

Booklet for Hygienic Training

Chapter 1: Cross Contamination



☞ **Compact GUIDELINE** to avoid **Cross-Contamination**, designed to instruct food business operators and employees in catering sector

Preface

The implementation of hygiene measurements is essential to produce high quality food in order to keep its sanitary innocuousness upright.

Food hygiene aims to reduce the risk of food poisoning, associated with adverse health effects in consumers and food borne outbreaks. In order to guarantee good food hygiene, all levels of food production and food processing, from primary production until the delivery of finished products, have to be considered.

Food Safety Managements Systems, based on the principle of HACCP include several indispensable procedures to reduce different kinds of hazards.

This booklet concerns different measures to minimize the hazard of Cross Contamination.

Training Concept for food business operators



CROSS-CONTAMINATION

What is Cross-contamination?

→ **Bacteria** are **spread** between food, surfaces or equipment.



Where do bacteria come from?

- Harmful bacteria often come from **raw meat/poultry, fish, eggs** and **unwashed vegetables**.
So it is especially important to handle these foods carefully!
- Other sources of bacteria can include:
 - **staff** • **pests** • **equipment** • **cloths** • **dirt** • **soil**

When can it happen?

- It is **most likely** to happen when **raw food** touches or drips onto **ready-to-eat food**, equipment or surfaces or when harmful bacteria from staff, pests, equipment etc. are transferred to food



Why do we have to prevent it?

- Because Cross-contamination is one of the **most common** causes of **food poisoning**





A. How to **prevent** crosscontamination



1. Clean and disinfect work surfaces and all preparation tools thoroughly before starting food preparation



2. Use different equipment (including chopping boards and knives) for raw meat/poultry and ready-to-eat food



3. Wash your hands before preparing food



4. Store and keep raw and ready-to-eat food apart at all times



5. Store different raw food separately from each other



6. Use separate cleaning materials, including cloths, sponges and mops for raw and cooked food



... you should also protect food from **'physical contamination'**
- where objects get into food, e.g. broken glass or pieces of packaging

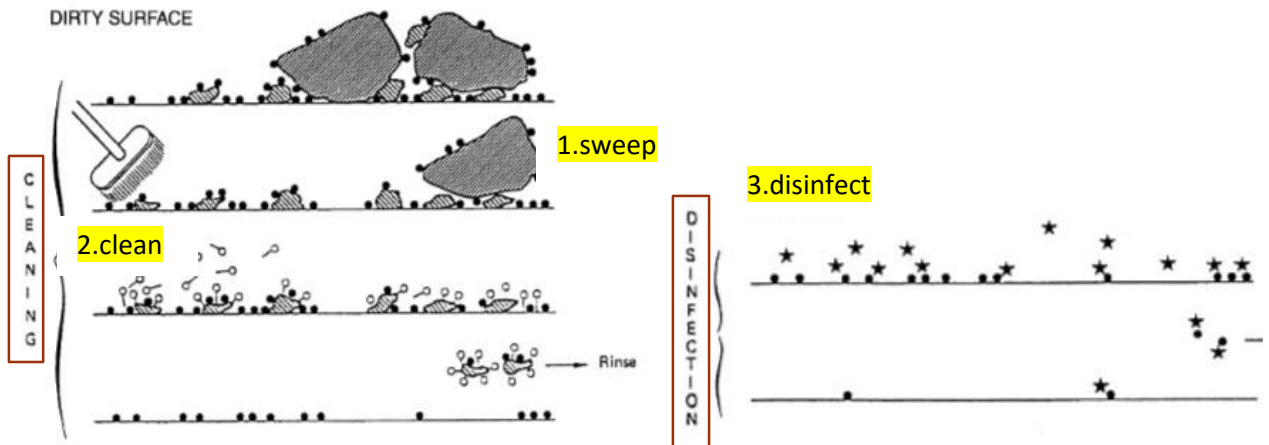
...you should also protect food from **'chemical contamination'**
-where chemicals get into food, e.g. cleaning products, residuals or pest control chemicals



B. How to effect adequate cleaning

- **before** working

CLEANLINESS



Even if there is **no visible dirt** on the surfaces or working tools, they can be **contaminated!!!**



Make sure that eventual **residuals of cleaning agents** get effectively **removed after sanitation!!!**



C. How to ensure a good hand hygiene

1. When do you have to wash your hands?



Before touching or handling any food



After going to the toilet



After every break



After touching raw meat, poultry, fish, eggs or unwashed vegetables



After touching a cut or changing a dressing



After touching or emptying bins



After cleaning



After touching phones, door handles, cash registers, money ...

2. How do you wash your hands correctly?



D. Separation of different food types



Keeping raw and ready-to-eat food separate is essential to prevent harmful bacteria from spreading



Vegetables and fruit



Raw poultry and chicken



Raw meat



Raw fish and seafood



Cooked meals



Bakery



Dairy

6

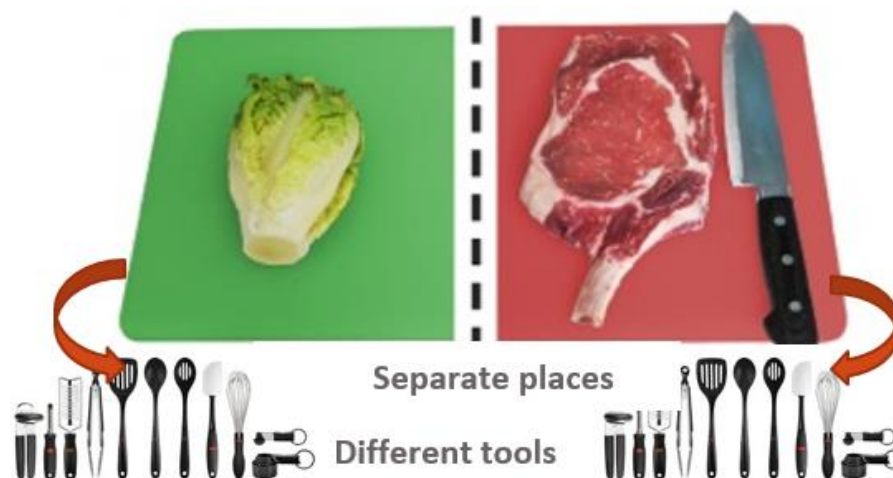
Separation at food purchase and delivery

- ☞ If possible, **plan arrival** and **delivery times** so that raw foods arrive/are delivered at different times to other foods.
- ☞ If you make your purchases directly at the shop, make sure it is kept at the **correct temperature** when you transport it and that **raw** and **ready-to-eat food** is **kept separate**.
- ☞ **Unload** deliveries **in** a **clean, separate** area. **Remove outer packaging** and throw it away.
- ☞ Before you do this make a note of any specific cooking instructions, labelling or ingredient information (that sometimes is just provided on the outer packaging), if you need to.

Separation principles for food processing

- Separation **in place**, if there is **enough working space**, ensure that:
 - a. different food types (poultry, meat, raw vegetables...), raw food and cooked „ready to eat“ meals are processed on **different working places**
 - b. different food types (poultry, meat, raw vegetables...), raw food and cooked „ready to eat“ meals are processed by **using different kitchen tools**
 - c. that **equipment is never passed** between working places, without being cleaned properly before

☞ Harmful bacteria from raw meat/poultry can spread from chopping boards and knives to other foods



7

- Separation **in time**, if there is **not enough working space**, ensure that:
 - a. different food types (poultry, meat, raw vegetables...), raw food and cooked „ready to eat“ meals are processed at **different times** with **different kitchen tools** that are **cleaned the tools** in between the operating processes



Never use the **same chopping board** or **knives** and other tools for preparing **raw meat/poultry** and for **ready-to-eat food** (unless they have been thoroughly cleaned and disinfected in between).

Please also consider...



Do **not wash** raw meat or poultry.

Washing meat does not kill bacteria but it can splash harmful bacteria around the kitchen and cause contamination



Do **not use the same equipment** with **moving parts** (e.g. vacuum packing machines, slicers and mincers) for both raw and ready-to-eat food

To clean this equipment effectively, it needs to be taken apart and this can be a complex process



When **preparing meat/ poultry** on a **grill** be careful when adding raw meat! Make sure it does not touch or drip onto the already cooking food

Bacteria could spread from the raw meat to the other food and stop it being safe to eat

How to avoid physical and chemical contamination

Therefore, please

- ☞ **Keep food covered:** This helps to stop things falling into the food
- ☞ **Make sure you control pests effectively:** This is to stop insects, droppings etc. getting into food.
- ☞ **Make sure that any chemicals you use to control pests are used and stored in the correct way and clearly labelled**
- ☞ **Follow the manufacturer's instructions on how to use and store cleaning chemicals.** Store cleaning chemicals separately from food and make sure they are clearly labelled: This is to prevent these chemicals getting into food.
- ☞ **Always clear and clean:** Keeping surfaces clear and clean will help prevent chemicals and objects getting into food
- ☞ **Repair or replace any damaged equipment or utensils, as loose parts may get into food by accident.**
- ☞ **Avoid glass in the food operating facilities:** This helps to prevent broken glass getting into food

Storing different food separately

Ideally, store **raw** and **ready-to-eat food**...

- in **separate** fridges, freezers and display units.

If they are **in the same unit**, due to a lack of refrigerators or space...

- store **raw meat, poultry, fish** and eggs **below** ready-to-eat food.
- keep **washed fruit** and **vegetables** separate from ready-to-eat food and **above** raw meat.

ALWAYS COVER cooked foods and other raw and ready-to-eat food!

☞ Especially when storing semi-processed (cut, sliced), cooked or ready-to-eat products, preferably use closable containers



Separated

Closable

Containers



- Do **not** use **dirty** containers at all
- Make sure that **plastic boxes** are **washed, disinfected** and **dried** between use
- Check the manufacturer's instructions to **see if the covering is suitable** for what you are using it for
- **Never re-use foil, cling film** or **freezer bags** and do not store food in opened tins.



When defrosting...

- keep foods that are **defrosting in the fridge** in a **covered container, below** ready-to-eat food, **or** in a **separate** area of the kitchen away from other foods



E. Correct handling of cloth



Cloths can be one of the **top causes** of **cross-contamination** in the kitchen! Their safe use is essential to prevent bacteria from spreading



TO ENSURE:



Use disposable cloths wherever possible and throw them away after each task.



Always use a new or freshly cleaned and disinfected cloth to wipe work surfaces, equipment or utensils that will be used with ready-to-eat food.



Take away re-usable cloths for thorough washing and disinfection after using them with raw meat/poultry, eggs or raw vegetables – and surfaces that have touched these foods.



If using re-usable cloths, make sure they are thoroughly washed, disinfected and dried properly between tasks (not just when they look dirty)



Ideally, wash cloths in a washing machine on a very hot cycle. A suitably high temperature can be obtained using a hot cycle of 90°C.



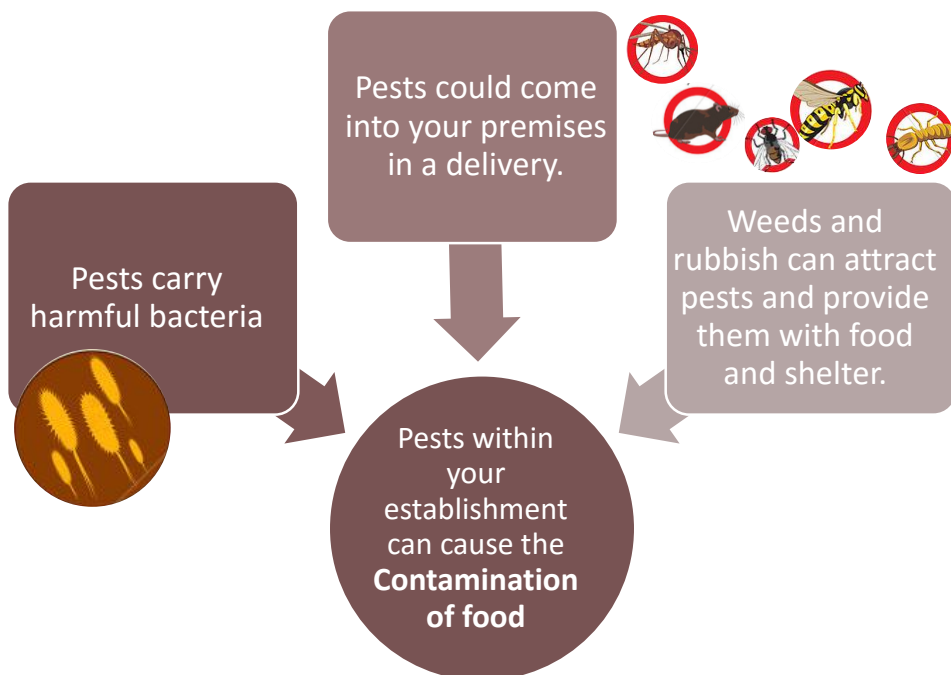
- Using **dirty cloths** can **spread bacteria** very easily
- If food or dirt is still on the cloths, this will prevent the disinfection process from being effective
- Cloths that are **not dried properly** can **increase** the **risk** of bacteria
- **Hot wash cycle** will clean the cloths thoroughly and **kill bacteria**



F. Pest Control

Effective pest control is essential to keep pests out of your premises and prevent them from spreading harmful bacteria.

What harm do pests bring to YOUR food business?



Never let **pest control** baits, sprays and other **chemicals** come **into contact with food**, packaging, equipment or surfaces, because they are likely to be **poisonous to people**.

Signs	Pests to be suspected
<ul style="list-style-type: none"> ○ Small footprints in dust, droppings, holes in walls and doors, nests, gnawed goods or packaging 	<ul style="list-style-type: none"> ○ Rats or mice
<ul style="list-style-type: none"> ○ Bodies of insects, live insects, webbing, nests, droning or buzzing, maggots 	<ul style="list-style-type: none"> ○ Flies and flying insects e.g. moths
<ul style="list-style-type: none"> ○ Eggs and egg cases, moulted 'skins', the insects themselves, droppings 	<ul style="list-style-type: none"> ○ Cockroaches
<ul style="list-style-type: none"> ○ Feathers, droppings, nests, noise, the birds themselves 	<ul style="list-style-type: none"> ○ Birds
<ul style="list-style-type: none"> ○ Moving insects, particularly in dry food, small maggots 	<ul style="list-style-type: none"> ○ Beetles weevils



Take preventative measures:

- *Make sure no food or dirty plates etc. are left out at night and avoid the accumulation of food residues and waste*
- *If windows are openable, implement fly screens and always close doors behind you*
- *Implement traps for flies, moth etc., also to monitor how strong the pest pressure is*



Keep an **open eye** on your work place and **act**

Everybody working within the food operating business **can contribute** to the **prevention of contamination!**

Therefore, please **keep your eyes open** and in case you notice any **inadequacy** please try your best to eliminate them, by **taking immediate action**



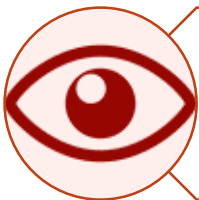
If you notice **dirty cloths** in the kitchen, **remove them** for cleaning immediately or throw them away.



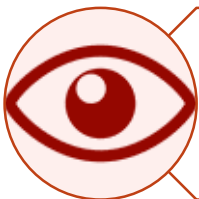
If you think, that other employees have **used a dirty cloth**, please **wash, disinfect and dry** any equipment, work surfaces or utensils it has touched and **throw away** any food that might have been contaminated.



If you think that ready-to-eat food has **not been kept separate** from raw food **throw away** the food, please **re-organise** delivery times, storage and food preparation or ask your employer to do so



If you find **pests or signs of pests**, **take action** immediately or/and **inform your employer** as soon as possible



If you **find foreign objects in food**, that should not be in there (glass pieces, patches, plastic particles etc.) **reject the delivery** and **inform your employer** immediately. In case, that those objects might have been already within the raw material **contact your supplier** immediately.

👉 **Compact GUIDELINE** to avoid **Cross-Contamination**, designed to instruct food business operators and employees in catering sector



The implementation of hygiene measurements is essential to produce high quality food. As the employees are the direct key for an efficient realization of all of them, their advisory instruction through training sessions is crucial.

This booklet concerns different measures to minimize the hazard of Cross Contamination.