

STEC

(*Shigatoxine producing Escherichia coli*)

Introduction

In microbiological outbreaks and recalls in recent years within the European dairy industry, 6% of outbreaks can be traced back to contamination by STEC bacteria, a toxin-producing E.coli. By comparison; for Listeria the figure is 2%.

Most problems are caused by this bacterium in raw milk products and soft cheeses from home and abroad. This is the reason why STEC is identified as a public health risk by the NVWA and will become a spearhead of the control authorities in 2021. Previously, STEC was not routinely included in the control examination of dairy products in the Netherlands.

Public Health risk

Certain E.coli bacteria, naturally found in the intestines of humans and animals, produce shigatoxin, which is a toxin. Therefore it's called STEC (Shigatoxin-producing Escherichia coli). Shigatoxin can cause severe, life-threatening symptoms of illness, such as even haemolytic uraemic syndrome (HUS).

Contamination

Your products may become contaminated with STEC through inadequate hygienic practices. For example, through contact with:

- ✓ raw products
- ✓ surface water
- ✓ people (hands)
- ✓ animals

Legislation and regulations

EC Regulation 2073/2005 does not include food safety criteria for STEC in dairy products, but your organisation, as a food manufacturing company, must always comply with Article 14 of EC Regulation 178/2002; 'food that is unsafe may not be placed on the market'.

Intervention document NVWA

As a food production company, you include the risk of STEC in your risk analysis, establish control measures, monitor them and take action if STEC is found.

For this, we would like to refer you to the NVWA document "Intervention presence STEC in food". In this document you can read what you can do to prevent the risk of STEC in food and which principles the NVWA follows. It also includes flowcharts for the various actions in high-risk and low-risk foodstuffs.

STEC analysis

As of 1 January 2021, Qlip can perform STEC analysis in its own laboratory, accredited according to ISO 17025. These analysis apply to milk and milk products.

With these analysis, we can help you prove that no STEC was found on the product samples we examined for you or, in case of a positive result, where you may still need to take measures.

As a specialised dairy laboratory, we are at your service!

Any questions?

If you have any questions about the STEC analysis, please contact our sales department at sales@qlip.nl or +31 88-7547199.

Your benefits

- ✓ Monitoring in accordance with NVWA policy: Intervention presence STEC in foodstuffs.
- ✓ Demonstrating food safety products
- ✓ Hygiene control
- ✓ Control measures
- ✓ Reliable analysis results through validated techniques
- ✓ Use of Qlip's specialised knowledge
- ✓ Performance of analysis in an ISO17025: 2017 accredited laboratory.

Test specifications

Testcodes:

BF7870e, BF7871e and BF7872e

Matrices:

Milk and milk products, including raw milk, butter, farm and soft cheese, whey powder and infant formula

Method:

PCR technique and confirmation using TBX-agar combined with PCR technique andaldi-ToF (equivalent to NPR-CEN-ISO/TS 13136).

Measurement result:

Detectable of not detectable in quantity of product (25ml, 25 g of 125g)

Turnaround time analysis:

10 days after sample receipt

Sample quantity:

Depending on the quantity to be tested