

Maintain & Promote Hygiene in Food Storage, Preparation & Cooking



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Receiving of food Deliveries

In most busy kitchens, goods are received daily, and often arrive at the most inconvenient time. There are however, no excuses for accepting goods without first checking the checking the quality and the quantity being delivered.

Food is usually ordered by the chef or manager from a reputable supplier. The supplier will have been chosen by reputation, by a promise of continual high quality of food, by regular supply and a reasonable price.

Food is ordered using an order sheet. This will state how much of a particular commodity is required and by when. There will be no process on this sheet.

The receipt of foods into a food premises is the first control point in the production of food. There should be a policy at your workplace on the points to check. When food is delivered the delivery will come with an INVOICE or DELIVERY NOTE. This will list the above commodities and the price being charged. The persons making a delivery will ask you to sign one of them. DON'T until the following checks have been made.

TASK1

Collect 1 order sheet and 1 invoice from your company. Note the information shown on them. Put them into your file. They will be needed later.

The following **checks** should be carried out before a delivery note or invoice is signed:

1. Appearance **of the** Food

Do not buy or accept any raw materials if you think that even after sorting or processing they could be until for human consumption. It is illegal to have any food in a catering establishment not fit for consumption. Is the food of the correct colour, consistency, smell etc...

TASK 2

Describe how the following foods should look on delivery:

Fresh whole fish

Fresh lamb

Fresh Cabbage

Fresh Cauliflower

Tinned baked beans

Dried pasta

2. Packaging:

Check the following:

- Packaging must not be damaged.
- Tins should not be bent or 'blown' or rusty (a blown can is caused by a minute hole in the tin, the food to ferment and causing the tin to expand).
- Food is increasingly being 'Vacuum Packed'. Vacuum packaging should be checked for puncturing. This may be difficult as a pin-prick hole is difficult to spot.
- What is the 'date marking'? 'Use-by-dates are for foods that have a shelf life of less than 6 weeks. Check that the food is within the date marking.

3. Temperature:

What is the temperature of the food? It will be worth testing the foods randomly. Fresh food should be within the range 0c - 5c. Frozen food at or below -18c. It is an offence to deliver foods warmer than +15c. Food which has been thawed and then re-frozen must be rejected.

Question: How can you tell if a packet of peas has been thawed and re-frozen?

4. Pests:

Check food for pests such as flour and insects in vegetables.

5. Are the delivery and van clean?

If deliveries are incorrect tell your supervisor !

Storage of food

The correct storage of food is critical to the success of a food preparation business.

Commodity	Storage	Temperature
Leaf Vegetables	Likely to be covered in soil and bacteria. Stored away from other foods in a cool well ventilated area.	Ambient
	Must be stored in a cool, dark well ventilated area. Overexposure to the sunlight can cause the skins to turn green.	
Root Vegetables		Ambient
Salad Vegetables	Stored in the bottom of a cool area such as a fridge	5c
Other Vegetables	Stored in a cool well ventilated area	Ambient
Dry Goods	Stored in a cool well ventilated area.	Ambient
Eggs	Very susceptible to smells. Keep away from onions etc in a cold area	5c
Frozen Foods	Stores well wrapped in a freezer area. Keep frozen, cooked, and raw foods apart to stop cross contamination.	-18c
Dairy Food	Best kept at the top of a fridge away from other foods	5c
Fish	Keep fish wrapped in a separate fridge to other foods. If there is only on fridge it is important that the food is both well wrapped and away from other foods.	5c
Meats	It is important to keep cooked and raw meats apart. Both should be stored wrapped in a fridge. The raw meat must be at the bottom of the fridge.	5c

The Correct use of a Refrigerator/Cold Store

- Operate at 1c - 5c. ideally the temperature should be monitored regularly and recorded.
- Store raw and cooked foods apart.
- Cover all foods.
- Clean out the refrigerator regularly.
- Operate a good stock rotation scheme in the area. First in first out.
- Do not overload
- Do not open the door too often.
- Clean weekly using odour free cleaning agent such as soda crystals.

Safe Working Practices

Back injuries account for a high percentage of the accidents which occur in kitchens. Many result from lifting, moving or carrying objects the wrong way, or handling items that are too heavy.

What you can safely carry depends on the weight of the object, but also other equally important factors.

List these factors below, and give a brief explanation of each:

Safe storage also relates to good organisation and neatness. When storing deliveries it is important to consider where best to keep certain goods, i.e. heavy items near the floor, goods stored according to food type, passage ways kept clear.

What are some of the advantages of this good practice?

PESTS: The Signs

Gnawing, on food, packaging, containers, equipment, cables, shelves, etc.

What other signs of pest infestation are there?

Give 6 examples and a short explanation of each one:

Preventing Pest Infestation

Kitchen stores offer unlimited supplies of food to pests, but good hygiene practices can discourage them. Examples of this include the following:

- Checking goods at the time of delivery to ensure that pests are not transported.
- Keeping the store clean and tidy-Rotating stock.
- Removing waste promptly.
- Keeping food in closed containers.
- Ensure windows and doors close tightly.
- Ensure piping and ventilation ducts are boxed leaving no gaps.

Legal Requirements Relating to Pest Infestation

The food Safety Regulations 1995 require food to be protected from the risk of contamination at all stages including transportation, handling and storage.

Specific points include:

- Raw materials or ingredients should not be accepted if you know or suspect they are contaminated, unless the normal preparation or cooking processes will make them safe to eat.
- Food must be placed and / or protected so as to minimise the risk of contamination.
- Adequate procedures must exist to control pests.
- Hazardous and / or inedible substances must be kept in separate or secure containers and adequately labelled.

Food Storage Conditions

The aim of food storage is to keep the food in optimum condition until it is required for use. This means protecting it from:

Harmful bacteria - storing cooked and uncooked food separately.

Harmful substances - cleaning agents should be stored separately and in the original or a clearly marked container. Poisoned baits should only be moved by the pest control contractor.

Physical contamination - food should be stored in its original container where possible, or transferred to a suitable container with a tight fitting lid.

N.B. Vacuum wrapped food should be transferred once opened to a more suitable container or wrapped in cling film.

Pests - keep food covered, away from walls and ventilators and above floor level.

Unsuitable temperatures - frozen food in the freezers, chilled food in the refrigerator. Check fruit and vegetables for storage preferences.

Excessive humidity or dryness — too humid cause sugar to go lumpy, breakfast cereals to go soft and bread to become mouldy. Too dry cause sultanas etc... to shrivel.

Studies of food poisoning incidents by food safety experts have shown that the most common causes are as follow:

- Food prepared too far in advance.
- Food stored or held at room temperature for too long.
- Inadequate cooling or refrigeration.
- Insufficient reheating.
- Holding food for too long in a hot cupboard
- Cross contamination.
- Inadequate thawing.

All of these can occur if the food handler is not aware of the standards of good practice, and the reasons for them. Or in a kitchen which is not well organised and where the staff have few or no guidelines.

State what your responsibilities are under current food hygiene regulations, relating to the following:

Waste Bins:

Handling Food:

Cuts and grazes:

Hygiene Work Practices

There are many things to remember when working in a food environment, here are some of them:

- Never allow raw and cooked food to come into contact
- Keep knives and chopping boards for specific uses
- Thoroughly wash and sanitise utensils and equipment after each uses
- Check core temperatures using a digital thermometer
- Clean as you go
- Follow the rules of good personal hygiene

Requirements For Various Food Types

When cooking food it is important to ensure that the centre of the food reaches a temperature of _____degrees for a minimum of _____minutes. When following laid down cooking times ensure that the oven/grill etc. is at the correct temperature before cooking commences.

Ambient

There are no special requirements for ambient type foods. Therefore foods such as rice, flour, dried pastas and pulses can be safety stored at room temperature. Canned food should be treated as prepared food once opened and stored appropriately. Once ambient food has been prepared the normal rules apply.

Chilled

Chilled foods should be kept in the refrigerator or cold room for as long as possible, and should only be exposed to the kitchen temperature when require for preparation or cooking. For best results remove eggs from chilled storage approximately one hour before required.

Frozen

Care must be taken to ensure that meat and poultry are thoroughly defrosted before being prepared or cooked. This may take up to two days for large joints.

Frozen vegetables and pre-prepared dishes are usually cooked from frozen.

If you are cooking or reheating food that has been frozen the core temperature must reach a minimum of 70oC for at least 2 minutes.

Ice cream may kept in an ice cream conservator prior to service but must not be allowed to reach more than 2oC or it will begin to melt. By law it must not be re-frozen.

Cooked

Cooked food should be served as soon as possible. If it is required to be held then it must be held above _____ degrees C.

Holding times are generally determined by the type of food and the company policy. E.g;

- A souffle must be served at once or it will collapse.
- Most soups or casseroles can be kept hot throughout without the quality deteriorating.
- Most burger chains hold their burgers for a maximum of 10 minutes.

Food can only be held for service for a maximum of 2 hours, beyond this time it must be discarded.

Food that is cooked and intended for service later must be cooled within 90 minutes and placed in the refrigerator.

Main Contamination Threats

Food is cooked in order to make it more palatable and digestible, and also to kill harmful micro-organisms which may be present.

The greatest danger is food poisoning bacteria. There are literally millions of these present on food, yet they are completely invisible. The food looks, smells and tastes perfectly normal.

The symptoms of food poisoning can start within one hour of consumption, but may take as long as 5 days to show. The commonest symptoms are stomach aches, vomiting and diarrhoea.

The cause of the bacteria being present may be:

- Present on the food when it entered the kitchen. For example, salmonella and campylobacter are found commonly in the environment, in water, soil and sometimes therefore in raw foods such as eggs, poultry and meat.
- Through cross contamination caused by poor handling and storage.

What is meant by cross contamination?

What steps can a food handler take to minimise the risk of cross contamination?

- Carried by pests or dust through poor cleaning practices or lack of maintenance.
- Though poor personal hygiene.

Why are good standards of personal hygiene essential when handling and storing food?

Other dangers to food may arise from:

- Physical objects, watches, plasters, nuts and bolts etc.
- Chemical contaminants, from using inappropriate cooking equipment such as copper or aluminium pans for cooking fruits, vinegar and other acidic foods.
- Cleaning agents, poorly stored or labelled.
- Poisons in the food itself, e.g., rhubarb, leaves or kidney beans.

Bacteria which causes food poisoning prefer a _____, _____ environment which is _____ neither too acidic nor alkaline. Protein foods such as _____, _____ and _____ are favourite.

In ideal conditions some bacteria can double their numbers every _____ minutes. Most bacteria prefer a temperature range of between _____ and _____ degrees C, so kitchen are in ideal environment. Some bacteria's will grow between 5 and 63 degrees C, this range is known as the _____.

Above 63oC bacteria are rapidly killed, bellow 5oC most bacteria become inactive. True or False?

This is true, but there are exceptions:

Certain bacteria's form spores at high temperatures, Liked seeds they withstand difficult conditions, but begin to multiply as soon as conditions are favourable.

- *Listeria monocytogenes* can grow to dangerous numbers in chilled foods.
- *Bacillus cereus* are found in rice, cereals and vegetables and reactivate during long moist storage at warm temperatures.
- *Clostridium perfringens* also form spores. It occurs in the intestines of animals and humans, as well as in raw meat and poultry, in water and in the soil.
- *Staphylococcus* produce a toxin if allowed to multiply. Although the normal bacteria are destroyed during cooking, the toxins can survive. *Staphylococcus* occurs in infected cuts, sores, boils and inflamed throat conditions, on normal healthy skin, especially the hands and face and in the nasal passages.

Defrosting Food

- Defrosting food is best done in a refrigerator or thawing cabinet. The temperature range should be between ____ and ____ degrees C to allow the ice crystals to melt slowly, causing minimum damage to the structure of the food.
- For a small cut of meat or chicken allow approximately _____ hours, and double this for medium to large joints.

Defrosting of small items of food can be done in a microwave with the appropriate programme.

Food which is not thoroughly defrosted before cooking presents a serious hygiene risk. The centre of the food is unlikely to reach a safe temperature in order to kill bacteria by the time the outside is cooked. It is even possible for ice crystals to remain.