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Hazard Factsheet

Listeria monocytogenes



Listeria monocytogenes is a foodborne bacterial pathogen able to grow at refrigerated temperatures and cause fatal illness. Failure to control *L. monocytogenes* has resulted in high-profile food poisoning outbreaks in UK and worldwide.



Food at risk

- *Listeria monocytogenes* has been found in a wide variety of foods
- It is of particular concern in chilled Ready-To-Eat (RTE) foods



Considerations

- *L. monocytogenes* can be a significant concern in determining safe shelf life (use by date) of chilled foods
- It is relatively heat-tolerant, so determines the safe cooking instructions of many foods



Background

- *L. monocytogenes* is capable of growth at refrigerated temperatures, with or without the presence of oxygen, is salt-tolerant, survives freezing, and can persist for years in the fabric of a food factory
- Invasive listeriosis with an incubation time of up to 90 days produces severe symptoms including meningitis and septicemia, and can be fatal



Origins

- Widespread in the environment; in soil, water, vegetation, the digestive tract of animals and in their faeces
- It is carried by an estimated 10% of the human population



Legislation / guidance

- There are legal microbiological criteria for presence in RTE foods in the UK / EC. For more information contact us for support and horizon scanning services
- Requirements for sampling of processing areas and equipment may also apply



Incidence

- In the UK there are approximately 200 confirmed cases of *Listeria monocytogenes* food poisoning annually
- The mortality rate is high at around 30%

Key concerns

- *Listeria monocytogenes* causes more deaths by food poisoning every year than any other bacteria
- Legal consequences and reputational damage to Food Business Operators (FBOs) linked to outbreaks can be catastrophic
- Due to the severe to fatal symptoms, including meningitis and septicemia, and miscarriage or stillbirth in pregnant women, hospitalisation is common
- Routine use of Whole Genome Sequencing by the Public Health Laboratory Service for *Listeria monocytogenes* from food and clinical samples allows the source of outbreaks to be accurately traced

How Eurofins Food Testing UK can help

- We offer accredited microbiological analysis of food samples and environmental swabs for *L. monocytogenes* and *Listeria* spp. detection and enumeration
- We offer a validation of cooking instructions service, and can provide guidance on generation of safe cooking instructions
- Our advisory service experts can help food businesses make food safety determinations, including advice on use of *L. monocytogenes* growth models and challenge testing. We can provide support to manage *L. monocytogenes* including factory hygiene, and setting of safe shelf-life



For further information

To learn more about how Eurofins Food testing UK Ltd can help with assessment of products for application of Use-By or Best-Before dates, or the related subject of setting product shelf-life, **please get in touch**

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