EU harmonised survey of Listeria monocytogenes in a range of ready-to-eat foods

Research programme Microbial Risk Assessment B12 B12
Study duration November 2010 to October 2013
Project code FS211001
Planned completion October 2013
Conducted by Health Protection Agency

Background


In March 2009, the taskforce on monitoring of zoonoses data collection at EFSA adopted a report on proposed technical specifications for a co-ordinated monitoring programme for Listeria monocytogenes in certain categories of ready-to-eat foods at retail in the EU.

Although the survey was an obligation under Directive 2003/99/EC, the data obtained contributes to the strategic plan outcomes 2010 to 2015 that ‘Food entering the UK is safe to eat’ and ‘Food produced in the UK is safe to eat.’ Surveys for Listeria monocytogenes are important to inform the development of risk assessment in this area.

Research Approach

Member States were required to assess the prevalence of Listeria monocytogenes in three ready-to-eat food categories:

- packaged hot or cold smoked or gravad (cured) fish
- soft and semi-soft cheeses, but not fresh cheeses
- packaged heat-treated meat products

Based on population size the UK was required to collect and analyse 1,600 samples during the course of the survey and submit data in the form of a report to the Commission.

The survey’s scope, sampling methodology, analytical methods and reporting of data provisions were outlined in the commission decision of 5 November 2010, concerning a financial contribution from the European Union towards a coordinated monitoring programme on the prevalence of Listeria monocytogenes in certain ready-to-eat foods to be carried out in the Member States.

A copy can be found at:


One of the requirements of the commission decision was that the National Reference Laboratory (NRL) undertake all analysis for this survey. At that time the UK didn’t have an NRL contract in place. However, the HPA had been undertaking NRL activities, as such they were the NRL ‘designate’ and were thus commissioned to undertake the work.

The survey ran in the UK from 1 November 2010 until 31 October 2011.

The outputs of the survey were sent to the commission on 31 May 2012, which forwarded reports to EFSA for the purposes of analysis and predictive modelling. Our organisation was unable to publish any data or analysis of the results obtained through this survey until after the EFSA summary report was published.

Results

Listeria species were detected in 40 (4%) of the 1600 samples tested and L. monocytogenes was detected in 17 samples (1%). This result corresponds with the reported L. monocytogenes contamination rates reported in the zoonoses monitoring data as ~ 1% of samples tested (EFSA 2009).

All of the listeria detected was found to be at a level below 100 cfu/g, except for one sample where 900 cfu/g was
detected in a sliced corned beef sample. No trend in the presence of listeria and storage condition at retail, packaging, country of origin, pH (acidity) or water activity was observed.

Additional Info

See also the scientific report of EFSA - Analysis of the baseline survey on the prevalence of Listeria monocytogenes in certain ready-to-eat foods in the EU, 2010-2011 Part A: Listeria monocytogenes prevalence estimates.


Research report

Research report: EU harmonised survey of Listeria monocytogenes in a range of ready-to-eat foods (858.14 KB)
Final dataset: EU harmonised survey of Listeria monocytogenes in a range of ready-to-eat foods (297.84 KB)