QUALITY MANAGEMENT

All CFIA laboratories have demonstrated conformance to ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*. The Standards Council of Canada evaluates our laboratories against this international standard, as a formal verification of the CFIA's capability to produce accurate and reliable results, within our accredited scope of testing. The results are supported by the development, validation and implementation of scientific methods, conducted by highly qualified personnel, using reliable products, services, and equipment, in a quality controlled environment. Participation in international proficiency testing programs further demonstrates that our testing is comparable to laboratories across Canada and around the world.

SCC Accredited LAB

FOR FURTHER INFORMATION

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Canadian Food Inspection Agency
Agence canadienne d'inspection des aliments

Greater Toronto Area Laboratory

Safeguarding with Science

Canada

CANADIAN FOOD INSPECTION AGENCY

The Canadian Food Inspection Agency (CFIA) is responsible for delivering federally mandated programs for food inspection, plant and animal health. The Agency relies on high-quality, timely and relevant science as the basis of its program design and regulatory decision-making. Scientific activities inform the Agency's understanding of risks, provide evidence for developing mitigation measures, and confirm the effectiveness of these measures.

CFIA scientific activities include laboratory testing, research, surveillance, test method development, risk assessments and expert scientific advice. Agency scientists maintain strong partnerships with universities, industry, and federal, provincial and international counterparts to effectively carry out the CFIA's mandate.

THE GREATER TORONTO AREA (GTA) LABORATORY

The Greater Toronto Area (GTA) Laboratory analyzes food, food products and other related samples for detection of microorganisms related to food safety and public health.

Additionally, the laboratory performs analysis of canned products for container integrity and commercial sterility and analysis of food products for extraneous materials such as glass, filth and unknown matter.

WHAT WE DO

Services and activities

- analysis of canned products for container integrity and commercial sterility
- analysis of food products for extraneous materials such as glass, metal, filth, and unknown matter.
- diagnostic testing to support for annual food safety monitoring programs
- foodborne illness outbreak investigations
- consumer complaint investigations, container integrity, extraneous matter, and unknown material identification.
- applied research for food safety issues
- develop diagnostic methods
- consult and advise operational and inspection staff at the CFIA and regulated parties

AREAS OF RESEARCH

Food microbiology

- The food microbiology laboratory operates seven days a week to ensure prompt sample analysis. The laboratory is designed to provide rapid responses to food safety investigations. Innovative technology is used to detect, enumerate, and characterize food-borne pathogens including *Salmonella*, *E. coli* O157:H7, *Listeria monocytogenes* and *Shigella*. Additionally, whole genome sequencing is fully integrated into diagnostic testing to perform detailed characterization and analysis of bacterial isolates.

Molecular biology

- Molecular biology methods are used for food microbiology investigations. The molecular biology area carries out research and method development, whole genome sequencing of bacterial strains, and bioinformatics analysis.

Extraneous matter

- The extraneous matter laboratory provides diagnostic testing related to consumer complaints and investigations. Testing includes detecting heavy and light filth elements (e.g. insect fragments, rodent hairs, sand) as well as injurious materials such as glass, metal and plastic.
- The laboratory uses several spectroscopy approaches including; fourier-transform infrared, laser-induced breakdown spectroscopy, and raman, all of which can be used alongside traditional microscopy techniques for unknown material identification and potential food fraud applications.

Container integrity

- Container integrity scientists test thermally processed foods and other types of pre-packaged foods for shelf-stability and food safety. This includes traditional metal cans as well as plastic-based flexible packaging. The unit also performs the safety parameter testing that includes pH, water activity (a_w), percent salt, and water phase salt.