

CASE STUDY - FROM INSIGHT TO ACTION

Augmented Diagnostics with GENE-UP® TYPER for faster root cause analysis of *Listeria monocytogenes* in raw meat products.

BACKGROUND

A raw meat product producer wanted to better understand the root of their contamination.

Fresh raw meat products, from burger patties to fresh cuts, come with short shelf lives, implying strict quality control procedures.

The rapid release of products is a key challenge in obtaining rapid results.

While working to improve their quality control process, they have been turning towards innovative technological solutions. They were looking for a way to type instead of serotype their strains to get more reliable results.

They wanted to be able to track the potential contaminations from livestock, slaughter to production and **understand the origin** of different contaminations **rapidly**, with an **easy method**.

How to get faster, reliable, information?

How do we get high definition results in-house?

How can we better understand the origin of the contamination?

METHOD

bioMérieux proposed an easy-to-use, rapid PCR solution GENE-UP®, with the GENE-UP® TYPER kit for faster root cause analysis.

In the case of a contamination, the GENE-UP®TYPER LMO kit allows for fast root cause analysis of the contaminating strain and its history like which farm or site it came from. The kit is performed on the GENE-UP® platform, bioMérieux's highly versatile PCR solution, on which they currently perform routine confirmation testing of *Salmonella* and *EHEC*.

The GENE-UP®PCR solution allows for a routine screening of a wide range of pathogens like ***Listeria spp***, ***Listeria monocytogenes***, ***Salmonella***, ***EHEC*** and **viruses** as well as **quality indicators and spoilers**. It is the **only** PCR solution on the market which is able to perform typing to obtain high resolution information in **only one hour** from a colony. It is faster, easier and more reliable than serotyping, which was the method they were previously using.

CONCLUSION

GENE-UP® TYPER is a component in an advanced solutions system called Augmented Diagnostics.

- Their trust in bioMérieux enables the proposal of a solution targetting their needs: to rapidly release products and **take informed action** in face of contaminations.
- GENE-UP® TYPER allowed them to have a **technologically advanced tool despite having little digitalization** in their laboratories.
- The tool allows them to better understand and control the quality of their products by adding a component of the Augmented Diagnostics approach.

RESULTS

GENE-UP® TYPER is rapid decision making tool for easy, fast and reliable insight for rapid product release.



- Better understanding

They are able to trace the history of certain strains by correlating the typing of the strains they had preserved from previous contaminations and between sites.



- Faster results for faster release

They are able to have reliable high definition results rapidly without doing serotyping.



- Better logistics management

Shortened holding time between production and export to their clients also helps gain time for delivery.



- Critical time cut

The shorter time-to-results enables better reactivity in case of contamination.



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Learn more about our Augmented Diagnostics Approach.