What is Listeria monocytogenes?

Listeria monocytogenes is a bacterium that causes a disease called listeriosis. It is widely found in the environment, can contaminate most foods and can grow at refrigeration temperatures.

Why is Listeria monocytogenes important and who is at risk of becoming ill?

Listeriosis is almost exclusively foodborne and its occurrence is increasing in many parts of the world. Generally, healthy individuals are not susceptible to disease by L. monocytogenes. The highest incidence of listeriosis is amongst pregnant women, the elderly (> 60 years of age) and immunocompromised individuals. Severe listeriosis manifests itself as septicemia in newborns and/or meningitis in older children and adults, and may result in death or miscarriage in the case of pregnant women. With a hospitalization rate of over 90% and a death rate of about 20% of those infected, listeriosis is a very serious illness, generally affecting 3 to 5 people per million of the population.

What are the regulatory safeguards?

In Europe and Canada, as recommended by the Codex Alimentarius of the United Nations, regulations/policies allow up to 100 cells/g in certain ready-to-eat foods that cannot support growth of L. monocytogenes. In ready-to-eat foods that can support growth, absence in five 25 g samples is required, unless the manufacturer can show that numbers will not exceed 100 cells/g throughout the stated shelf-life of the product. In the US, Australia and New Zealand, regulations require absence of L. monocytogenes in five 25 g samples in all cases.
**Why is it relevant for dairy?**

Milk and other dairy products can become contaminated with *L. monocytogenes* at many stages along the food chain, from the faeces of milking animals, from the general or food manufacturing environment, or in rare cases from udder infection. This is a particular concern where the product can support the growth of the organism. For example, growth can occur in ready-to-eat dairy products, particularly soft, and smear- or surface-ripened cheeses, which are also susceptible to post-processing contamination from the environment.

**What is the dairy industry doing to manage the risks?**

The dairy industry is very aware of the potential for *L. monocytogenes* contamination.

The following steps are taken to control the risk:

- In the processing industry, milk pasteurization is recommended, since pasteurization will eliminate pathogens including *L. monocytogenes*.
- Good hygienic practices at the processing facility are also applied in order to prevent post-pasteurisation contamination.
- At farm level, strict hygiene practices are followed during the production and transport of raw milk.
- Additional hygiene practices are implemented in the production of raw milk cheese and other dairy products.