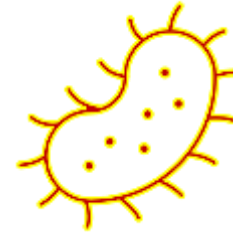
In more detail, it is a food safety chain where the first link in the chain is the supplier, the final link then is the customer and you've got to look after that food safety chain and make sure that nothing comes into contact with food whilst you handle or process it.



Causes of food poisoning

BACTERIA

- Bacterial food poisoning are responsible for the majority of food poisoning outbreaks with a staggering 80 %



MOULDS (mycotoxins)

- Less common, but could be seen with some products like grains or seeds and vegetables when stored wrong and it does cause a problem



CHEMICALS

- Things like detergents, bleaches, disinfectants, preservatives, agricultural residues, pesticides antibiotics that can get into food.



Cont'd

METALS

- Be careful what metallic containers you use to cook food like acidic fruits.
 - Certain acids will attack the inside of things like aluminium saucepans causing sauce to turn black [better use stainless steel or glass saucepans]
- Be careful with the plastic containers in which you store food. Some plastic surfaces contain poisons like arsenic and that can leach into the food. [Use Tupperware or aluminium containers that are meant for storing food]

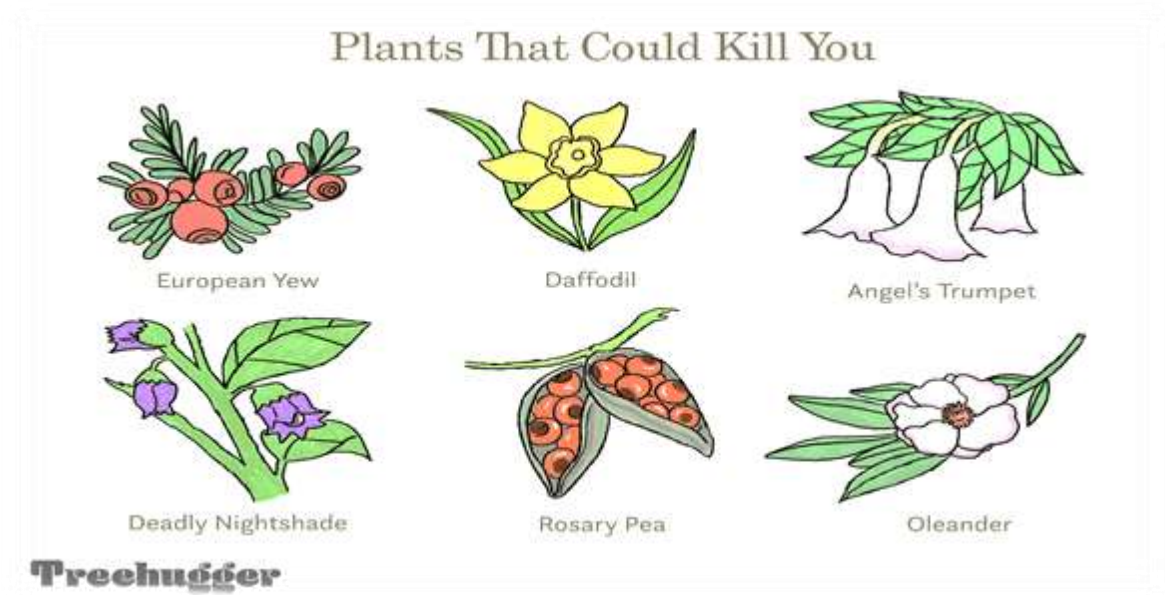
	Most Reactive
POTASSIUM	19 K
SODIUM	11 Na
CALCIUM	20 Ca
MAGNESIUM	12 Mg
ALUMINIUM	13 Al
CARBON	6 C
ZINC	30 Zn
IRON	26 Fe
TIN	50 Sn
LEAD	82 Pb
HYDROGEN	1 H
COPPER	29 Cu
SILVER	47 Ag
GOLD	79 Au
PLATINUM	78 Pt
	Least Reactive



Cont'd

POISONOUS PLANTS/FISH

- Fugu – pufferfish, which is a delicacy in Japanese restaurants around the world
 - Chefs who prepare fugu dish need to have a mandatory licence
 - Pufferfish contains a neurotoxin, which can kill within 2 minutes, because the skin, internal intestines contain it
- In general, fresh fish contain parasitic infection (little wrigley worms), therefore it needs to be cooked in the correct internal temperature of between 60 to 75 degrees Celsius.
 - If using fish raw [eg making sushi], then it must be frozen for at least 24 hours, then defrosted and then used, as the freezing process will kill the parasite
- Also, plants like deadly nightshade, rhubarb leaves, for example all contain toxins that can lead to poisoning



Cont'd

OTHER NATURAL POISONS

- FUNGI
 - Always make sure you identify the edible types of fungi and ensure you stay away from the poisonous types.
- GREEN POTATO
 - Or potatoes in a sprouting – the green is a build-up of a glycoloid poison, which comes from chlorophyll, but it can have certain effects on human body especially when you are young or quite old. Do not try to peel away the green or even rub away the sprouts
- RED KIDNEY BEANS
 - Needs to be boiled for at least 15 minutes before used



Not allergies

Allergic reaction which is not caused by food poisoning but rather than the brain being fooled into thinking that the body digested poisonous materials. Hence, the brain will send a message to the immune system to release antibodies to fight against that “poison” which is perceived as a threat. This is known as psychosomatic food allergy.

- E.g. –peanut allergy, peanuts, shellfish, milk
- Psychosomatic food allergies can be life threatening, where customers could end up with respiratory failure.



Cot'd

The biggest problem with allergies is **poor communication between staff and customers**

- Symptoms – rash, swelling, collapse, difficulties with breathing
- Caused by: Celery, Cereals with gluten, Crustaceans, Eggs, Fish, Lupin, Milk, Molluscs, Mustard, Nuts, Peanuts, Sesame seeds, Soya, Sulphur dioxide (sulphites)
- Reported cases in England & Wales: 70,727 cases in 2016
- Reasons: More poultry eaten, eating out more, more ethnic takeaways, incorrect handling of chilled foods, less preservatives used, BBQs, Intensive farming/feeding
- The most common cause of food poisoning is Food Prepared Too Far in Advance

Full information of allergens are detailed as part of the Allergen Awareness training

Cot'd

Benefits of GOOD food hygiene

Safe food means:

- Good reputation
- Satisfied customers
- Increased productivity by staff working in a clean environment
- Brand protection
- Legal compliance
- Good working conditions
- Reduced risk of food poisoning
- Longer shelf-life on products because part of the food hygiene involves checking the dates of products
- Higher staff morale



Cot'd

Costs of POOR hygiene

Unsafe food means:

- Food poisoning
- Food complaints
- Brand damage/loss of business/ Closure
- Fines and legal costs
- Cost of civil action
- Pest infestations
- Waste food
- Loss of production
- High staff turnover



Food poisoning

Symptoms:

- Nausea
- Vomiting
- Abdominal Pain
- Diarrheal
- Dehydration

At-risk groups:

- Elderly
- Very young
- Ill People/Hospital patients/ Immunocompromised
- Pregnant Women



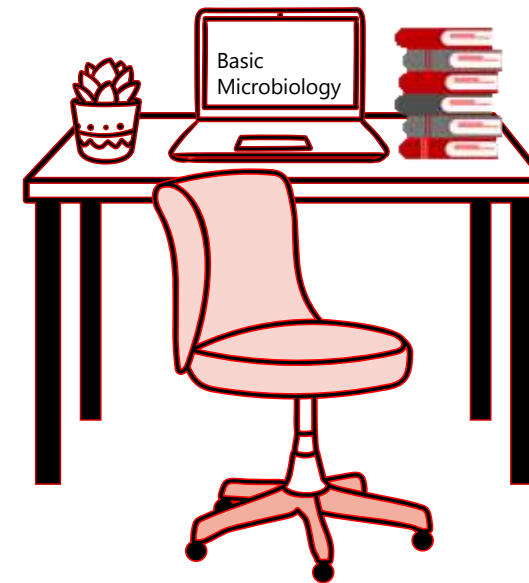
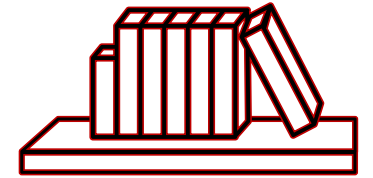
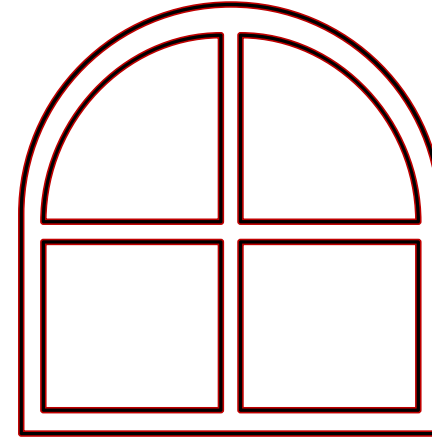
Unit 2 – Basic Microbiology

PURPOSE

- Unit introduces trainees to essential facts about bacteria and their growth requirements

LEARNING OUTCOMES

- Explain in simple terms the nature of Food Poisoning Bacteria and their effects on food
- State and explain the four conditions necessary for the growth of Food Poisoning Bacteria
- State the temperatures of the Temperature Danger Zone and recognise its importance in relation to food storage
- Give examples of High Risk Foods



Are all bacteria harmful?



THREE TYPES

- Good
 - Used to make beer, cheese, yoghurt, etc. So different types of bacteria are being added to foods in order to increase their taste or longevity
- Bad
 - Pathogenic – cause illness
- Ugly
 - Spoilage- cause food to perish or rot

What effects do Food Poisoning Bacteria have on Food

- Food which is contaminated with **Food Poisoning Bacteria** SMELLS, LOOKS and TASTES normal
- **Spoilage Bacteria** affect the taste, colour, smell and texture of food
- **Signs:**
 - Odours, discolouration, slime/stickiness, change in texture, unusual taste
 - The production of gas, blown cans or packs, damaged packaging
- Bacteria are microscopic so you can't see them with a naked eye
- Bacteria is found everywhere, but there are 4 key places:
 - Especially **raw meat** (all raw meat contains food poison bacteria)
 - **sewage** (waste material from humans and animals, host of various diseases/infections/parasites)
 - **water** (two-thirds of the Earth is water – not just in the sea but in fresh water too)
 - **soil** (main depository of bacteria)
- Other names for Bacteria: Pathogenic Bacteria, Micro-organisms, Pathogens, Germs, Microbes

Food Poisoning Bacteria

Salmonella

- There are 2500 types of Salmonella and many are named after the place they have been discovered, eg Salmonella Cardiff

Clostridium perfringens

- Quite bad producing world's worst neurotoxin and if it goes into your body it can kill you within 2 minutes

Clostridium botulinum

- Quite bad producing world's worst neurotoxin and if it goes into your body it can kill you within 2 minutes
- Interesting fact that botulinum toxin is being used in botox (used to stretch people's faces and make them look younger)

Bacillus cereus

- Also known as the rice bacteria causes food poisoning in rice that's been cooked and left out in warm atmosphere rather than chilled or it just hasn't been reheated properly

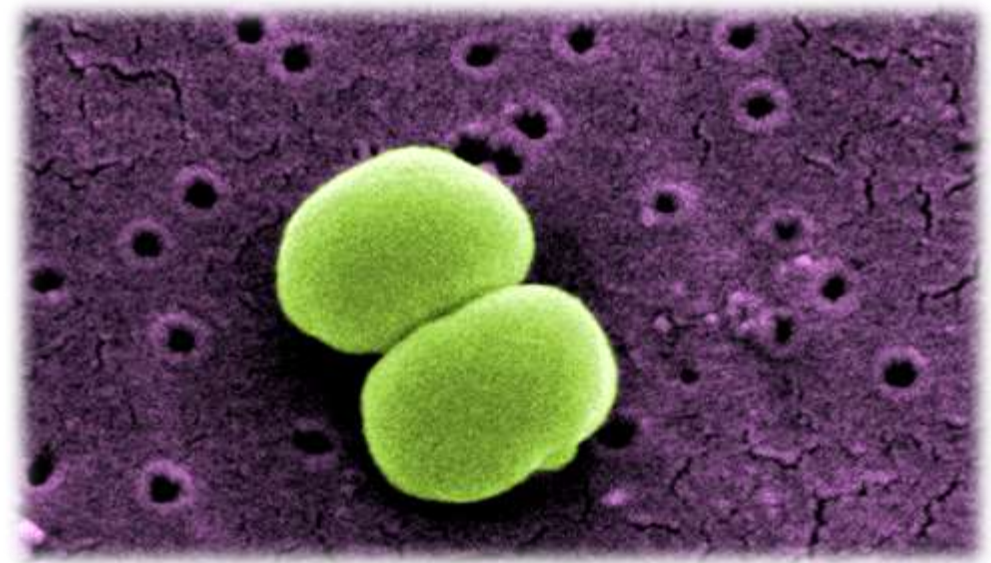
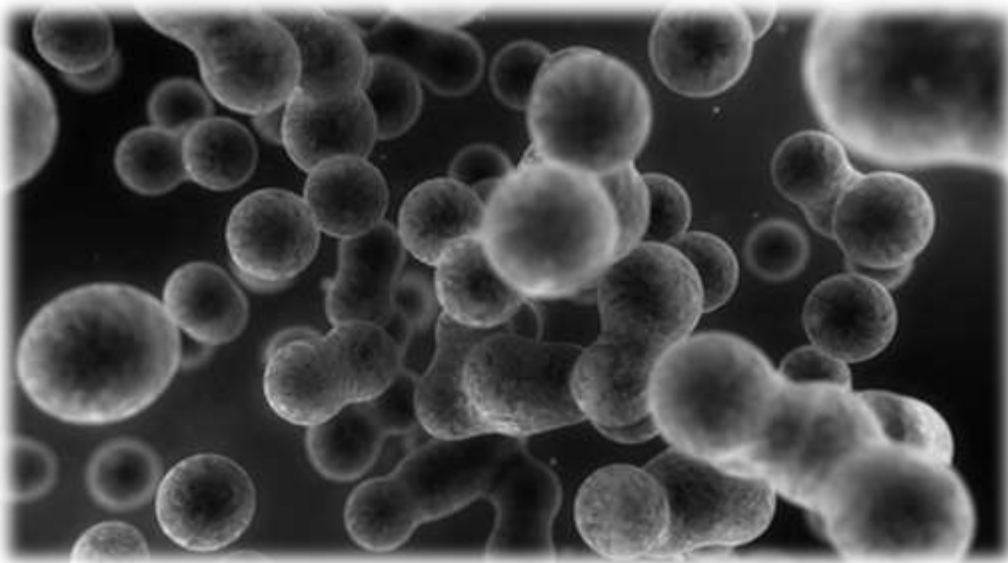
Staphylococcus aureus

- This one is present on all humans and animals – on our skin, in our eyes, nose. Its purpose is to prevent us from contracting other infections. It actually protects us from other environmental bacteria

Requirements for Bacterial Multiplication

Factors
needed for
bacteria to
grow and
multiply
on foods:

- Warmth
- Moisture
- Food
- Time



Food types which are a major source of food poisoning

- **High-risk foods**
 - Common food vehicles in food poisoning, usually protein ready-to-eat, stored under refrigeration, no further processing. Foods that can be found in a deli or supermarket fridge – e.g. cakes, cooked ham, prawns, pork pie, pates.
- **Raw foods**
 - That's where you can find a high number of food poisoning organisms. So, when these organisms are transferred to a high-risk food [or what we call cross-contamination] then they become a problem.
- **Low-risk foods**
 - Foods that have never been implicated in food poisoning outbreaks as they are acid foods with PH of below 4.5; have high sugar/salt/fat content; they are dry products; include preserved foods not requiring refrigeration; ambient storage/room temperature.
- **Ready-to-eat raw foods**
 - Fruits, salad vegetables, should be thoroughly washed before consumption, to minimise the risk from low dose pathogens

Germometer

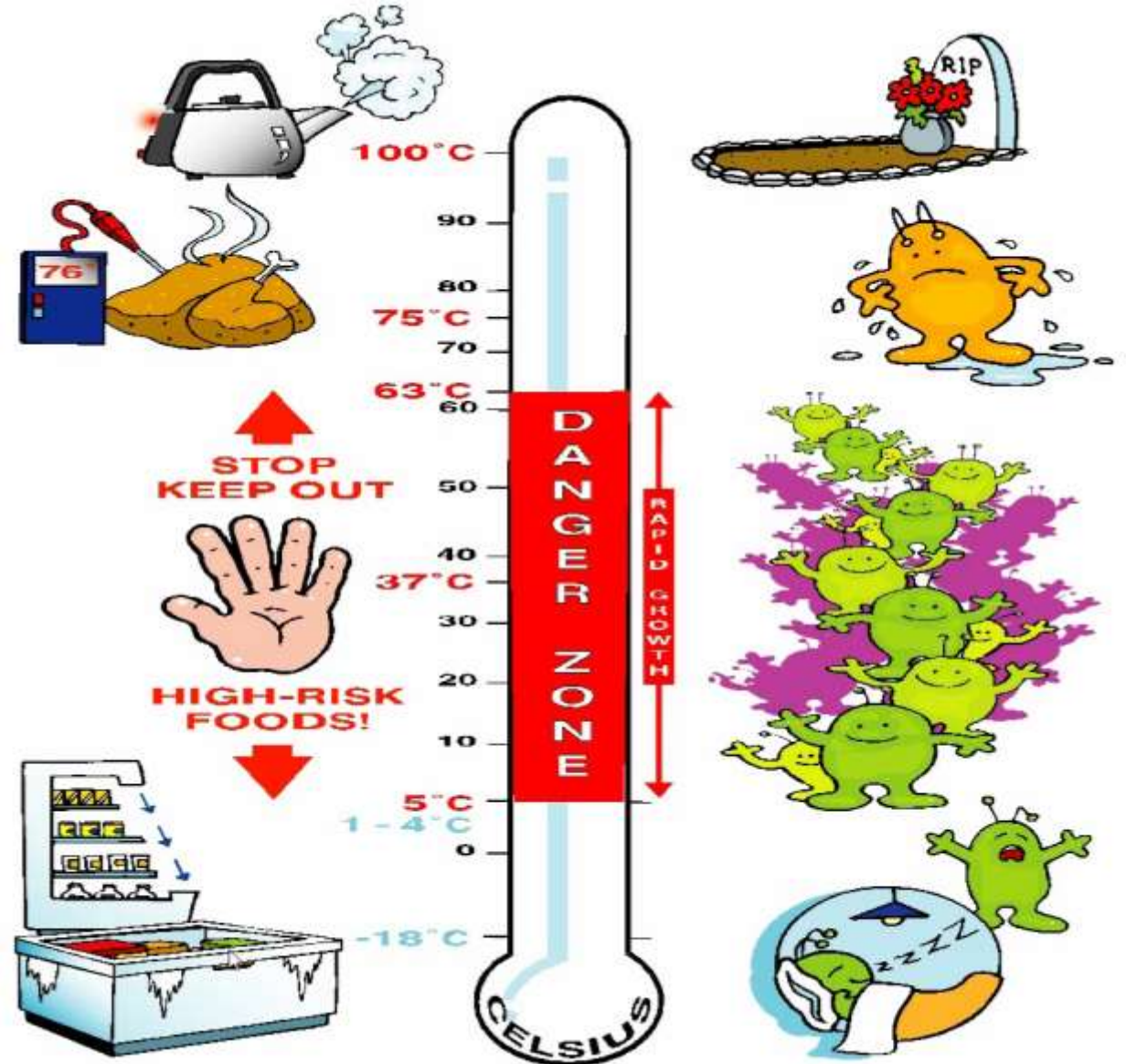
At -18 degrees C (point of freezing) bacteria will survive and go into hibernation, so if you defrost an item of raw meat it will still contain the pathogens

1 to 4 degrees C (refrigeration temperature)

Temperature danger zone **5 to 63 degrees C**. Any high-risk food, for example, being kept at this temperature range potentially has bacteria growth to large numbers. Ideal temperature for growth of bacteria is 37 degrees C. Anything lower or higher than this temperature slows bacteria multiplication. At 50-55 degrees C, bacteria starts to die and by the time we get to 63 degrees C, they are all dead

Food standards agency (FSA) and environmental health agency recommend cooking food to **75 degrees C**.

However, if you cook at 60 to 65 degrees C it is still quite safe because all the bacteria are killed



Rule of thumbs

2 Hour Hot Rule

- By law, all food which for whatever reason goes below 63 degrees C, has got to be sold within 2 hours.
- Or you can cool it down, chill it and use it the next day as a chill product, but not reheating it

4 Hour Cold Rule

- E.g. you've got some sandwiches (a high-risk food) inside of a chiller, which keeps temperature between 1 to 4 degrees. If the chiller breaks down, then all food inside will start to grow up in temperature, so then you've got 4 hours to sell that food.
- This is because within 4 hours bacteria can multiply quite substantially especially in a high-risk food kept in an ambient temperature

90 Minute Cool Down

- For example, you take meat out of the oven, then you are allowed to let it rest in a cool place in the kitchen for no longer than 90 minutes before you refrigerate it

Temperature measuring devices

Digital thermometer

- Gives an accurate reading of the internal temperature of the food product, such as meat
- We will be looking for an internal temperature of 75 degrees C as per the FSA.



Frozen storage

- Ensure you wrap food in the freezer to prevent:
 - Contamination
 - Freeze burn
- Frozen food must be stored at **-18 degrees C**
 - Clean and defrost thoroughly
 - Cover and label food
 - Keep food tidy
 - Do not over stock
 - Do not put any warm food in
 - **FIFO** – First in, First out. FIFO is a method of stock control, which ensures that all frozen food is used within date. New stock goes to the back of the freezer, and the older stock comes forward



Chilled storage

- Chilled food must be stored at 1 to 4 degrees C
- Clean and defrost thoroughly
- Cover and label food
- Keep food tidy
- Don't over stock
- FIFO – First in, first out method of stock control
- Do not put any warm food in
- Separate raw and ready-to-eat foods
 - Raw meat/ raw products at the bottom of fridge
 - Salad items go in the middle of the fridge
 - You put high-risk foods such as sandwiches, cooked meats etc. on the top shelf of the fridge
- Decant food from metal containers, so if you've opened a large tin of beans or meat for example always put it in a food safe container such as Tupperware container. Do not leave them in the original metal container because you will get metal contamination



Chilled and Frozen Delivery

If foods are delivered above accepted temperatures they must be rejected

1-4 C for chilled food

-18 C or lower for frozen food

Therefore, if you are responsible for accepting deliveries in of chilled and frozen food you need to always take above into account, because it is the first link part of the **food safety chain** and it comes from the supplier.



Thawing food

Check to ensure that food is properly thawed before cooking

Make sure there is no ice in the cavity

Easiest way to check if food is properly thawed is by using a temperature probe (always ensure you sanitise the pointy bit of the probe before use)

You can cook anything from frozen



Cooking

Cooking

- Always check that food is cooked thoroughly to 75 degrees C

Reheating food

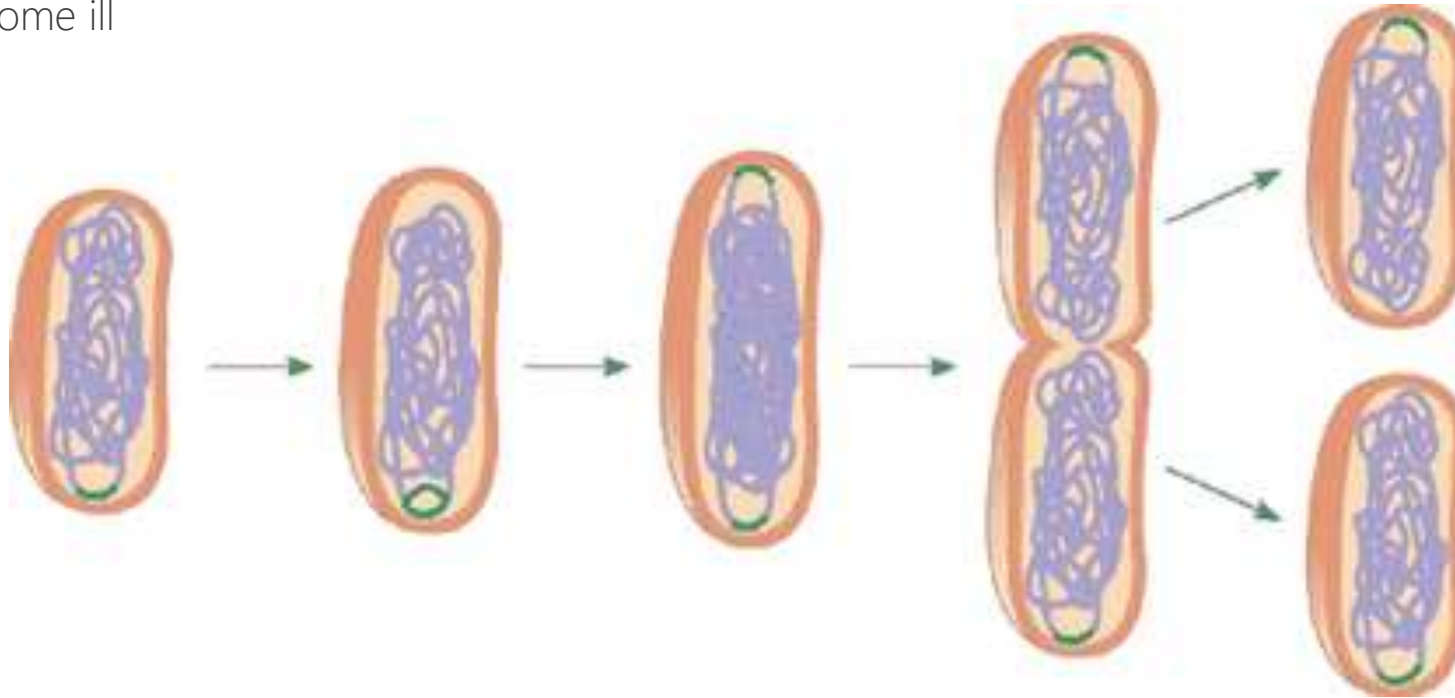
- can be done ONCE ONLY to a minimum temperature of 75 degrees C.

Hot holding

- When you are keeping food hot, for example, there are infrared lights which give top heat. These trays are kept on a heater that can be dry or wet heater, which keeps food hot from underneath.
- The hot holding temperature must be at or above 63 degrees C

Binary Fission

- Binary fission means doubling in size – under ideal condition of Food, Moisture, Warmth and Time, Pathogens will multiply every 10 to 20 minutes
- E.g bacteria will multiply in the following order 1,2,4,8,16,32,64,128,256 etc. at every 10 minutes under right conditions
- In 6 hours (less than a shift duration) a single bacteria will multiply to 6 billion bacteria cells. The human body needs only half a million to become ill



Spores

- Spores are resistant resting phase for certain bacteria.
- Eg under 0 degrees C, bacteria go into hibernation and turn themselves into a spore. It becomes a crusty shell on the outside while bacteria remains dormant inside
- Spores can survive high temperatures in excess of 200,000 degrees C
- Spores can survive chemicals such as sanitisers and disinfectants
- Spores can survive dehydration



Toxins

- Toxins are animals' poisons
 - Certain animals such as snakes produce venom like a viper or rattlesnakes. So will plants, as this is their natural way of protection against attacking predators.
 - Some bacteria produce toxins as well
 - Exotoxins – this is where bacteria grow in food, e.g. Staphylococcus aureus, which is our bacteria if we cough or sneeze over food
 - Endotoxins – this is where bacteria go into our gut, e.g Salmonella. The abdominal pain comes part from bacteria releasing toxins, but also from our immune system fighting against the bacteria cells

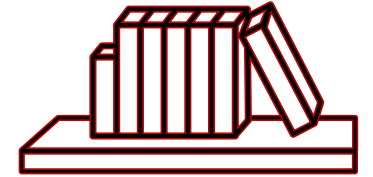
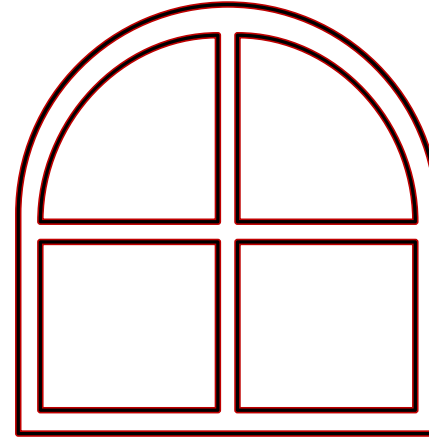
Unit 3 – Food Poisoning and Foodborne Disease & Personal Hygiene

PURPOSE

- Unit aims to increase trainee's understanding of food contamination and the importance of personal hygiene

LEARNING OUTCOMES

- Identify the main sources of bacterial contamination
- Give examples of action which should be taken to prevent the contamination of food
- State and explain the reasons for high standards of personal hygiene



Food poisoning

- Food poisoning is an acute illness caused by consumption of contaminated or poisonous food (acute illness means it happens very quickly)
- Incubation period – the time taken for when you first ingested the food to any start showing the signs and symptoms of food poisoning
 - Could be anything from 1 to 36 hours
- Duration of food poisoning
 - 1 to as long as 7 days



Personal Hygiene

You must maintain a high standard of personal hygiene to avoid contaminating food

- Protective clothing - always put on **hats first** when wearing protective clothing
- Overalls, jackets, trousers, aprons
- Hairnets, hats, neck coverings
- Safety shoes/boots
- Gloves



Personal Hygiene

You must maintain a high standard of personal hygiene to avoid contaminating food

- You must **AVOID** below to prevent build-up of food and dirt:
 - **Jewellery**
 - **Watches**
 - **Perfumes/heavy make-up**
 - **Nail varnish/extensions**



Personal Hygiene -Habits

You must maintain a high standard of personal hygiene to avoid contaminating food

- **DO NOT**
 - Smoke
 - Cough or sneeze over food
 - Pick nose
 - Spit
 - Bite nails or lick fingers
 - Eat in food area
 - Scratch
 - Touch face or hair



Personal Hygiene -Habits

You must maintain a high standard of personal hygiene to avoid contaminating food

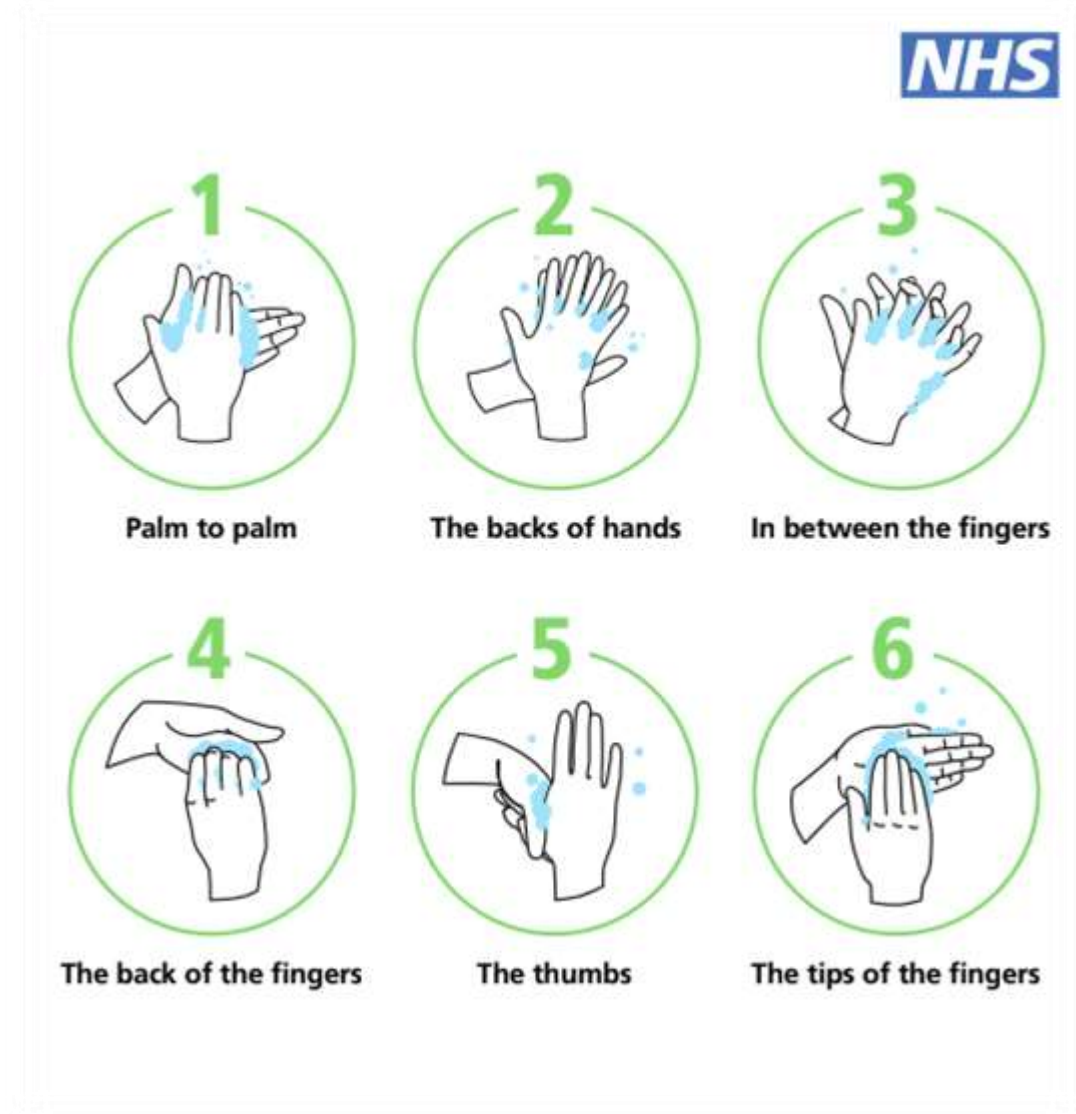
- **DO**
 - Cover cuts with a blue waterproof plaster
 - Keep nails short and clean
 - Wash hands regularly
 - Report illnesses and septic wounds



When to wash hands

How to wash hands

- After:
 - Entering food room
 - Using toilet
 - Handling raw food
 - Changing a dressing
 - Dealing with an ill customer
 - Touching hair, nose or face
 - Smoking, eating, coughing, sneezing, and blowing the nose
 - Cleaning/ handling waste
 - Handling cash money
 - Handling external packaging



Infected food handlers – case vs healthy carrier

- **Case** – A person suffering from the illness and has all symptoms characteristics
- **Healthy carrier** – An infected person who carries the food poisoning bacteria, but has no symptoms
- Ensure to report illness to the supervisor:
 - Diarrhoea
 - Vomiting
 - Foodborne disease
 - Skin infections

Types of contamination

Microbial

- Bacteria, viruses, moulds, yeasts and parasites

Chemical

- Disinfectants, sanitisers

Physical

- Glass, piece of plastic/ string, nuts, bolts, packaging materials, bones, shells, jewellery, cigarette ends, plasters

Allergenic

- Nuts, casein, soy

Cross-contamination

Cross-contamination is the transfer of food poisoning bacteria from a source to a high-risk food

The biggest source of cross-contamination is the HANDS

Direct contact cross-contamination – e.g raw chicken where you get all the contamination on the skin especially *compilobacter*, coming into physical contact with cooked ready-to-eat food

Indirect contact cross-contamination – e.g where the bacteria or the contamination goes from the raw product to the cooked product via intermediary (or vehicles as we call it), such as a chopping board, a knife ,a cloth or something similar

Drip – type of cross-contamination where you got drip, e.g raw meat juices going into a high-risk food like ready-to-eat foods (cake, sandwiches). This is why in a fridge, raw food is kept at the bottom.

Various problems with indirect cross-contamination like flies, birds, raw meat, raw fish, pets, rodents, packaging, bins. These are all sources of bacterial contamination.

Preservations

- Preservation methods remove one or more requirement for bacterial growth.
- High temperatures – method of food preservation
 - Pasteurisation (e.g milk, at 72.2 degrees C for 15 seconds, egg at 64.4 degrees C for 2.5 minutes)
 - UHT (ultra heat treatment) - 135 degrees C for 1 second
 - Sterilisation – Canning 121 degrees C for 3 minutes
- Low temperatures – method of food preservation
 - Freezer at -18 degrees C
 - Fridge at 1 to 4 degrees C



Preservations

- Pickling
 - High acid (i.e low pH)
- Dehydration
 - Drying
 - Salting
 - Brining
 - Sugar
- Vacuum Packing
 - Controlled Atmospheres
 - Smoking
 - Chemical Preservatives (Nitrates, Nitrites)



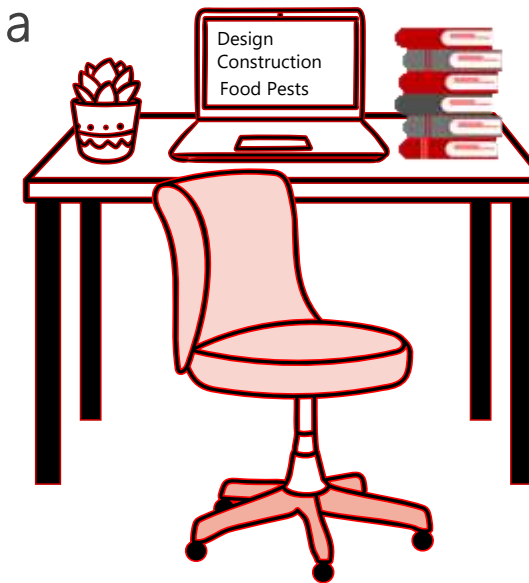
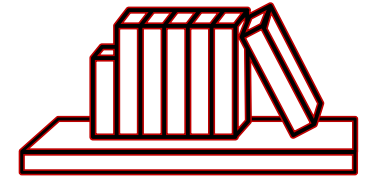
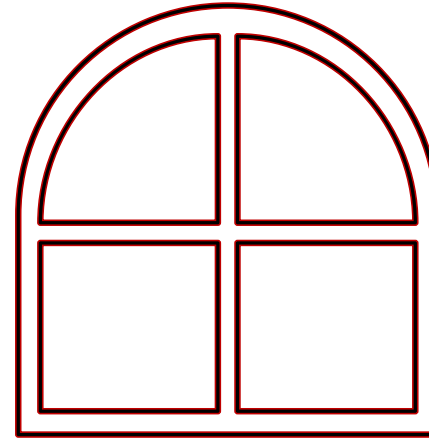
Unit 4 – Design and construction, Food Pests and Control

PURPOSE

- Unit aims to introduce trainees to the Construction of Food Premises and Pest Control

LEARNING OUTCOMES

- Demonstrate understanding of the standards required in a hygienic kitchen/ working environment
- State the 3 properties required of an internal structure
- Recognise the signs of Pest Infestation and know what action to take



Construction properties

- Impervious – this is a type of material which does not absorb any moisture and restricts the passage of water. So, finishes such as plastic and metal are classed as impervious materials. (soft wood, for example, is not an impervious material as it absorbs moisture)
- Easily cleanable – materials that are smooth and easy just to wipe over (have no cracks or difficult corners along their surface)
- Durable – long lasting materials that will not fall into bits when used for a period of time



Storage and disposal of waste

- Bins and waste are reservoirs of contamination
- You've got two types of bins in a kitchen
 - Internal bin
 - there should not be any accumulations outside the main bin, so everything must go into the bin
 - Must be cleanable and emptied frequently throughout the day (not at the end of the shift and certainly do not wait till it's overflowing)
 - External containers (outside bins)
 - Again, there shouldn't be any accumulations (as in bin bags/waste material/boxes with food or rubbish dumped outside the containers as this will attract pests)
 - Impervious base – i.e flooring should be made of something like concrete or tiles etc. for containers to be placed. Containers must not be placed straight on the soil or grass, as this is where pests tend to hide
 - Cleanable – easy to clean and disinfect, especially round the summer. Also ensure lids are closed at all times to prevent pests of getting access



Dates and Storage

- You've got two main dates stated in use in the UK food safety legislation
- Use by date (aka food safety date):
 - Legislative date in a way that if you break the law regarding use by, you can be prosecuted
 - Used by date is a food safety date (not used on perishable goods)
 - E.g if you put a food on a shelf on the 1st on September and its Use By date is 31st August, then you can get prosecuted
- Best before date (aka food quality date):
 - Not a legal requirement – in other words if you've got anything on your shelves when the EHP comes to visit, and you've got foods past Best Before date, you will just be told off and go on internal records but not be prosecuted
 - In the Hospitality Industry it shows professionalism to abide by the Best Before dates.



FIFO – First in, first out – method of stock control to stop goods go out of date

Pests

- Rodents, flies, cockroaches, birds, domestic pets must be kept away from the kitchen or anywhere near a food storage areas or food premises, because they carry plenty of infections
- Pests thrive if they can find food, moisture, warmth and shelter. They hide behind sinks fixed to pipes, behind the shelves, on the floor, behind the shelves.
- Everyone in the kitchen is classed as food handler, therefore it would be everyone's responsibility to keep pests away and check for one on a regular basis.
- Evidence of pests
 - Insects – live or dead insects, eggs/ larvae, damage, droppings, smell, debris
 - Rodents – live or dead rodents, droppings, noise, smell, smears and fur, damage, footprints, rat runs
 - Birds – live or dead birds, droppings, feathers, damage

Pests control - reasons

Disease – pests cause disease including food poisoning

Contamination – anything that is contaminated must be thrown out

Wastage – as a result of the contamination, since food is being thrown out

Damage – pests cause damage to pipes, electrical systems (especially rodents), rats can bite through solid concrete, pipe work, so you could have floods

Lost custom – if you are known for having pest infestation, you will not get customer footfall

Complaints and staff loses – at the end of the day if customers not coming in then you have no business, which results in staff resignation and complaints

The law – You must not have any pests on the premises and take every precaution necessary to ensure you don't have pest infestation

Pests control – how to prevent access

- Keep doors closed and check the framework of the door at the bottom to ensure there are no gaps there
- Look for any damage on the windows. Not just the obvious broken window, but look around the framework and ensure there's no holes or gaps
- Check around any plumbing – again no gaps or holes
- Check flooring for any damage
- However, if you have got this problem already then:
 - Physical methods
 - Ultraviolet, electronic fly killers, traps, sticky fly papers, mist nettings
 - Chemical methods – rodenticides, insecticides
 - You need to be qualified to be using chemical methods to avoid food contamination

If you spotted pests on premises



Inform manager/ line supervisor
Dispose of contaminated food
Protect all other food which has not been contaminated
After you've completed the above 3 steps, you may contact pest control

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Dispose of contaminated food

Protect all other food which has not been contaminated

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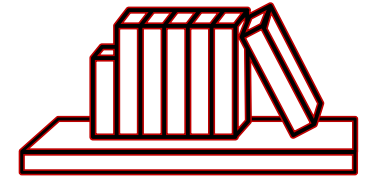
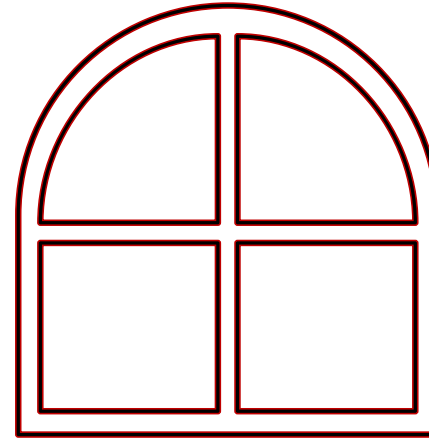
Unit 5 – Cleaning and Disinfection and Food Safety Legislation

PURPOSE

- Unit aims emphasises the importance of working in a clean environment and to raise awareness of the relevant legislation

LEARNING OUTCOMES

- Define and give examples of “Clean-as-you-go” and “Scheduled cleaning”
- Demonstrate an understanding of the uses of Cleaning and Disinfection chemicals
- Have an appreciation of cleaning procedures of premises, equipment and utensils
- Recognise your personal legal responsibilities as Food Handler



Cleaning

- The application of energy to a surface to remove dirt, grease, food particles
- Cleaning is not meant to kill or reduce bacteria
- Detergent - Chemical used for cleaning of dirt, grease, grime, food particles (again it does NOT kill bacteria)
- Disinfectant –used to reduce bacteria to a safe level (doesn't kill all bacteria 100 percent)
 - Chemicals disinfectant – such as bleach
 - Steam – Water at 100 degrees C is classed as disinfectant
 - Water at 82 degrees C – ideal disinfectant as its own liquid flushes bacteria away
- Sanitiser – combined detergent and disinfectant, which actually both cleans and reduces bacteria to a safe level
 - used more and more since the start of COVID-19 virus
- Sterilising
 - The process of destroying all microorganisms and their spores
 - It needs temperatures of at least 101 degrees C



Hazards from cleaning

- Cross-contamination
 - E.g if you clean in an area and use the same cloth you would clean the high-risk area first, then the raw food area after. If you did it the other way around, ie. Raw food and then high-risk food you will take raw food particles into the high risk area.
 - Ideally use disposable cloths preferably the blue roll towel -just wipe over and throw away!!
- Chemical contamination – chemicals getting into food
- Physical contamination – e.g from brush bristles, piece of cloth getting into food
- Failure to destroy pathogens
 - E.g. if you use sanitiser that needs to be diluted, you need to make sure you dilute it to the right level in order for it to destroy pathogens. Also, you must ensure it is in date as when it's passed Best Before date it is particularly useless in destroying pathogens
 - Tainting – e.g. you've got a strong odoured product that could taint food products

Clean-as-you-go

- Type of cleaning where you do there and then. For example, you make a mess, you then wipe it up and clean it down. It is not planned and it's a good hygiene practice.
- It reduces contamination and hence, food poisoning



Scheduled cleaning

- Type of cleaning where you have to adhere to a specific schedule. It is planned on a rota basis.
- The cleaning schedule says
 - what is being cleaned
 - who cleans it
 - when is it being cleaned
 - How is it going to be cleaned
- Type and amount of chemical being used
- Time you are going to give the chemical in contact with the surface
- What personal protective clothing you're going to wear
- Check record - it will all have to be checked and recorded by the line manager or supervisor
- Your signature and time of cleaning



Surfaces Requiring Disinfection

- **Food contact surfaces**

- Knives, tongs, other utensils
- Slicers/ Mincers/ Mixers
- Containers/ Chopping boards/ Work surfaces
- Production Belts

- **Hand contact surfaces**

- Handles
 - Doors/Refrigerators/ Freezers
 - Cupboards/Utensils
- Taps
- Switches

- Also the Cleaning Materials and Equipment must be cleaned – like mops, buckets etc.



Cloths

- We pay particular attention to cloths as they are a common source of contamination – so single-use, disposable cloths are highly recommended
- Good example is the blue paper towel roll as it is disposable, i.e. single use and then you throw it away



6-stage cleaning and disinfection



Double sink dishwashing

- This is another method of cleaning using double sinks. One bowl will contain hot soapy water (detergent) and the other bowl is water that's almost at boiling point (good enough to kill all bacteria)
- A lot of companies adopt this way of cleaning for its staff as it is effective in preventing contamination and food poisoning
- You start with cutlery and crockery:
 - Pre-clean – scraping everything into recycling container
 - Wash them in the detergent water
 - Put it into a rack and dip it into the water for about 30 seconds
 - Put the rack out to air dry



Order of cleaning



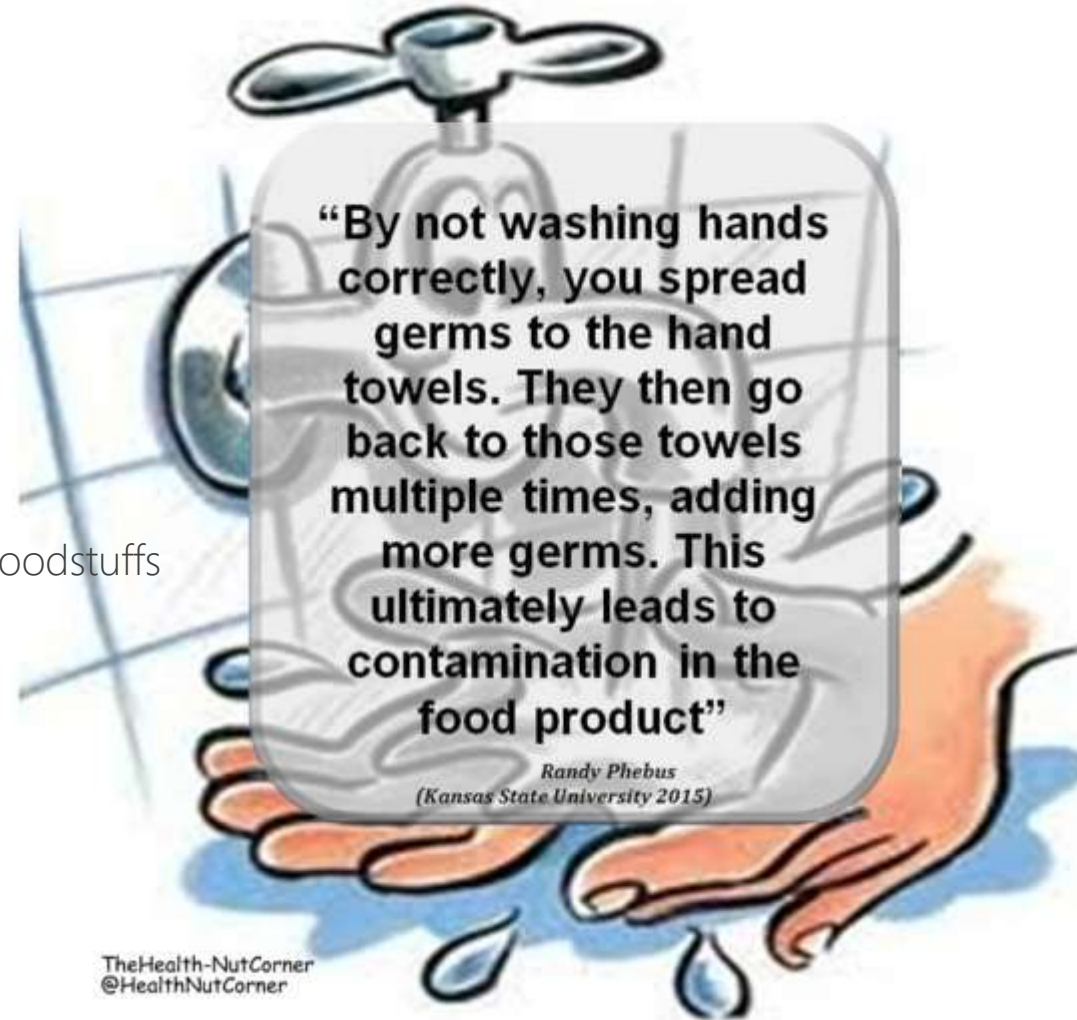
- Best using colour coding system where you use totally separate buckets and mops for the toilet area compare to everywhere else
- You also use colour coding with preparation boards
 - **Yellow** board – for cooked food
 - **Red** board – Raw food
 - **Blue** board – Raw fish
 - **White** board – sandwiches and cheese dairy products
 - **Green** board – vegetables and fruits
 - **Brown** board – soiled vegetables (vegetables that are grown in the soil)

Washing facilities

- By law businesses must have a hand washing sink
 - Hand wash facilities has as a minimum – hot and cold water, soap and drying facilities
- Separate food and equipment sink with hot and cold water
- In case of any problems with the equipment sink or water supply, for example hot water isn't working, you have to contact the supervisor

Food Safety Legislation

- What is Food Safety Legislation
 - Its purpose is to protect public health
- We've got various acts as follows:
 - The Food and Safety Act 1990
 - The Food Hygiene (England) regs 2006
 - EC 852/2004 Regulation on the Hygiene of Foodstuffs
- Penalties and prosecutions
 - Unlimited fine
 - Imprisonment up to 2 years



Environmental Health Practitioners (EHP)

- EHP take the role of Enforcement Officers
 - Provide food safety advice
 - Inspect food premises
 - Enforce legislation covering food
- Powers of EHP
 - Enter and inspect food premises at any reasonable time (in operations time)
 - Investigate outbreaks
 - Remove suspect food and have it destroyed
 - Serve improvement and prohibition notices
 - Initiate Prosecution for breaking food safety laws



Due diligence

- It is a defence to prove that the business took all reasonable precautions and all due diligence to prevent the offence
- In other words, due diligence means you've taken all reasonable precautions to ensure that food poisoning won't occur
- Businesses normally adopt due diligence called **Food Safety Management System (also known as HACCP – Hazard Analysis Critical Control Points)**
- All food businesses regardless of size (even if you were a hot dog vendor on the corner of a street or you were a 5-star hotel) you must have HACCP IN place or a Food Safety Management System
- What is it though?
 - Food Safety Management System consists of written records, such as
 - temperature log - freezer temperature/fridge temperature/cooking temperature/reheating temperatures
 - Maintenance contractors
 - Personnel Training
 - Cleaning schedules



Food handler requirements



End of learning modules

Link for the test could be found [here](#) or via the link below:

<https://forms.office.com/e/WnunzmjNsW>

You will have 60 minutes to complete 50 questions in this test. You need a minimum of 75% to obtain your certificate.

The certificate is CPD accredited and is valid for 1 year.

If you require assistance, please contact our Chefs & Curry team via email on info@chefsncurry.co.uk or by calling 02476 978 990

Thank you and good luck!

