

New technology increases food safety

Maple Lodge Farms is the first poultry processor in Canada to incorporate high pressure processing technology in its operation

Through the use of a revolutionary new technology, Brampton-based Maple Lodge Farms is increasing food safety by decreasing potential risks from listeria and other bacteria. Maple Lodge has implemented a new method of ensuring that sliced luncheon meat that has already been packaged is even safer for consumers.

The new process, known as high pressure processing (HPP), works by applying very high water pressure to the sealed packages of precooked deli products. At 87,000 pounds per square inch (PSI), the pressure is more than five times that of the 16,000 PSI found at the deepest ocean trench in the world, which can easily crush most living creatures and the hull of a submarine. It took Maple Lodge a month to install and test the system, and on March 23, 2009, the company began using it.

“Canadians, now more than ever, are vigilant when it comes to food safety, particularly with ready-to-eat meats found in the deli section,” says Michael Burrows, CEO of Maple Lodge Farms.

By applying extremely high water pressure to the finished packages of deli meat for a short period of time, many sources of bacteria and pathogens, including listeria, salmonella, and E. coli, are destroyed. The process also pasteurizes the product, which gives it a longer shelf life and a fresher taste. Even though the packaged food is under extreme pressure, the food is not harmed and the packaging is not breached.

Food safety has been an increasing public concern in the past year. Maple Lodge Farms’ commitment to ensuring the freshness and safety of its products prompted the company to take preemptive action. The company began by commissioning a survey of consumers to see what was important to them. According to the survey, conducted by BrandTrust in December 2008 on behalf of Maple Lodge Farms, people are as concerned about food safety as they are about freshness – in fact, 92 per cent of people report that food safety is their top consideration in making a decision to buy a food product. Furthermore, 80 per cent of respondents indicated that they would pay a premium for an added measure of safety assurance.

In addition to the added safety benefits, the process also reduces the need for Maple Lodge Farms to add preservatives and other chemicals to its products, making it possible to make healthier, more natural food. Furthermore, the use of HPP is approved by the Canadian Food Inspection Agency, Health Canada, the United States Food and Drug Administration, and the United States Department of Agriculture Food Safety and Inspection Agency.



Maple Lodge Farms’ new high pressure processing technology uses water to destroy many sources of potential pathogens and bacteria in its prepackaged deli products.

“Maple Lodge Farms is taking a proactive approach to food safety. As a family-owned company, our goal is to exceed Canadians’ expectations as well as industry standards.”

- Michael Burrows, CEO, Maple Lodge Farms

“We believe that our customers want fewer preservatives in their deli products,” says Burrows. “Our goal is to provide an extra degree of protection to our foods in addition to making them healthier and more nutritious. HPP technology provides the ability to do all this and doesn’t use chemicals in the process.”

Maple Lodge products that have undergone the new process are labeled with a sticker indicating such, and include the company’s line of ready-to-eat deli products and its chicken bacon offering. The high pressure equipment was developed in 2001 by Avure Technologies, a company based in Kent, Washington. The technology is proven to disable dangerous illness-causing bacteria; reduce the need for chemical preservatives in food; keep food fresher, longer; and significantly extend the shelf life of the product. Since 2001, Avure has installed its HPP technology in food processing facilities for companies in countries including the United States, Japan and throughout Western Europe.

Maple Lodge is Canada’s largest privately owned poultry processor and is the first poultry processing company in Canada to incorporate the HPP process into the manufacturing of its deli meats. As the final step in the manufacturing process, the HPP technique ensures that virtually all potential pathogens and bacteria in intact packaged products are destroyed prior to any product leaving the plant. And even though the installation of the high pressure processing technology cost Maple Lodge Farms millions, consumers won’t be feeling the pinch.

“Maple Lodge Farms is taking a proactive approach to food safety. As a family-owned company, our goal is to exceed Canadians’ expectations as well as industry standards,” says Burrows. “By investing in HPP technology we can provide a high degree of protection for these products...”

To learn more about Maple Lodge Farms, its products, and its commitment to food quality and safety, visit maplelodgefarms.com. To learn more about Avure Technologies, visit avure.com.