

Getting to the root of food safety issues may require tracing its origins all the way back to that small seed that was planted in the soil. The way food is grown, processed, manufactured, packaged and delivered is all part of an intricate system affecting the safety of what we eat as Canadians.

A review of the "farm to fork" or "bean to belly" journey of many food products reveals the potential dangers, as well as the stages at which standardization can be better used to ensure safety. Standards and conformity assessment play a pivotal role in the scrutiny, objectivity and transparency of our food safety systems.

"Standards are important because they allow the farmers, primarily, to show all of the good practices that they're putting in place to prevent the food from becoming contaminated and it's helping them to provide reassurance to their customers," says Heather Gale, the national program manager at the CanadaGAP Program.

The CanadaGAP Program is an on-farm food safety program for producers, packers and storage intermediaries of horticulture crops. The program is officially recognized by the Global Food Safety Initiative (GFSI) and is administered and maintained by the Canadian Horticultural Council.

Even though food industry safety standards are deemed as voluntary, many food distribution groups such as grocery stores or food vendors will not distribute products without the assurance provided by certification to a specific standard.

"The market makes it mandatory rather than our association," says Gale, adding how Canadians buying from commercial grocery stores are in many cases already purchasing products that have been certified by an organization which has received accreditation from the Standards Council of Canada (SCC).

As is the case in many other sectors, in food safety, keeping up with and ensuring standards account for technological advancements within the food industry, can be a real challenge for participants. "Science is always changing and there's research going on all the time in produce food safety; it's an area of growing interest so we definitely need to keep pace with any changes," explains Gale.

The flow of goods between countries also lends an added dimension to questions of food safety. The harmonization of standards and certification schemes with other countries and regions is among the mechanisms for addressing these questions.

"As the world shrinks in terms of import/export, there is a need to have a common language so you can speak to the issues and standards provide that language," says Dr. Trevor Smith, an Adjunct Professor at the University of Guelph's Food Sciences department and Chair of the SCC Advisory Committee on Standards.

While much of his work revolves around international standards for quality management & quality assurance,





Smith recognizes the significance of harmonization for food safety as a mechanism to ensure the healthiness and safety of the foods we consume.

"Having this internationally shared systems language is important," he adds. Although

most of Canada's food safety operations have been relatively effective in keeping consumers safe, Smith believes there is room for improvement.

The international standard known as *Food safety* management systems – Requirements for any organization in the food chain (ISO 22000), defines the requirements of a food safety management system covering all organizations in the food chain. According to Albert Chambers, the Vice-Chair of the Canadian advisory committee on food products (CAC-ISO TC 34), the international standard's impact in Canada has been limited, but he expects that will change as the North American food supply chain increases their expectations.

For food manufacturers, a complete food safety certification scheme exists in the form of the Food Safety System Certification (FSSC 22000), which is also recognized by GFSI and is based on the ISO 22000 standard and other existing standards for certification. The Standards Council of Canada is among the national bodies recognized by GFSI to offer accreditation to FSSC 22000.

"We're going to see the ISO 22000 family of standards evolve over the next few years," says Chambers.
Understanding how food safety methods operate in Canada will shed light on where the industry is headed and how Canadians will be protected against possible contamination.

"There's a really strong commitment inside the ISO system in keeping this family of standards at the forefront in terms of innovation and being up to date with changes and approaches," adds Chambers.

The future of food processing and distribution is a journey which requires reliance on standardization to ensure food safety. Whether Canadians are "better safe than sorry" is largely dependent on Canada's ability to plant the seeds of quality and implement the appropriate standards.