

FOOD TECHNOLOGY CENTRE

Innovation for the Food & Bioresource Industries

Prince Edward Island, CANADA

NEWSLETTER

December 2008

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Success Stories

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

Free Preliminary Consultation

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

FTC can provide solutions in **natural products extraction** and nutraceuticals/ functional foods product development. FTC has the equipment and the expertise to help you develop new products and techniques that will help you to design extraction, separation and purification methods and to reduce your production costs. For further information, please contact Dr. Edward Charter, Manager, Natural Products Extraction, at 902-368-5912.

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.



Season's Greetings from the Food Technology Centre

All of us at the Food Technology Centre wish you a Happy Holiday Season and All the Best for the New Year!

We look forward to working with you in 2009.
Please give us a call if we can be of any help.



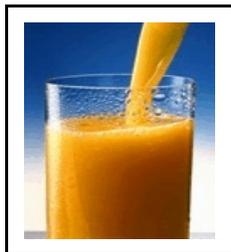
Client Profile: Prince Edward Island Department of Health

By Eva Van't Veld, B.Sc., Microbiology Technologist

Since 1989, the microbiology laboratory of the Food Technology Centre has worked with Environmental Health, a division of the Prince Edward Island Department of Health, by providing analytical services, especially of food samples. This analysis is necessary for the Department to determine the sources of foodborne illness using epidemiology as well as to devise effective strategies for preventing such events.

The Department of Health is responsible for promoting and protecting the health and safety of islanders and visitors through education, enforcement of regulations, and inspections of public and private services and facilities.

The Food Safety Program administered by the department focuses on the prevention of foodborne illness. This mandate is carried out through public education and inspections of all food premises in the province, including grocery stores, slaughterhouses, eating establishments, and licensed premises, on a regular basis. Integral to the food protection program is the investigation of foodborne illness outbreaks and complaints of suspected food poisoning cases. A significant component in the investigation of foodborne illness is a competent and accredited laboratory capable of prompt analytical response.



Microencapsulation

By Lilian Yu, Food Scientist

Microencapsulation is a process by which very tiny bubbles of gas, droplets of liquid, or particles of solid active ingredients are coated with continuous shell materials such as proteins, hydrocolloids, gums, waxes, polymers, or resins for the purpose of shielding the active ingredient from the surrounding environment.

There are many advantages of microencapsulation: liquids can be handled as solids; odour or taste can be effectively masked in a food product; bioactive compounds can be protected from the effects of the surrounding environment; toxic materials can be handled safely; and drug delivery can be controlled and targeted.

In the food industry, the typical applications of microencapsulation include: formulation for functional foods; masking for taste and colour; stabilization of flavour; and

Funding Programs

Links to information about programs available from our funding partners are available on FTC's website. See [Funding Programs](#).

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).

Food Safety Workshops

- [Food Safety for Maintenance Workers](#) – one day workshop on two dates: Feb. 3 & Feb. 4, 2009 at Oxford, NS.
- [Seafood HACCP-QMP](#) – 3 days workshop, Feb. 11-13, 2009 at Moncton, NB.

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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improving oxidation stability to increase the shelf-life of product. Orange juice with Omega-3 oil is one common example of the application of microencapsulation technology.

For further information on microencapsulation, please contact Lilian Yu, Food Scientist at (902) 368-6154; email: lyu@gov.pe.ca.

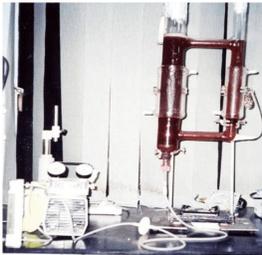
IFT Webcast: Safety of Minimally Processed Foods

You are invited to an Institute of Food Technologists webcast entitled "[Safety of Minimally Processed Foods](#)". This informative webcast was originally shown in August and is scheduled to be re-shown in the Food Technology Centre boardroom on Tuesday, December 16 at 1:00 p.m.

Please call Janet Docherty at 368-5226 if you are interested in sitting in. There will be no charge for this presentation.

Featured Equipment: Loop Airlift Fermentors

By *Lawan Suleiman, PhD, Natural Products Extraction Biochemist*



Airlift fermentors (see July-August Newsletter) use air as a means of agitation. The air is pumped in at the bottom of the fermentor and passes through a sparger creating bubbles. The movement of the bubbles cause transfer of biomass and oxygen in the fermentor.

The loop airlift fermentor has an external loop attached to the main body of the fermentor. This allows the fluid and the cells to circulate in the fermentor, achieving higher oxygen transfer rates.

Fermentation has become an integral part of the development of many high-value products and is now replacing more conventional methods. The quest toward "green" environmental sustainability has significantly increased interest in the recovery of fermentation products such as organic acids, feed supplements and food additives. The range of products, produced through fermentation, is increasing beyond the traditional high-value, low-volume compounds and is now competing with traditional synthetic production of commodity chemicals. Benzaldehyde for example can be effectively produced in a Loop Airlift Fermentor using *Rhizopus* species.

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

Featured FOODTECH Canada Centre: Cintech agroalimentaire

Thirteen similar centres across Canada have formed a network incorporated as FOODTECH Canada. The purpose of this network is to provide technical support for Canada's food processors to commercialise new products, to enable the centres to work on large projects that they could not do on their own, and to allow the centres to focus on their particular expertise. This month we are featuring a FOODTECH Canada Centre in Saint-Hyacinthe, Quebec.



Cintech agroalimentaire – The centre has complete labs for R&D, analysis, processing on a laboratory and pilot scale, sensory evaluation and experimental cuisine. High-tech equipment to evaluate texture, colour and starch behaviour is available. Vacuum microwave and press dryers, an extruder, a pilot fermentor as well as supercritical CO₂ extraction and purification units are available. More information is at http://www.cintech-aa.qc.ca/eng/a_accueil.asp. Contact Johanne Tanguay at jtanguay@cintech-aa.qc.ca.