

AGAT Laboratories

Food Testing Services

Food Products

Our laboratories offer analytical services to monitor food safety and quality, with a focus on monitoring chemical and microbiological hazards in food products. Our expertise supports a vast range of industry clients, from food processing companies and catering/restaurant businesses to food distribution operators, and ensures their regulatory compliance throughout the supply chain.

Food Testing Services

AGAT Laboratories' Food Testing Division offers services in food safety, development and consulting including:

- Microbiological analysis
- Chemical analysis
- Shelf-life analysis
- Environmental quality analysis
- Nutritional analysis and labelling
- Allergen testing
- Contaminant testing of compounds such as mycotoxins and heavy metals

Accreditation

Understanding that food safety is one of the largest public health challenges faced today, we strive to uphold procedures that equal or surpass the criteria established by government agencies and recognized accreditation bodies.

AGAT Laboratories is officially recognized by:

- Canadian Food Inspection Agency (CFIA)
- Standards Council of Canada (SCC)
- Canadian Association for Laboratory Accreditation (CALA)
- Quebec Ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC)
- Ontario Ministry of the Environment
- Ontario Drinking Water Quality Management Standard (DWQMS)
- Nova Scotia Environment
- British Columbia Drinking Water (EWQA)



AGAT Laboratories is accredited by the International Organization for Standardization for the following:

- ISO 9001:2015
- ISO/IEC 17025:2017

Environmental Contaminants

Strengthening food safety requires the adoption of a quality plan to verify cleaning procedures through bacteriological monitoring of production surfaces and contaminant testing of water and ambient air. Moreover, we help our clients monitor the effectiveness of the various food safety controls and programs they have in place.

Many of our food industry clients have on-site water treatment facilities to effectively manage wastewater in a cost-effective manner. To ensure our clients remain compliant with all necessary regulations, our laboratory tests contaminants in water and soil as a complementary service to our food industry clientele. In order to ensure that your facility is maintaining a healthy and safe environment, we also offer comprehensive indoor air quality evaluations along with analytical services for mould, bacteria and other potentially harmful chemicals.

The chemistry tests that we conduct through our Environmental Division include:

- Heavy metals
- Preservatives
- Pesticide, Herbicide and Insecticide residues
- Petroleum hydrocarbons
- Analysis of volatile and semi volatile mixtures
- Contaminants including hydrocarbons, dioxins, furans, PCBs and PAHs

Food Chemistry

Our food chemistry laboratory provides information concerning the composition of products necessary to industries that must conform to regulations on packaging and labelling of products for consumers. Many of our clients are mandated by the Food and Drug Act and the Consumer Packaging and Labelling Act to ensure their products include a specific list of nutritional facts on product labels in a pre-defined format. Therefore, they are required to ensure that their products include a specific list of nutritional information, which must appear on product labels in a predefined format. As part of our food chemistry services, we provide our customers with an accurate sample of the Nutrition Facts table. The table provided

can be created according to the labeling criteria of Health Canada or according to the criteria of the United States Department of Agriculture for food products exported to the United States.

Our nutritional analysis and labeling services also include a wide range of nutrient testing, such as:

- Moisture and ash content
- Total fats or lipid profile
- Simple or detailed fatty acid profile
- Cholesterol
- Proteins
- Calories
- Carbohydrates
- Dietary fibre
- Total sugars or sugar profile
- Minerals usually indicated or detailed
- Vitamin C (optional)
- Vitamin A (optional)
- Vitamin D (optional)

Moreover, we are able to provide specialty services for food profiling and contaminant identification. Our LC-MS/MS, GC-MS and HPLC instruments allow trace-level detection for the analysis of vitamins and mycotoxins in food samples.

Microbiology

Our microbiology laboratories use up-to-date methodologies and instrumentation to guarantee high quality results for food safety and quality control. Our laboratories use various systems to detect pathogens on a genetic or molecular level in order to deliver results faster than by conventional methods. Pathogen detection can be performed using the MDS (Molecular Detection System) from 3M, VIDAS from bioMérieux, IQ-Check from BioRad, and BAX Q7 from Dupont which provide faster detection alternatives.

Our food microbiological capabilities include, but are not limited to, the following tests:

- *Listeria monocytogenes*
- *Salmonella* spp.
- Yeast and mould
- *E. coli*
- *Staphylococcus aureus*
- *Bacillus cereus*
- Total coliforms
- Thermophilic, mesophilic and psychrophilic bacteria
- *Clostridium botulinum*
- *E. coli* O157: H7
- Anaerobic bacteria
- Lactic acid bacteria
- *Clostridium perfringens*
- Sporulating bacteria
- Enterobacteriaceae
- Aerobic bacteria



Information Management

WebFOOD is our secure interactive database specially designed for our food industry clients. It allows them to enter data and access results in real time. Additional features of WebFOOD include data trending, guideline comparisons, quality control checks, customizable export functions and a searchable library of historical data. AGAT Laboratories uses a state-of-the-art Laboratory Information Monitoring System (LIMS) that monitors all data being processed within the laboratory. LIMS monitors quality control systems and processes results instantly as analytical testing is completed.

webfood.agatlabs.com

