



Factsheet - Food sampling

Each year we sample around 120 food items from local businesses as part of its efforts to ensure food safety.

The aim of the programme is to identify the microbiological quality of food and ensure it is safe to sell to the public. The samples are examined for those types of bacteria most commonly associated with that food type*. Examination of the food items is carried out by Hereford Hospitals NHS Trust's Food, Water & Environmental Laboratory.

Taking the sample: the sample is taken randomly from the stock you have available. The quantity required is at least 100 grams. The sample is normally taken just as it would be served to a customer, using your own utensils. The food item is then placed in a sampling bag, labelled with the departments code and the type of food taken and tied with a security tag. All relevant information is recorded on a sampling sheet, this will include the temperature of the food storage area at the time the sample is taken, use by dates, who produced the food etc.

What happens next: the food sample is taken to a portable refrigerator located in the officers car. An air temperature of below 5^oC is maintained in the portable refrigerator until the sample arrives at the laboratory where it will be maintained at a temperature that will keep food microbiologically unchanged for examination.

You will be notified of your results, using the following terms:

Satisfactory: means that the bacteria found were at acceptable levels

Borderline of acceptability: There were higher than expected levels of bacteria. You will be required to review systems of work to ensure that safe food is produced

Unsatisfactory: This indicates problems with food handling. An urgent review of food handling procedures is required to ensure that food does not cause food poisoning

Unacceptable / Potentially Hazardous: Consumption of this food may cause illness. Immediate action is required.

*Food is tested for some, or all, of the following bacteria:

The Aerobic Colony Count (ACC) is the total bacteria found in food. This examination is usually carried out on most foods, the exception being those foods that would naturally contain high levels of harmless bacteria e.g. salamis and milk products. A high ACC may indicate the product has been kept too long or that it has been left unrefrigerated. Refrigeration of food slows down growth.

Eschericia coli (E coli) is a bacterium, which is found in the gut of man and animals. It may be transmitted through faecal contamination at slaughter or through poor personal hygiene of food handlers. Their presence in cooked foods is indicative of poor personal hygiene - not washing hands after going to the toilet. There is a strain of E coli (**O157**) which can cause serious illness, this bacteria is associated with meat e.g. burgers. The centre temperature of such products should reach at least 70^oC for two minutes, or equivalent temperature/time combination, or until the juices run clear. Always ensure cooked foods are separated from raw.

The family Enterobacteriaceae includes bacteria that naturally inhabit the gut of man and animals but some are widespread in the environment. Enterobacteriaceae are useful indicators of hygiene and of post processing contamination of processed foods (i.e. from dirty machinery). Some of these bacteria are found in the environment and are therefore commonly found in salad/vegetable products or in cooked foods coming into contact with raw foods. It is essential therefore that salads are thoroughly washed, that all equipment be thoroughly cleaned and that cooked and raw foods are kept separate.

Staphylococcus aureus is a bacterium that can produce a toxin in food that survives cooking/re-heating and which causes food poisoning. This bacterium is found in the nose and mouth of humans and in uncovered wounds, cuts, spots, boils etc. The presence of these bacteria in food is usually due to poor personal hygiene. It is essential that hands are washed before handling food.

Clostridium perfringens is a bacterium that is found in the gut of animals and humans and in the environment. Some strains can cause food poisoning. Cooking rapidly for sufficient time will reduce its presence but it can survive the cooking/re-heating process and reactivate. It is also essential to prevent cross contamination from raw to cooked foods, especially uncooked meats.

Bacillus species and specifically Bacillus cereus, are food poisoning bacteria. Bacillus is widely distributed in the environment, and therefore found on grains, beans, pulses etc. It is essential that foods are cooked thoroughly, and if not being served immediately they must be cooled rapidly, otherwise the bacteria which can survive the cooking process will produce food poisoning toxins. This bacterium is usually associated with rice dishes where large volumes of food have been cooked in advance and then cooled too slowly over several hours. Refrigeration helps control growth.

Listeria species especially Listeria monocytogenes are found in the environment and is usually associated with salads, pates and soft cheese. Its presence in cooked foods can be an indication of insufficient cooking or contact with raw foods. This bacterium can grow well at refrigeration temperatures. It is essential that foods are cooked thoroughly and covered, and that all equipment and surfaces are cleaned thoroughly.

Salmonella species are food poisoning bacteria which can be found in the intestines of animals, humans and in polluted waters. Salmonella may be present in food due to insufficient cooking of contaminated foods, or from cross contamination from raw food e.g. raw poultry to cooked foods, (which includes the use of raw eggs in uncooked dishes) or due to poor personal hygiene.

Some **Campylobacter** bacteria are known to cause food poisoning. This bacterium is found in the gut of some animals. Its presence in foods may be due to insufficient processing or cooking (e.g. unpasteurised milk, uncooked centre of rolled meat joints) or contamination by pets and other domestic animals. Food must be cooked thoroughly and once cooked not allowed to come into contact with raw foods or pets.

For further information or advice:

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