

# Preventing cross contamination in your food business

## New thinking on food hygiene

Scientific research suggests that methods traditionally used to control cross contamination are not as safe as previously thought. The Food Standards Agency has produced guidance which is based upon this research. The guidance states that the safest and most reliable way to prevent cross contamination from raw foods to ready-to-eat food is by introducing complete physical separation. This would mean having completely separate equipment, food preparation areas and storage.

This guidance leaflet is based upon the text of the latest version of the Food Standards Agency's *CookSafe* manual and has been produced by Glasgow City Council to inform Food Business Operators (FBOs) of the ways in which they can keep their customers free from food poisoning. It also explains changes to the way in which food hygiene inspections will be carried out and how the current law will be enforced.



## *E. coli* O157 – What is it and why does it matter?

*E. coli* O157 is a type of food poisoning bacteria which has caused major outbreaks in Scotland in 1996 and Wales in 2005. It can occur naturally in the intestines of animals and may be present on a range of raw foods. It is a particularly dangerous organism because:

- it can lead to serious untreatable illness and even death
- it is reported to have a very low infective dose (less than 100 bacteria can cause illness)
- it has the ability to survive refrigeration, freezing and environments which have a low pH or reduced water activity.

It is known that *E. coli* O157 which is present on raw foods can be transferred to ready-to-eat foods by means of cross contamination. If it is present on food which is consumed, it may cause serious illness

## What “Cross Contamination” means

Cross contamination occurs when harmful bacteria are transferred from contaminated food to uncontaminated food. This can occur in two ways:

- By **Direct Cross Contamination** – contact between raw food and ready-to-eat food during transport, storage or preparation
- By **Indirect Cross Contamination** – spread of bacteria from raw food to ready-to-eat food via food handlers, equipment or surfaces. For example, indirect cross contamination via refrigerator door handles, knives, chopping boards, work surfaces, chef's cloths or cleaning cloths.

## Raw Foods

The following raw foods present a potential source of cross contamination and should be handled with care:

**Raw Meat** including beef, pork, lamb, chicken, turkey and game;

**Vegetables and fruit** that have not been labelled as ready-to-eat. Particular care must be taken when handling raw vegetables which are visibly dirty or which may have been in contact with soil

## What has changed and how will it affect your business?

Research suggests that many of the traditional measures used to control cross contamination are not as reliable as we once thought. As a result, Glasgow City Council food safety officers will look very carefully at your food operation during your next inspection. They may require that you make changes. In some instances, you will be required to do so urgently.

**Please remember that Council inspectors have the authority to stop certain unsafe activities from taking place in your business and in certain circumstances they can close your business. They could also seize food which poses a risk to consumers.**

This leaflet is designed to provide you with advice on the changes you may have to make before your business is inspected. If you wish to discuss any issues, please contact us – see contact details on Page 4

## Personal Hygiene

People working in your business can contaminate food or spread contamination from raw or ready-to-eat foods. These risks can be controlled by good personal hygiene practices – especially making sure that hands and protective clothing are clean.

Handwashing is vital and **must** be carried out after handling raw food. The manner in which your hands are washed is extremely important. Food safety officers will ask you to display your hand washing method at the next inspection. If the methods used by you or your staff are not adequate, you will be advised to change your practices.

Please see the diagram to the right which indicates the minimum standard of hand washing which will be required. The hand washing operation must take place at a suitable wash hand basin.

Note: Disposable gloves should never be used as an alternative to hand washing

### Effective

### Handwashing



1. Palm to palm



2. Right palm over left dorsum and left palm over right dorsum



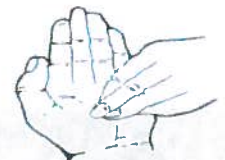
3. Palm to palm fingers interlaced



4. Backs of fingers to opposing palms with fingers interlocked



5. Rotational rubbing of right thumb clasped in left palm and vice versa



6. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa

## Protective Clothing

If protective clothing becomes contaminated from handling raw food, it must be changed before handling ready-to-eat food. The use of disposable plastic aprons is recommended when carrying out any activities where raw foods are being handled and where there is a high risk of protective clothing being contaminated by raw food.

Hand washing should take place after removing contaminated clothing and before putting on clean clothing.

# Controlling cross contamination in your business

## Permanent Physical Separation

The safest, most reliable way to prevent cross contamination is to have completely separate areas, staff, equipment, utensils and cleaning equipment. However, it is accepted that this may not be possible in many businesses.

## Alternative Measures

You should try to achieve permanent physical separation in as many ways as possible. However, where such separation is not possible, you must adhere to the following:

### Staff

- Restrict food-handling to specific staff at specific times – personal hygiene is critical

### Areas

- Identify a temporary raw food area for preparing raw food. This area should only be used for raw food at pre-arranged times and must be thoroughly cleaned and disinfected before using for ready-to-eat foods.
- Never allow any food to come into direct contact with the surfaces of a temporary raw area, e.g. use chopping boards etc

### Equipment

- The dual use of any equipment for raw and ready-to-eat equipment is dangerous. The only safe option is to use separate equipment and utensils. In particular, complex items of equipment must never be used for both raw and ready-to-eat foods if there is a risk of E. coli O157. "Complex equipment" includes vacuum and MAP packaging equipment, mincers and slicers.
- Raw and ready-to-eat foods must be kept separate at all times – including during storage and preparation. Where it is not feasible to have a separate chill, refrigerator or freezer, great care must be taken to ensure that cross contamination does not occur.

## What does "Cleaning and Disinfection" mean?

**Cleaning** is the process of physical removal of food debris, visible dirt and food particles. It is usually carried out using hot water and detergent. Cleaning alone will not remove all bacteria.

**Disinfection** is the process of killing bacteria and viruses following general cleaning. Disinfection can be carried out on a clean surface using either heat or a chemical disinfectant

All equipment and areas within your premises must be kept clean. However, **you** must decide when **disinfection** is necessary. Please note that disinfection will **always** be necessary where there is a need to control cross contamination.

## Separating raw food equipment from ready-to-eat equipment during cleaning and disinfection

Unless you are using a well-maintained dishwasher which is capable of achieving sufficiently high temperatures, you must separate raw food equipment and utensils from ready-to-eat food equipment during the cleaning and disinfection process. This means that raw food equipment must not be cleaned and disinfected in a sink at the same time as ready-to-eat equipment.

## Cleaning and disinfecting in sinks

Where sinks are used to clean and disinfect both raw food equipment and ready-to-eat food equipment, as a method of controlling cross contamination, the sinks and taps must be disinfected between uses.

When controlling cross contamination, any disinfectant used to clean the sinks or the equipment must be of the **BS EN 1276** or **BS EN 13697** standard and should be used in the manner recommended by the manufacturer.

**Important.** The use of a “bactericidal detergent” in a single washing phase is not an acceptable method of disinfecting equipment as a cross contamination control

## Method:

- **Pre-clean** - remove residues
- **Main clean** – wash in sink with hot water and detergent
- **Rinse** (if required)
- **Disinfect** – in the sink with clean water and an appropriate food-safe disinfectant, for the required contact time
- **Second Rinse** (if required) in the sink with hot water.
- **Dry** – ideally air dry or use single-use drying cloths

## What if equipment cannot be cleaned in a sink?

The following method is usually used on work surfaces, wash hand basins, taps, door handles etc. which must be disinfected to prevent cross contamination

- **Pre-clean** – remove loose debris
- **Main clean** – clean the surface using hot water and the correct amount of detergent
- **Disinfect** – treat with a food-safe disinfectant spray (**BS EN 1276** or **BS EN 13697**)
- **Dry** – ideally, air dry



Glasgow City Council will provide a list of suitable disinfectants as well as a list of local suppliers of these products.

## What will happen next

The next time that your business is inspected by Glasgow City Council, the officer will pay particular attention to cross contamination. This will mean that issues such as separation of raw and ready-to-eat foods, personal hygiene and cleaning and disinfection will be given added emphasis. The officer will issue a report which will state the actions which you must take to make your operation safer.

**Please Note.** Cross contamination, especially where there is a risk of E. coli O157, is viewed as an extremely serious matter. Officers of Glasgow City Council are authorised to take formal action where the risk is particularly high or where a food business operator has failed to take the required steps. “Formal Action” may include the service of a notice requiring actions to be carried out – and may extend to a requirement that certain food activities be stopped. Additionally, officers may require that ready-to-eat foods which have been exposed to the risk of contamination be discarded.

If you wish to discuss the information on this factsheet, please contact:

Glasgow City Council  
Land and Environmental Services  
231 George Street  
Glasgow G1 1RX  
Tel: 0845 2701558  
Email: [foodsafety@glasgow.gov.uk](mailto:foodsafety@glasgow.gov.uk)

For further information on the Food Standards Agency’s Cross Contamination Guidance, visit

[www.food.gov.uk](http://www.food.gov.uk)