



The purpose of cleaning, disinfection and sterilising in food hygiene is to prevent both food poisoning and spoilage.

Definitions

- *Cleaning* Any process of physical removal of soil, i.e. any matter present that, should not be part of an item. This matter can contain microbes that are responsible for food poisoning or spoilage.
- *Disinfection* The elimination of microbes that cause disease or their reduction to safe levels. This can be done by removal (see 'cleaning' above) or by MUing them with heat or chemicals.

Disinfectant Chemical that has a lethal action on microbes.

Sanitizer Term for disinfectant often used in the food industry.

Microbe Single celled micro-organism. Food Production Areas

Cleaning is the process, which removes those microbes from contact with foodstuff that can cause poisoning and spoilage, or the dirt that protects those microbes. Areas where food and drink are prepared require the highest standards of hygiene.

CLEANLINESS IS THE FUNDAMENTAL PROCESS OF FOOD HYGIENE

Cleaning Agents

- *Water* The simplest cleaning agent of all. Applied under pressure it cleans hard surfaces such as the floor and walls in delivery areas. Water also rinses out dirt removed from a surface by another cleaning agent.
- *Abrasives* or scouring cleaners. Mostly used for cleaning enamel and ceramic cleaners including tiles. Abrasive powders are much coarser than liquids, creams or pastes, but all can damage surfaces.
- Alkali detergents also called hard surface cleaners. Use for heavier or more specialised tasks. They can corrode if not used with care.

Chemical disinfectants - will kill bacteria, which survive the cleaning process. They need time to kill the bacteria and may be inactivated by waste food materials, by the fabric of cleaning cloths and by the materials of some surfaces.

- *Detergents* made from chemicals mainly derived from petroleum. Mixed with water, they penetrate greasy surfaces. The dirt is then coated with the detergent preventing the dirt from reforming and sticking to the surface again.
- *Neutral Detergents* also called general-purpose detergents. Suitable for washing dishes, mopping floors and similar routine tasks.
- Sanitisers products designed both to clean and disinfect surfaces. Intended for 'clean-as you-go' use, sanitisers do not replace the need for thorough washing, and where necessary the use of disinfectants. Powder sanitisers dissolved in hot water, require a final rinse, and are not suitable for use on certain metals. Liquid sanitisers are diluted before use. They must be left to dry, not rinsed off.
- Soaps made from fats mixed with caustic soda. Soap can break up most dirt, but leaves a scum, so it is unsuitable for general cleaning. Disinfectants are added to some liquid soap for washing hands.
- *Wipes* products designed to provide a quick and convenient way of cleaning food temperature probes, small utensils and for wiping food preparation surfaces on a 'clean-as you-go' basis. Use once only then discard.

Using Cleaning Agents

- *1.* Always wear protective clothing and protective gloves. Cleaning agents can irritate and burn the skin.
- 2. Always wash hands after doing any cleaning
- 3. Read the instructions carefully
- 4. Never mix products
- 5. Do not pierce an aerosol can; even if empty
- 6. Do not make up disinfectant solutions until you need to use them. They can lose their effectiveness even in a few hours. *Manufacturer's instructions* will explain dilution ratios, how much time to give the agent to work, how to rinse dirt and cleaning agent from the surface, how to store the cleaning agent, safety warnings.

Storing Cleaning Agents

- 1. Keep away from all foodstuffs
- 2. Close all containers firmly after use
- 3. Store containers upright
- 4. Always store in a correctly labelled container

Store in a well-ventilated cupboard or room, away from fire risks.

Instructions on cleaning agents

Exercise: Read the labels on 5 different chemicals used in your workplace kitchen/counter area, and complete the table below.

Chemical	Uses	Caution/Warning signs

Types of Cleaning Agents

The following are the main types of cleaning agents. Please state what they are used for.

- General purpose (or neutral) detergents
- Sanitisers

• Sanitiser wipes

• Hard surface cleaners

• Solvents

• Abrasives

Cleaning Surfaces

What cleaning methods & materials would you use to clean the following work surfaces:

Surface	tethods & materials would you use to clo	Cleaning Method
Surface	Cleaning materials	Cleaning Method
Metal		
Wall Tiles		
Painted		
<u>Surfaces</u>		
Glass		
01000		
Floortiles		
<u>Vinyl</u>		
The sector 1		
Laminated		
<u>Surfaces</u>		
Cupboards		
<u>Shelves</u>		
Drawers		
<u></u>		
Sinks		
<u>Handbasin</u>		
Draina		
Drains Culling		
Gullies		
Traps		
<u>Overflows</u>		
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Food Production Equipment

Before starting to clean any food production equipment it is important to be aware of the safety points regarding each machine:

- 1. Always isolate the machine from the power supply. Turn off at the mains or unplug.
- 2. Do not clean dangerous machinery unless you are over 18 or you have been trained correctly <u>and</u> are supervised.
- *3.* If you come across any faults tell your supervisor.
- 4. Generally allow equipment to cool before cleaning.
- 5. A detergent solution is suitable for equipment or any part of the equipment, which is not heavily ingrained with burnt food, dirt or grease. This would generally apply to bain maries and hot cupboard, steamers, the top and sides of brat pans, the front of oven doors and so on.
- 6. Pay particular attention to runners and sliding door channels. Remove shelves from ovens where you can.
- 7. Where necessary use a degreasing agent and a scouring pad to remove heavy deposits.
- 8. After cleaning, rinse with fresh very hot water.

Cleaning Food Production Utensils

IT IS ESSENTIAL TO USE A MEASURED AMOUNT OF CLEANING AGENT IN THE WATER. OVERUSE OF WASHING UP LIQUID CAN CAUSE DERMATITIS.

- **Pots & Pans** Allow to soak if heavily soiled. Clean in hot soapy water and rinse in hot water and place upside down to dry.
- <u>Stainless Steel</u> Requires the minimum of cleaning. Wash in diluted detergent.
- <u>Cast Iron</u> Frying pans etc. Do not wash with water. Clean with a dry cloth or absorbent kitchen paper. Use salt as a scouring agent. If washed by accident, dry and coat with oil.
- <u>**Copper**</u> Wash in hot water with detergent. Remove stuck on food with a brush or soft cloth. NEVER use scourers or metal wool.
- <u>Aluminium</u> Pans should be washed in hot water with detergent and scrubbed clean with a cloth or hard bristle brush. Rinse and dry.
- <u>Plastics</u> Generally can be washed in hot water with detergent.
- <u>Wood</u> Never allow wood to stay in contact with water for a long period as it may warp or split. Allow wood to air dry.
- <u>Can openers</u> Be careful of the blade. Should be washed in hot water with detergent and air-dried.

<u>Cleaning Equipment</u>

What cleaning methods and materials would you use to clean the following equipment?

Steamer:

Cleaning Materials	Cleaning method	

Ovens/ Micro wave Ovens:

Cleaning Materials	Cleaning method
Cicaling Matchais	Cleaning method

Hobs & Ranges:

Cleaning Materials	Cleaning method

Griddles/Grill/ Salamanders:

Cleaning Materials	Cleaning method

Fryers:

<u></u>	
Cleaning Materials	Cleaning method

Bain Marie/Hot Plates:

Cleaning Materials	Cleaning method

Food Processor:

Cleaning Materials	Cleaning method

CHEFS TIPS!!!

STEAMERS:

After each use, remove any food residues. When steamer is not in use, leave the door slightly open so that the air inside remains clean.

GRILLS:

When cleaning the inside of a gas-operated grill, take care not to damage the burner plaques. Do not attempt to clean these - any deposits will burn off.

GRIDDLES:

To remove accumulated carbon, use a scraper and fine grit griddle brick. Occasionally, to bleach the plate, wipe vinegar over the cold surface.

VEGETABLE PREPARATION MACHINES:

Rinse the bowl by filling with hot water and switching on for a few moments. Whatever the attachment, clean it by hand using washing up liquid rather than in a dishwasher. This will help the machine to last longer. The blades on the slicing discs, the plates on the julienne discs and the graters wear out with use. Change them every so often to ensure high quality cutting. Sharpen smooth daily using a sharpening stone.

STAINLESS STEEL:

To keep the attractive, shiny finish of stainless steel, clean regularly and often by rubbing over with a damp cloth and mild detergent Rinse and dry. If there is a build up of grease or stubborn deposits on the surface, use a soft-cleaning pad. Rub in the direction of the grain.

ENAMEL FINISHES:

You find these on the fascia panels of some grills and ovens. Clean with general-purpose detergent solution. Never use oven cleaners, aerosol cleaners or other such products, especially those, which may have a high caustic content. They can cause serious damage or discoloration to the enamel finish, particularly when the appliance is hot.

ALUMINIUM:

Do not use a dishwasher to clean aluminium fittings from equipment. The aluminium will get tarnished.

Generally a cleaning schedule is drawn up to make sure that every area and piece of equipment receives the attention they require.

This may specify that the floor in the cold roonrand walk-in freezer is washed daily, while the walls and shelves are washed weekly.

- 1. Use cleaning equipment and procedures, which will collect the dirt effectively and not spread bacteria from one surface to another. Wet methods mopping, scrubbing with hot detergent and wiping with a damp cloth f ollowed by thorough rinsing are generally best for kitchens.
- 2. Keep cleaning cloths separate from those used for other purposes using a different colour will help. Cloths used for wiping a spill off the floor should never be used for cleaning food surfaces. There are often more germs on a damp cloth than anywhere else.
- 3. Display warning signs.
- 4. When high areas are being cleaned use safety steps.
- 5. Wear protective gloves and protective clothing.
- 6. Change cleaning and rinsing solutions regularly. They will not do a proper job if you try to economise *or*, perhaps, to save yourself time. Rinsing water should be very hot!
- 7. Pay special attention to ledges, service pipes, ventilation grills, drainage and floor channels. Equipment that is on castors should be pulled out, so that you can clean the floor underneath properly.
- 8. Do not remove warning signs until the floor is dry.

<u>Develop a cleaning schedule</u> for your establishment's kitchen which includes the following information:

- Equipment to be cleaned and how often (e.g. griddles/fryers etc..)
- Production areas to be cleaned and how often
- Appropriate cleaning materials to be used
- Floors, wall tiles and storage areas how often? .etc. . .

Cleaning Schedule for

TYPES OF UTENSILS

Food production utensils are grouped according to what they are made from. Describe and give examples of each group in the table below.

Utensil made from	Description and examples	
Stainless metal		
Coated Metal		
Wood		
Plastic		
Porcelain		
Earthenware		
Glass		

STORING UTENSILS ?

List the main points to consider when storing utensils:

CLEANING FOOD PRODUCTION UTENSILS

What are the two different methods for washing kitchen utensils?

Describe each method:

1.	
2.	

List 4 different types of kitchen utensils that are used in your work place and describe what special care may be required when cleaning, drying & storing them.

1.	
2.	
3.	
5.	
4.	

DEALING WITH PROBLEMS

Some faults with equipment are easy to spot, e.g. a damaged blade, or a missing part; or you may find that the machine does not work after re-assembling. If you think that you have put everything together properly and still it does not work correctly, this suggests a fault!!

What are the "do's" and "don'ts", which you must consider upon identifying a faulty piece of equipment?

Do's	Don'ts