



Science for Compliance

ILC MICRO-CHEM, INC.

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Visit our website for
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accredited methods:
www.ilc.micro-chem.com



Public Health Agency of
Canada Pathogen and
Toxin License



Strengthening Canada's Food Safety System

Did you know that the Canadian Food Inspection Agency (CFIA) is planning on strengthening Canada's food safety system? Implementation of a Preventive Control Plan (PCP) among Canadian food businesses, including importers, is under consideration by the CFIA.

A PCP is a written document outlining the measures and actions taken to ensure that food is safe for the consumer as prescribed by all Canadian food legislation. Preventive control measures are an internationally accepted approach to prevent or mitigate hazards associated with food products.

There is a lot that businesses can do proactively to prepare for the implementation and enforcement of the new regulation and avoid last minute rush to meet deadlines.

Let ILC Micro-Chem, help you

develop a PCP for small food businesses and/or perform a Hazard Analysis as required under a PCP preparation.

Link: http://www.inspection.gc.ca/DAM/DAM-aboutcfia-sujetacia/STAGING/texte/texte/regs_safe_food_infographic_plan_1431108346112_eng.pdf



Foodborne Illness Facts:

According to Health Canada, every year, about 4 million (1 in 8) Canadians are affected by a food borne illness. Of these, there are about 11,600 hospitalizations and 238 deaths.

Link: <http://healthycanadians.gc.ca/eating-nutrition/risks-recalls-rappels-risques/surveillance/illness-estimates-estimations-maladies/causes-eng.php>

Microbiology testing has become even more sensitive with its techniques. As an example, the industry has moved toward increasing sample sizes from 25 g to 325 g for *E.coli* O157:H7 testing. Larger sample size increases sensitivity, increases the likelihood of finding bacterial concerns and ultimately, decreases risk.

Chemical analysis is an important component in many quality and safety programs. Instrumentation such as liquid chromatography-tandem mass spectrometry and gas chromatography has given the ability to detect chemical contaminants at very low concentrations, improving confidence in the food supply.

Link: <http://www.foodsafetymagazine.com/magazine-archive1/aprilmay-2014/the-role-of-analytical-testing-in-maintaining-food-safety/>

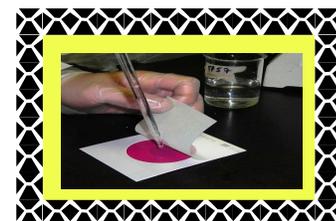
Expanded Scope of Accredited Methods

We have recently added new methods to our scope of accredited methods in Microbiology and Chemistry. MFLP-21 Enumeration of *Staphylococcus aureus* in Foods and Environmental samples using 3M™ Petrifilm™ Staph Express Count (STX) Plates has now been included in our always expanding scope of accredited methods for microbiological testing. Our microbiology team

can now provide you with a test that is fast, reliable and consistently accurate with confirmed *S. aureus* results in 24 (+3) hours and no additional Confirmatory Tests are required!

The MFLP-21 method is also an environmentally friendly alternative to the traditional cultural (agar) test (MFHPB-21) which reduces:
*66% of Waste

*75% of Greenhouse Gas Emissions.
*76% of Energy use
*79% of Water.
(Reference: 3M™ website)



New Allergen Tests



Food manufacturers face growing concerns regarding the presence of allergens in their products. Since February 2016, the CFIA has recalled over 40 different products from store shelves due to undeclared allergens. Globally, an increase in the specificity and scope of regulations, combined with the heightened awareness by the media and the public has increased the concern of accidental mislabelling or cross-contamination that could happen during product manufacturing. ILC Micro-Chem is capable of allergen testing for all your product

needs. We have also just recently added Milk and Soya allergen testing to our SCC scope of accreditation.



Nutritional Analysis & Labelling

Nutritional food analysis yields important information for dietary balance and manufacturing procedures. ILC Micro-Chem provides a complete range of analysis from basic proximate analysis to complete Canadian and US Nutritional profiles via approved methods and database analysis. We can provide Canadian and US labels for your products after the analytical testing has been completed. Contact us for accurate and complete allergen testing and

Nutritional Analysis and Labelling needs and avoid costly recalls.

Nutrition Facts	
Per 90 g serving (2 slices)	
Amount	% Daily Value
Calories 170	
Fat 2.7 g	4 %
Saturated 0.5 g	5 %
+ Trans 0 g	
Cholesterol 0 mg	
Sodium 200 mg	8 %
Carbohydrate 36 g	13 %
Fibre 6 g	24 %
Sugars 3 g	
Protein 8 g	
Vitamin A 1 %	Vitamin C 0 %
Calcium 2 %	Iron 16 %

Why Do An Enrichment?

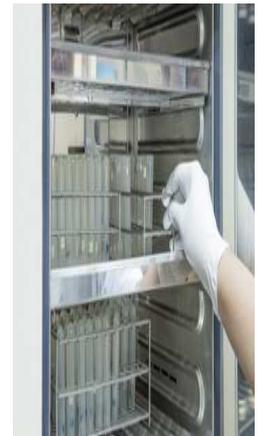
Irrespective of the approved testing method you're using for food borne pathogens, enrichments are essential. So why is it that different pathogens have different enrichment times? Each enrichment time is tailored to how fast the organism can grow, given the enrichment media and temperature specified by the method. For example, *Listeria* tends to grow more slowly than *E. coli* or *Salmonella* and hence the recommended enrichment times for *Listeria spp* tend to be longer.

Also, testing protocols (methods) for *Listeria* have a primary enrichment, which allows any bacteria to grow in a less harsh media. This ensures that sick or damaged cells have a chance to recover and replicate. The primary enrichment is then followed by a secondary or sometimes called selective enrichment. This enrichment uses a harsher media that will inhibit the growth of organisms that are unlike *Listeria*. This allows the target organism to grow within the enrichment,

increasing the chances of successfully finding *Listeria* further down the line.

Listeria monocytogenes is one of six *Listeria* species that are able to survive for prolonged periods in extreme environments. It is the only species that is highly pathogenic to humans.

(Redacted from full article by Lauren Bambusch:
Link: <http://instantlabs.com/food-safety-test/why-do-an-enrichment/>



MISSION STATEMENT

ILC Micro-Chem, Inc. is committed to providing the highest quality and most cost-effective product testing services in partnership with the Food, Pet Food, Natural Health Products and other related industries. Using government approved methods and state of the art equipment, our professional staff of scientists and technicians strive to meet the changing needs of our customers. Personal service is our trademark and the foundation of our business. ILC Micro-Chem, Inc. is committed to guaranteed fast turnaround times, personal attention and flexible services that do not compromise the quality of our results. Customer satisfaction is our ultimate goal.

OUR SERVICES

ILC Micro-Chem is ISO/IEC 17025: 2005 accredited through the Standards Council of Canada to provide analyses to Canadian, US and overseas clients. We provide Labelling of Foods, Pet Food Nutritional Profiles, Microbiological and Chemical Analyses, Environmental and Water Analyses, Allergen Testing, Vitamins and Amino Acid Profiles, Shelf-Life Studies, Consultation Services, Quality Assurance Programs, Regulatory Requirements and Plant Inspections. For more information about our organization and details on the services that we offer, please feel free to visit our website or call us directly.

