

Managing *Listeria*

Goal

To prevent ready-to-eat (RTE) food becoming contaminated with the bacterium *Listeria monocytogenes*.

Act requirements:

- All food that is produced or processed and handled must be handled in a way that minimises contamination or deterioration.
- There must be procedures in place that prevent, eliminate or reduce hazards during the production, processing and handling of food.

Why?

- To prevent ready-to-eat (RTE) food becoming contaminated with the bacterium *Listeria monocytogenes*.
- Listeria bacteria can be found everywhere and will grow in food processing and storage areas
- *Listeria monocytogenes* causes the foodborne illness listeriosis. A significant proportion of people who get listeriosis die, including babies who can become infected by their mothers.
- Consumers with lower immunity, have a greater risk of getting sick from food than other people. These people include the very young and the elderly; people who are ill, those either recovering from illness or on medication and women during pregnancy.
- Listeria is particularly associated with long shelf life, refrigerated RTE processed foods.
- *Listeria monocytogenes* is considered the most dangerous pathogen of chilled processed foods as it can grow under refrigerated temperatures, in air, in no air (e.g. a vacuum pack), and under relatively acidic conditions.

How this is done

Special care must be taken when handling foods that are potentially hazardous – see *Potentially hazardous foods*. Follow the instructions below carefully. This is because they are foods that:

- will support growth of *Listeria monocytogenes*;
- may not be processed further to make them safe to eat;
- are stored refrigerated; and
- can be stored for long periods.

You must thoroughly clean, and if necessary, sanitise processing areas and equipment.

It is important that if potentially hazardous foods are taken out of their packaging, they are handled hygienically to prevent them becoming contaminated.

In the rest of this template, the “important information” box below is used for procedures where it is particularly important to control the spread of *Listeria*.



Controlling *Listeria monocytogenes* is an important part of this process.

How this is done

People and places

All handlers of potentially hazardous foods must follow good hygiene practices when they are in the food preparation area. This includes washing and drying hands thoroughly before handling food and after touching nose, hair and other surfaces where harmful organisms are likely to be present. Food surfaces and equipment must be cleaned and sanitised before starting preparation. All handlers must wear clothing that is dedicated to food handling activities.

- Self-service areas must be kept clean.
- Used utensils must be regularly replaced with clean ones;

Food spillages must be dealt with promptly.

To prevent a build-up of food waste discard food scraps often.

Cleaning and sanitising

To control the presence, spread, and growth of *Listeria monocytogenes* you must:

- keep processing areas clean; and
- clean and sanitise equipment that comes into contact with potentially hazardous processed food.

Equipment where food can accumulate, such as slicers and can openers, must be cleaned and sanitised before and after use and between different food types. This may require taking the equipment apart to get at hidden areas where small particles of food have lodged.

How this is done

Storing food

You must keep cooked and ready-to-eat foods separate from other foods so that they don't accidentally become contaminated. Potentially hazardous foods must be stored chilled below 5°C, or kept hot above 60°C.

All foods must be stored and used according to instructions provided on the original labelling, or within two days of opening. Once their original packaging is opened, they must be stored covered until used.

Frozen food must be thoroughly defrosted before cooking, or cooking times extended to ensure they are cooked right through.

Check that stored food is still within its "Use-by" or "Best- Before" date. If the date has passed, or the storage conditions have not been met, throw the food away.

Bulk food containers e.g. containers of jams, pickles, sauces must be emptied and cleaned and sanitised before re-use.

You must regularly check that fridges and chillers are keeping the food stored in them at or below 5°C.

Cooking food

When cooking potentially hazardous food, it must be cooked thoroughly. Use a probe thermometer to measure the temperature in the thickest part of the food has reached 70°C for three minutes or 75°C for 30 seconds. After cooking, serve high-risk food promptly.

Serving food

Take extra care when preparing and serving salads (e.g. pasta, rice, tabbouleh, and cold meat salads), cold cuts, pies, quiches etc and sandwiches – especially those containing salad ingredients.

Check the labelling on salad packaging and unless it clearly states that the salad ingredients are ready to eat, wash them in clean water.

Prepare these foods as close to meal time as practical and store them chilled until needed. If any of these foods are left at room temperature they must be eaten within four hours – otherwise the food must be thrown away.

If cold cuts are on the menu, slice and serve them as close to meal time as possible.



Further information on the control of *Listeria monocytogenes* in ready-to-eat foods can be found at www.mpi.govt.nz including:

- *Listeria* management;
- Good operating practices;
- Microbiological testing for verification of the control of *Listeria monocytogenes*;
- *Guidance for the Control of Listeria monocytogenes in ready-to-eat foods*;
- *Fact sheet on Managing Listeria in the Care Sector*.

Managing *Listeria* in the care sector

For those catering for the elderly, very young and other vulnerable people *Listeria monocytogenes* (*Listeria*) causes the foodborne illness listeriosis. Those who are at greater risk from severe/invasive listeriosis are people with lower immunity (either because of an illness or medication), the very young, frail older people and pregnant women. *Listeria* can also cause miscarriage, stillbirth or premature birth, and serious illness or even death to newborn babies. Although invasive listeriosis affects very few people each year in New Zealand, it is a very serious illness and a significant proportion of these people will die.

Listeria bacteria are naturally found in the environment and on raw food products and the bacteria are easily introduced into food preparation, processing and storage areas. Listeriosis is most likely to be associated with foods that are ready-to-eat (processed) and are stored chilled. This is because these foods are often contaminated after processing, e.g. after cooking, and unlike most other organisms that cause foodborne illness *Listeria monocytogenes* can grow under refrigeration temperatures, in air, in no air (e.g. a vacuum-pack), and under relatively acidic conditions.

See Food Standards Australia New Zealand Standard 1.6.1. Microbiological Limits for Food.

Food and *Listeria*

It is vital that you and your staff understand the risk from *Listeria* and know how to prevent its spread when serving food to vulnerable consumers. Make sure that this is included as part of your staff training programme.

Cooked and ready-to-eat foods, that are stored chilled and have a long shelf-life are of particular concern. They are among a group of foods termed “high risk” foods. This is because they are foods that may contain the harmful organisms that can cause illness and may support the growth of *Listeria monocytogenes* if not kept under temperature control. See the list of common high risk foods on this page.

To reduce the risk of listeriosis you may wish to use foods that have been heat processed in their final container, such as retort-processed foods, canned foods and some pouched foods. These foods will have been cooked or processed to remove harmful organisms.

Purchasing food

Make sure you source food from a supplier who has processes to ensure their food is safe and suitable, and who will consistently supply food in clean and undamaged packaging. The food should have a “Use-by” or “Best-Before” date. It is a good idea to order quantities that you will use straight away to avoid the risk of your stored food becoming out-of-date. You should also check that the manufacturer has a *Listeria*

Management Plan¹ in place.

Cleaning and sanitising

Regular and thorough cleaning and drying of food preparation areas and equipment will help prevent *Listeria* becoming established.

Even if you can't see dirt *Listeria* may be present. You won't know if it is there unless you test for it. *Listeria* is particularly at home in slicers and other areas that are hard to clean, also wet places, such as drains, drainage channels and wet areas around waste containers from where it can easily be spread to other places. Dirty cloths and damaged hoses are great hiding places for *Listeria*.

You can develop a cleaning schedule that identifies specific areas and equipment for cleaning, when it needs to be done, how it is to be cleaned (and if necessary sanitised) and who is to make sure it is done. This will help to make sure that nothing is missed out.

You can also develop a sampling programme to check key places and identify whether *Listeria* is in the food environment.

Take particular care with these common high risk foods:

- fresh produce which is difficult to wash e.g. seed sprouts,
- pre-cut bagged salads, raspberries;
- pre-prepared ready to serve packaged fruit and vegetables;
- ready-to-eat foods that may contain cooked and uncooked ingredients such as sushi, dips, hummus and mixed vegetable and protein salads;
- cooked meats, uncooked ready-to-eat meats such as salami or jerky, cold cooked chicken;
- vegetable pates, pastes and terrines unless sealed in jars or cans;
- soft cheeses, blue cheeses and grated cheese (unless it is going to be cooked before serving);
- raw or unpasteurised milk, or dairy products made from raw or unpasteurised milk;
- fish and other seafood that is going to be served raw or lightly cooked;
- processed chilled seafood (e.g. hot and cold smoked fish and shellfish, pre-cooked prawns and crab, surimi); and
- processed foods, especially meat and fish where the salt or acid have been reduced or the moisture increased compared to traditional shelf-stable product.

¹ Information on *Listeria* Management Plans can be found at <http://www.foodsafety.govt.nz/science-risk/programmes/hazard-risk-management/listeria.htm>