

# E. coli O157

## Cross-contamination

### Factsheet - Caterers

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

Help to prevent it by following this advice

Harmful bacteria such as *E. coli* O157, *Campylobacter* and *Salmonella* can easily spread to ready-to-eat (RTE) foods, such as salads and cooked foods, through direct contact with raw foods or indirectly by staff, equipment, contaminated surfaces or cleaning materials.

Contaminated food can make your customers seriously ill and can even kill. This factsheet, if followed correctly, will help you control the risk of cross-contamination within your business.

Avoid CROSS-CONTAMINATION by making sure that there is:

1. adequate SEPARATION between raw and RTE foods;
2. effective CLEANING AND DISINFECTION practices;
3. good PERSONAL HYGIENE, particularly washing hands thoroughly and handling food hygienically; and
4. effective and appropriate MANAGEMENT CONTROLS AND STAFF TRAINING in place.

## 1. SEPARATION

Your food premises must be designed in such a way to permit good food hygiene practices.

If possible you should have separate staff, equipment, utensils and areas for preparing and storing raw and RTE foods.

If this is not possible you must consider and put in place the following measures:

- **Work areas** can be used for both raw and RTE foods, but only if separated by time (refer to diagram at end of factsheet). Surfaces must be thoroughly cleaned and disinfected before being used for RTE foods. As an additional safety measure, you should not use work surfaces directly to prepare food and instead use a suitable barrier, for example a chopping board or a container, as the food contact surface.
- **Staff** can handle and prepare both raw and RTE foods, but they must be adequately trained and observe strict hygiene controls, for example they could reduce hand contact by using separate dedicated utensils to touch food. If handling food staff must wash hands between handling raw and RTE foods. It is best practice to use disposable gloves and/or aprons for raw food preparation.
- **Storage** facilities should be of suitable size so that there is sufficient separation between raw and RTE food to avoid cross-contamination. It is advisable to store raw meat below RTE foods to avoid juices dripping onto RTE food or its packaging. Using sealed containers can also reduce the risk of contamination.
- **Utensils** including chopping boards, tongs, containers etc. should, where possible, be dedicated for either raw or RTE food and colour coded to help staff identify their use. Where this is not possible they should be put through a dishwasher between uses<sup>1</sup>. Make sure that

1 An alternative can be to heat disinfect utensils. The required time temperature needs to be able to kill E. coli.

dishwashers are properly maintained, loaded correctly, run on a full cycle and not interrupted once started.

- **Sinks:** a single sink may be used for washing raw and RTE foods and for washing utensils, but this needs to be managed properly, for example washing RTE foods/utensils before raw food/utensils. The sink will also need to be effectively cleaned before being used for RTE products. The use of a bowl or colander to wash food is best practice.

#### Complex equipment:

- Vacuum packers, slicers and mincers should not be used for both raw and RTE foods **unless** you are able to fully dismantle and thoroughly clean all surfaces that could be contaminated. It is unlikely this will be possible during a normal working day, as it will require time being set aside to do this effectively.

For vacuum packers it is unlikely to be practical for a business to regularly change their use as a competent engineer would need to undertake what is a complicated dismantling and reassembling process.

- Other types of complex equipment, such as weighing scales, mixers or temperature probes may be used for both raw and RTE foods, if you put in place effective control measures, and take account of:
  - The complexity of the machine. For example, some mixers/food processors are more complex and more difficult to clean than simple table top varieties;
  - The use of the machine. Will it be used for both raw and RTE foods throughout the day, and if so, have you allowed sufficient time between use for cleaning and disinfection; and
  - The required control measures, such as how cleaning and disinfection will be undertaken between raw and RTE food. This cleaning and disinfection can be undertaken using the two-stage process described below.

**Only once these points are assessed can you determine whether dual use of these machines is suitable.**

## 2. CLEANING AND DISINFECTION

**Effective cleaning and disinfection is critical in any food business.**

- The FSA strongly advises the use of either a dishwasher, a sterilising sink, or a steam cleaner to clean and disinfect equipment and utensils.

- **Chemical disinfection** may be appropriate where a dishwasher or heat disinfection is not possible. For example, it may be appropriate to chemically clean a temperature probe that cannot be put through a dishwasher or a work surface that cannot be heat disinfected.

- To effectively disinfect areas used for both raw and RTE foods, a two stage cleaning process must be followed:

**Stage 1:** Use a detergent to clean and remove any visible dirt followed by rinsing with clean water.

**Stage 2:** Disinfect using a disinfectant at the correct dilution and contact time recommended by the chemical manufacturer.

- Sanitisers can be used as both a detergent and a disinfectant. When using sanitisers the two stage cleaning and disinfection process, as described above, must still be carried out. You should apply the sanitiser first to provide a clean surface and then again to disinfect.
- Disinfection will not work on visibly dirty surfaces.

**Disinfectants and sanitisers must at least meet the requirements of one of the following standards:**

**BS EN 1276 or BS EN 13697; or**

**other standards that meet the same conditions and requirements.**

- The FSA recommends that you use disposable single-use cloths when cleaning. If this is not possible make sure you use separate designated cleaning equipment for raw and RTE areas, for example colour coded cloths.

## 3. PERSONAL HYGIENE

It is essential that staff follow good personal hygiene practices.

- Staff should wash and dry their hands thoroughly using a recognised technique, such as the one in the E. coli guidance or in the manuals listed at the end of this factsheet.
- It is very important that you and your staff wash hands before handling RTE foods, after going to the toilet, after touching raw meat/unwashed raw vegetables or touching surfaces that have come into contact with raw food.
- You need to make sure that you have a separate basin that is dedicated for handwashing and is supplied with hot and cold running water, cleaning materials and a hygienic means of drying hands.

Anti-bacterial hand gels should not be used instead of handwashing. They can be used afterwards as an extra level of protection.

- You need to make sure that staff wear clean protective clothing and if this becomes soiled it is changed before handling RTE foods. In a catering environment where staff may be preparing raw and RTE foods consecutively, such as during the cooking process, protective clothing may not need to be changed, but care should be taken to ensure clothing does not pose a risk of cross-contamination for RTE foods. For example if you undertake raw food preparation that results in food being splashed then the protective clothing should be changed before handling RTE foods.

## 4. MANAGEMENT CONTROLS AND TRAINING

**Make sure that your food safety management systems are up-to-date, are effective to control the risk of cross-contamination and are being implemented.**

Staff must be supervised and instructed and/or adequately trained in the procedures / safe methods that are relevant to their job.

### ADDITIONAL INFORMATION

The FSA has produced the following manuals to help small caterers with the requirements of setting up a food safety management system which include the messages in this factsheet and you may find them helpful:

- Safer food better business: <http://www.food.gov.uk/business-industry/caterers/sfbb/sfbbcaterers/>
- Safe catering: <http://www.food.gov.uk/northern-ireland/safetyhygieneni/safecateringni/>
- CookSafe: <http://www.food.gov.uk/scotland/safetyhygienescot/cooksafe/>

### CONTACTS

For further enquiries please email us at:  
[FoodlawCOP@foodstandards.gsi.gov.uk](mailto:FoodlawCOP@foodstandards.gsi.gov.uk)

# Separation of Areas Decision Tree - What is achievable?

