

FOOD TECHNOLOGY CENTRE

Innovation for the Food & Bioresource Industries

Prince Edward Island, CANADA

NEWSLETTER

October 2007

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Free Preliminary Consultation

FTC provides free preliminary consultation services and FTC will help you source appropriate funding for your food development projects.

The **Prince Edward Island Food Products Development Fund** will assist Island businesses with projects conducted at the Food Technology Centre. Companies from neighbouring provinces, NB and NS, also have funding support available from their provincial governments for product development activities conducted at FTC. Contact Yaw Dako, Food Technologist (902-569-7699).

Microbiology Laboratory Services:

- [Sample Submission forms](#)
- [Requirements for the collection and shipping of samples](#)
- [Specific instructions for the collection and shipping of shellfish samples](#)

To obtain swabbing supplies and sterile bottles, or for further information about our laboratory services, please call our microbiology laboratory at (902) 368-5937.

FTC provides certified **organic processing** services. Contact Dr. Leigh Gao, Food Scientist/Engineer at 902-368-5465.

Success Stories

We love to help our clients succeed! A few of their success stories are available on FTC's website. See [Success Stories](#).

Fermentation in Modern Processing

By Dr. Lawan Suleiman

From simple bread-making to alcohol production, fermentation has been practiced throughout history. Archaeologists digging in Egyptian ruins found early grinding stones and baking chambers for yeast-raised bread, as well as drawings of 4,000-year-old bakeries and breweries. Now, fermentation is becoming an increasingly integral part of the development of many high-value products and is replacing conventional processing of commodity products, such as organic acids, feed or food additives, and industrial chemicals. The quest for environmental sustainability and development of renewable resources has increased interest in the recovery of useful fermentation products. The range of products produced through fermentation is increasing beyond traditional high-value low-volume compounds, such as pharmaceuticals, and is starting to compete with traditional synthetic production of commodity chemicals.



Since fermentation is moving into lower-value higher-volume chemicals, it is important to maximize efficiency and minimize costs and waste byproduct. This can only be achieved by properly designing the combination of fermentation with downstream separations into a single process. Since fermentation broths consist of complex aqueous mixtures of cells, soluble extracellular products, intracellular products, as well as converted substrate or unconvertible components, the choice of separation method will depend on the physical location of the product of interest and its size, charge, and solubility.

For information on FTC's fermentation services, contact Dr. Lawan Suleiman, Natural Products Extraction Biochemist at (902) 368-5086; email: lsuleiman@gov.pe.ca

The Gradual Resurgence of Potatoes

By Yaw Dako, Food Technologist

From the 19th century, the potato has been a constant feature on dinner tables in Canada. Recently, however, the consumption of potatoes has been in a gradual decline. This was partially fueled by the rise of the Atkins, South Beach and other low-carbohydrate diets. The negative perception of potato meals as being cumbersome and time consuming to prepare did nothing to help the image of potatoes in the eyes of today's consumers, who are looking for healthy, convenient

FTC can provide solutions in **natural products extraction** and nutraceuticals/ functional foods product development. Contact Dr. Edward Charter, Manager, Food Science & Natural Products Extraction, at 902-368-5912.

Food Safety Workshops:

Course outlines of all our Food Safety Workshops are available on the [Training page](#) of our FTC website.

For further information on these, or if you would like a course held in your area, please contact Jim Landrigan at 902-368-5772 or by email at jklandri@gov.pe.ca

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Feedback: If you have ideas for future newsletters or any comments, we would love to hear from you. Please call Janet Docherty at 902-368-5226 or email jvdocher@gov.pe.ca



and quick-to-prepare meals.

Proving up to the task in combating the challenges faced by the industry and meeting the demands of their consumers, the potato industry responded by introducing various new innovative and exciting products. Some of these products include; microwaveable potatoes, pre-peeled and par-cooked refrigerated products, seasoned wedges and diced potatoes and refrigerated mashed potatoes. These products have been warmly received by consumers.

Other products gaining increasing acceptance by consumers are the varieties of gourmet potatoes. Available in different shapes and eye-catching colours like blue, red, and purple, specialty potatoes are proving to be popular in both farmers' markets and retail stores across the country.

Processors of potato snack products have not been left behind either. To satisfy the demand for healthy products, producers of potato chips have reformulated their products by removing trans fats in order to make them more appealing to the consumer.

Looking forward into the future, it is encouraging to see the introduction of a variety of new potato products and the reformulation of some of the old traditional potato products. These efforts by the potato industry will help the potato reclaim its prominent place on the dinner tables of consumers in North America.

Food Safety Workshop



Picture courtesy Don Newman

as well as the Food Safety Enhancement Program (FSEP).

HACCP originated in the early 1960s when the Pillsbury Company developed it for the National Aeronautics and Space Administration (NASA) space program to provide assurances for the safety of food products for space travel. Since its inception, HACCP has evolved and gained international acceptance as one of the most effective approaches to safe food production. FSEP is the Canadian Food Inspection Agency's approach to encourage and support the development, implementation and maintenance of HACCP systems in all federally registered establishments.

The workshop was attended by industry participants from New Brunswick, Nova Scotia and Newfoundland.

Funding Profile: Canadian Foundation for Innovation (CFI)

The [Canadian Foundation for Innovation \(CFI\)](#) is an independent corporation created by the Government of Canada to fund research infrastructure. The CFI's mandate is to strengthen the capacity of Canadian universities, colleges, research hospitals, and non-profit research institutions to carry out world-class research and technology development that benefits Canadians. Since its creation in 1997, the CFI has committed more than \$3.75 billion in support of approximately 5,300 projects at 129 research institutions in 64 municipalities across Canada.