

Raymond Mangin, Dairy Farmer,
Bruxelles Manitoba

Producer Profile

Manitoba Agriculture, Food and Rural Initiatives

Milk producer saves money with food safety practices

By using the Hazard Analysis Critical Control Points (HACCP) system for food safety, dairy producers can monitor critical areas and adopt best management practices (BMP) to:

- cool and store milk effectively
- monitor use of medicines and chemicals closely, to prevent residue in milk
- sanitize equipment properly and make sure wash water is clean
- transport animals safely

Raya Farms in Bruxelles, Manitoba is improving safe storage practices for milk and saving money while they do it.

In March, dairy farmer Raymond Mangin finished installing a plate cooler. It's a piece of equipment that lowers the temperature of the milk from his 65 Holsteins faster and cuts the amount of electricity needed to cool the milk after it goes into the farm's bulk milk storage cooler.

The plate cooler is helping this soon-to-be-third-generation family farm evolve and maintain high standards of freshness and safety in its milk – while cutting energy costs.

The plate cooler lowers the milk temperature by passing it over cold, stainless steel plates before it goes into the farm's bulk storage cooler.

In the plate cooler, cold water from a well passes through on one side of a steel plate, while warm milk passes along the other side of the plate. Though the milk and water never come into contact, heat is exchanged through the metal.

Instead of being added to the bulk cooler at 27 to 29 degrees Celsius (80 to 85 degrees Fahrenheit), the milk is much closer to the ideal storage temperature of 2 to 3 degrees Celsius (37 to 38 degrees Fahrenheit). That means the farm needs to use much less energy to maintain safe storage temperatures.

"About 25 per cent of the energy used on a dairy farm is for the cooling system," says Mangin. Keeping the temperature of the milk cool is important for food safety. The longer the milk stays warm, the more bacteria can multiply.

"We've used it for six milkings," he said, one week after the installation.

"We record our milk temperature after each milking. It saves about 45 minutes of cooling time."

It used to take about an hour and a half to cool the milk down to the proper storage temperature.

Mangin bought the plate cooler with support from Growing Forward, a federal-provincial government initiative that has several programs for specific improvements to food safety, the environment and business development. Under Growing Forward's Food Safety Program for Farms, Mangin received funds for two-thirds of the purchase price of the \$3,000 plate cooler.

To be eligible for the funds, he successfully implemented and passed the first audit for the Canadian Quality Milk program (CQM), developed and monitored by the Dairy Farmers of Canada. CQM helps producers prevent and reduce food safety hazards and risks on their farms.

“We’ve been looking at this for a couple of years,” says the producer. “When I found out about Growing Forward, I decided this would be the way to buy one.”

Mangin has been running the farm for 31 years, and is now welcoming his son Justin into the operation. They milk 65 purebred, registered Holsteins and do all their own breeding, using artificial insemination. ■

Food Safety from Farm to Fork

Consumers want to know the dairy products they eat are safe and wholesome. The Dairy Farmers of Canada developed and monitor the Canadian Quality Milk program (CQM) as an on-farm food safety program. It helps producers prevent or reduce food safety hazards and risks on their farms. It assures consumers that Canadian milk and meat are produced safely.

CQM uses the Hazard Analysis Critical Control Points system (HACCP). HACCP helps prevent and reduce the risks of food safety hazards. ■



About The Food Safety Program, for Farms

The Growing Forward **Food Safety Program, for Farms** provides producers funds to set up, implement and monitor food safety, biosecurity and traceability systems on-farm.

Manitoba dairy producers can apply for up to \$2,000 for implementation and equipment costs that support the CQM program; and up to \$5,000 for good agricultural practices (GAP).

Your Farm. Your Products. Your Plan.

There are many benefits to implementing food safety, biosecurity and traceability programs:

- improves food safety, biosecurity and traceability practices
- improves product quality and consistency
- maintains or increases market access
- demonstrates due diligence which reduces business risk and liability
- reduces the risk of product recalls
- enhances the record-keeping system

Enhanced food safety practices respond to market demands, manage risks and improve the health and well-being of Canadians. ■

For more information on how Growing Forward or other provincial programs can help improve farm profitability, contact your local Manitoba Agriculture, Food and Rural Initiatives Growing Opportunities (GO) Office or visit our website at manitoba.ca/agriculture.