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Ecolab provides solutions and expertise to improve food safety throughout the world. Through GFSI, we gain additional insight into emerging trends, share information with other members and collaborate on new protocols to further enhance food safety.



The Why

Food safety is critical to the reputations of businesses – and to the health and well-being of people everywhere. We know the top causes of foodborne illness outbreaks can be eliminated through effective cleaning and sanitizing – and we are committed to protecting people and businesses from the risks of illness-causing pathogens.

Scientists have long identified *Listeria monocytogenes* as a problem for its high lethality rate compared to other foodborne illnesses. *Listeria* is tenacious and can also attach itself to the fryer grease that coats floors and counters. A USDA and Purdue University study confirms a growing contamination risk of *Listeria* in floors and drains. Additionally, a recent report by Restaurant Hospitality identified unclean non-food contact surfaces as the second leading cause of failed health inspections. Ecolab's own testing in 100 locations found *Listeria*, *Staphylococcus*, and *Salmonella* on 49% of floors, 46% of mops and buckets, and in 66% of floor drains. Current cleaning methods were not efficient to manage it or control the cross-contamination implications.

The How

Consistency is a key component in the fight for food safety, and that's what a partnership with GFSI provides. In the 15 years that Ecolab has been a member, we have worked with GFSI and its membership to provide a global perspective on food safety standardisation. These aligned values have helped make people safer around the world.

Ecolab collaborated with another GFSI member to address *Listeria monocytogenes* in a retail environment. Ecolab developed a new product and process to address a customer need. The customer then worked closely with the Ecolab team, testing in several store locations to ensure consistency in the training, process and results.

There were a number of challenges to overcome including employee training, variety in test stores and their conditions, management engagement, no formal regulatory requirement for sanitising floors or drains and measurement of the product use and concentration. However, grounded in the dedication of Ecolab and our retail partner as well as our joint commitment to improving food safety, we persevered.

Enzymatic-based cleaners are able to digest fatty and greasy soils over time ensuring a cleaner and safer

environment. Formulated with enzymes that immediately work to degrade soil particles as well as with an antimicrobial agent to sanitise, the results compounded over time to lower the microbial load with each additional washing. Introducing an enzymatic solution also eliminated a step in the floor cleaning process. This allowed for additional time to be spent cleaning more thoroughly. We were able to show a substantial decrease in the presence of *Listeria* in a retail environment thus reducing the risk of cross-contamination as well as some other unexpected benefits.

The Benefits

The positive scientific results were obvious. Floors were cleaner and the risk of cross-contamination was greatly reduced in the test stores. Contamination levels dropped from 41% to 2% in test locations.

By turning the water temperature down and removing the rinse and sanitise steps from current wash, rinse and sanitise procedures, we achieved better results with 50% fewer nightly cleaning steps, 78% less water use, and 89% reduction in utility spend.

Employee engagement also improved. More than 60% of employees said the floors looked much better compared to how they looked with their previous cleaning

process. They were also happy that the process was a one product solution that could be used for cleaning and sanitising both floors and drains. It made their jobs easier and delivered superior results consistently.

This new product and process produced additional unintended benefits. The reduced build-up improved the floor coefficient of friction by 10% making surfaces less slippery and adding to employee safety. There was a realised labor savings of 86 hours annually per store based on the reduction of process steps. The stores also saw a significant decrease in flying insects as a result of cleaner floors and drains.

Figures

