

College of Applied Medical Sciences

Department of Environmental Health

*Introduction to Food Safety and
Microbiology*

Lecture 7



PHYSICAL FOOD OF CONTAMINATION

Food Contamination

Contain food or water on what makes it unfit for human consumption or animal, whether micro-organisms harmful or toxic chemicals or contaminated food radioactive materials killer, which could result in food intake consumer disease, which is the most famous food poisoning disease

It is possible that food is the cause of the transfer of pathogenic microbes.

So we must prevent the contamination of food and water with microbes, to safeguard public health in any human gathering. , This is done by following several preventative ways to protect food from contamination, such as not to make the food exposed to insects and dust, and wash fruits and vegetables well. Taking into account washing hands when preparing food as well as before and after eating any meal ..

Revolve around food contamination neglect of appropriate food trading roads or overlooked some food processing basics, factors :-

- 1 -Food handlers not to take strict sanitary precautions, both for personal habits or in their work and the tools used areas.**
- 2 -Food not cooled sufficiently (7 degrees Celsius, at least), especially during the long transport and travel.**
- 3 -Non-food manufacturing appropriate manner and packaged in containers suitable materials (executed using tin and some plastics.)**

4 -Exposing food to carriers of contaminants during storage and transport.

5 -Lack of awareness of the seriousness of the disease, which is transmitted by food.

6 -Lack of control over the quality of the food process, especially from the microbiological.

The following items could contaminate your food:

- 1-plaster 2-flakes of paint 3-pieces of brick
- 4-broken glass 5-broken tiles 6-screw fixings
- 7-covering (sheathing) from electricity cable
- 8 -Feces of mice 9 -polythene

FROM EQUIPMENT The following items could contaminate your food:

- 1-nuts and bolts 2-screws 3-pieces of metal

FROM THE FOOD HANDLER The following items could contaminate your food:

- 1-hair 2-combs 3-nail varnish 4-fingernails
- 5-nail varnish 6-sweet papers and wrappings
- 7-buttons 8-chewing gum 9-pens and pen tops
- 10-earrings 11-various other items of jewellery

To protect your food from the risk of contamination

To protect your food from the risk of contamination, your food handlers should wear appropriate protective clothes. These work clothes should not have pockets as they may contain items that could fall into the food.

A person may lose 50 to 75 hairs a day and, unless they take precautions, some of these hairs may get into food. Clean hair falls out less than greasy

hair so staff should have good personal hygiene. Your staff should tie long hair back at all times and wear a hairnet or hat.

Your staff should also cover any cuts, scratches or grazes with waterproof plasters to stop bacteria getting into the food. Plasters should be blue so they can be easily seen in food if they fall off.

Your staff should not wear jewellery as this could cause contamination (a plain wedding ring is usually acceptable).

Your staff should not wear nail varnish as this can chip and get into food, and they should keep their fingernails short to avoid broken nails falling into food.

They should not wear false fingernails as these can also break off and end up in food.

Radioactive contaminants food

The technique was developed food irradiation in the seventies of the twentieth century, and in order to increase the width of the fruit and vegetables by throwing food gamma, that stops the rotting process and kill contaminated bacteria, [37] and by identifying levels of the amount of irradiation from the reality of what was produced by the efforts research-related, it is possible with this technology to save fish -mthela-for a whole month in good condition. [38] However, it has been under great opposition warning that pollution in terms of cancer risk, and the potential for break of vitamins on the other hand. Which led to the application of radioactive processed foods processing, with reference to so as to have the consumer the freedom to deal with them or not.

Protect food from radioactive contamination into account the following:

1-Develop specific standards for radiation ratios possible presence in food and locally produced

2-Supporting actors oversight necessary to estimate the amount of radiation science with instruments

3-Action stations in various parts of the republic to monitor the amount of radiation in the environment air soil water Animal Plant

4-Reduction of food imports from countries that do not monitor the food-exporting them and work Index Black businesses that sell or trade in contaminated food.

5-Control of nuclear reactors under construction in Egypt, and the provisions of the means of their safety.

Action to reduce food contamination

1-Choose foods and drinks fresh and stay away from preserved foods as much as possible.

2 -Wash hands thoroughly before eating any food.

3 -Clean kitchen utensils before using it cleans well.

4-Prevent people infected with communicable diseases from food preparation or approach him.

5-Remember fruits, vegetables and leftovers well and unrevealed, and the use of the refrigerator so.

6-Sterilized vegetables, fruits textured permanganate, or with soap and water before use.

7 -Boil the milk well and boil some kinds of cheese, and save them in the refrigerator when finished.

8 -Use a filter for drinking water when in doubt not to clean or boiled, filtered and then drinking it..

9 -Throwing waste and scrap remaining food daily in the space, after putting them in airtight bags.