Listeria control programs in the production environment

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Listeria is a universal problem for food manufacturers and even when all reasonable hygiene measures have been put in place, problems can still arise. The crux of the Listeria monocytogenes challenge is this bacteria’s natural resistance to many of the standard food preservation methods. The factory sources of Listeria are many and varied and include handling, processing and maintenance equipment, packaging systems, drains, surfaces, as well as refrigeration and chilling units.

Sealed Air has defined practical hygiene solutions for the effective management of the Listeria threat. Sealed Air’s preventative approach targets all potential sources of the bacteria’s spread in the form of a comprehensive hygiene programme. It addresses three main risk types – those deriving from infrastructure, processes and personal hygiene. From our expertise in implementing hygiene practices in several types of food industries, we claim that a previous assessment needs to be performed before providing the solution that better fits the requirements and specific conditions of the producer. The first step is a full and objective audit of the factory facilities, including the identification of any potential Listeria “hot spots”. Our product range facilitates hygiene excellence in all processing equipment and food contact surfaces. Proven solutions also incorporate training programmes for personal hygiene and working practices, measures for the prevention of cross-contamination and water control. Last development has been a specific assessment about Listeria based on our know-how, which provides specific (and some generic) solutions to control the impact of this bacteria on final product.

Finally, we have to highlight that no magical solution exists to fight Listeria: control requires good hygienic practices to be followed and continuous monitoring, but no hygienic practices alone will be able to eliminate Listeria from the production environment. Implementation & management of correct hygiene tasks can minimize the cross-contamination of the finished product and support the manufacture of microbiologically-safe food. Additionally other aspects need to be included as well such as a good HACCP program as well as Good Manufacturing Practices.

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References


Figure 1: The pattern of recovery of Staphylococcus aureus from the lots of pigs each date. For each lot, 4 locations where sampled: receiving (pr.rs), post lairage (pr.pls), post-stun (pr.ss), and pre-chill (pr.ps).

Figure 2: Pattern of Staphylococcus aureus recovery from lots of swine, at three locations: at arrival (recived sponge), after lairage (post-lairage sponge) and at chill (prechill sponge)