

FOOD TECHNOLOGY CENTRE

Innovation for the Food & Bioresource Industries

Prince Edward Island, CANADA

NEWSLETTER

July 2006

Featured in this issue:

- Kudos to PEI Shellfish
- Antioxidants from Green Tea
- Leica Fluorescence Microscope
- Funding Profile: Atlantic Innovation Fund
- Upcoming Training Workshops

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 carried out at the P.E.I. Food Technology Centre. Support is also available for product development activities carried out at FTC for companies in our neighbouring provinces through the NS, NB, and NL governments. Contact Yaw Dako, Food Technologist (902-569-7699)

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

FTC can provide solutions in **natural products extraction** and nutraceuticals/ functional foods product development. Contact Ron Skinner, Project Manager, Natural Products Extraction at 902-368-5919.

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.

Kudos to the PEI Shellfish Industry!

Prince Edward Island's shellfish industry contributes close to \$70 million to the Island's economy and provides employment for more than 2,500 Islanders in coastal communities across the Island. Products such as Malpeque oysters and PEI mussels are world-renowned for their superior quality and excellent flavour.

The Island's shellfish industry based largely on the culture of blue mussels and harvesting of the American oyster. PEI produces in excess of 80% of the cultured mussels produced in Canada. The majority of PEI's oysters come from a traditional fishery as the bulk of production originates from public beds. Many of the beds are now being enhanced using aquaculture techniques which can cut two to three years off the time it traditionally took to grow a market size oyster. PEI is second only to British Columbia in terms of oyster production. Culture techniques for soft-shelled clams, quahogs, and bay scallops are also being developed.



Wendy MacRae, Microbiology Lab Technologist, shucking quahogs prior to testing for faecal coliforms

The Food Technology Centre's microbiology lab is contracted to routinely analyze shellfish samples to ensure that safe products are sent to market. Our food scientists also work with processors to increase secondary processing of value-added shellfish products. International processing technologies have been transferred to PEI shellfish processors with the help of the Food Technology Centre.

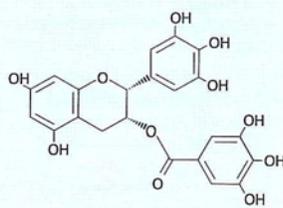
The annual [PEI International Shellfish Festival](#) will be held September 15-17, 2006 around the historic Charlottetown waterfront and in restaurants throughout Charlottetown. Events include live entertainment, shucking championships, chowder championships, culinary demonstrations, children's activities, and much more. With lots of opportunities to taste delicious PEI shellfish, what a great way to kick off a vacation on PEI!

Antioxidants from Green Tea

By Dr. Leigh Gao, Food Scientist/Engineer

Green tea is a food product that has an abundance of antioxidants called catechins. Antioxidants are important in the diet because they scavenge and neutralize oxidants that damage biologically-active molecules. Lack of antioxidants in the diet may leave cells vulnerable to damage and in turn cause cancer and other health problems.

Origin BioMed Inc., a Halifax-based nutraceutical company, has taken advantage of the health benefits of tea catechins and now manufactures a line of green tea catechin supplements and topical products. The FTC is assisting Origin BioMed to further develop their tea business and create processing methods to incorporate tea catechins into mainstream healthy foods.



Green Tea Catechin
epi-gallocatechin-3-gallate (EGCG)

The tea leaves from the plant *Camellia sinensis* are known to contain seven major polyphenol antioxidants called catechins and their related molecules. The diagram shows the chemical structure of a major tea catechin, acronymed EGCG, that was found to preferentially inhibit colon cancer cells.

Food Safety Workshops

Several courses are being planned in cooperation with the New Brunswick Food & Beverage Processors Association:

- [Introduction to ISO 22000:2005 Food Safety Management System Workshop](#), Moncton, NB; Sept. 12, 2006.
- [Food Plant Sanitation Workshop](#), Moncton, NB; Sept. 13, 2006
- [Getting Ready for a Customer Food Safety Audit Workshop](#), Moncton, NB; Sept. 19, 2006.
- [Food Safety for Managers and Supervisors](#), Moncton, NB; Sept. 20, 2006
- [HACCP Food Safety Workshop - FSEP](#); Moncton, NB; Oct. 17-18, 2006
- [Seafood HACCP Workshop \(QMP\)](#), Moncton, NB; Nov. 7-9, 2006

These courses will also be offered in other areas if there is enough interest. For further information on these and other available courses, please contact Jim Landrigan at 902-368-5772 or by email at jklandri@gov.pe.ca

A listing of [food processing equipment](#) is available on our website. Most pieces of equipment are mobile, permitting operators to customize processing lines. A range of pumps and auxiliary equipment is also available.

For further information on our Centre, please visit our website:
www.gov.pe.ca/ftc

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To unsubscribe please email
ftcnews@gov.pe.ca
with "unsubscribe" in the subject line.

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

FTC's work will be to ensure that the bioactivity of the catechins is protected against damage during storage and processing. The catechins must also be released to function in the human body after food ingestion while maintaining the flavour and colour of the food products to which the catechins are added as a functional ingredient.

Featured Equipment - Leica Fluorescence Microscope



The microbiology lab has recently obtained a fluorescence microscope. This enables the use of specific antibody-labelled stains and helps improve the sensitivity and specificity in the identification of disease-causing microorganisms in food. This further enhances the ability of the lab to improve the services to its clients and to pursue research of strategic importance to food safety.

FTC uses this microscope to identify food-borne microorganisms such as *Cryptosporidium* and *Giardia*.

For further information about laboratory analysis services provided by the Food Technology Centre, please call our Microbiology Laboratory at (902) 368-5937.

Funding Profile: Atlantic Innovation Fund

What is the Atlantic Innovation Fund?

The [Atlantic Innovation Fund \(AIF\)](#) is a program designed to strengthen the economy of Atlantic Canada by accelerating the development of knowledge-based industry.

What are the objectives of the AIF?

The objectives of the AIF are to:

- increase activity in and to build capacity for innovation and research and development (R&D) that leads to technologies, products, processes or services that contribute to economic growth in Atlantic Canada;
- increase the capacity for commercialization of R&D outputs;
- strengthen the region's innovation capacity by supporting research, development and commercialization partnerships and alliances among private sector firms, universities, research institutions and other organizations in Atlantic Canada; and
- maximize the region's ability to access national R&D funding programs.

What types of projects are eligible for AIF funding?

The Atlantic Innovation Fund focuses on R&D projects in the area of natural and applied sciences, as well as in social sciences, humanities, arts and culture, where these are explicitly linked to the development of technology-based products, processes or services, or their commercialization.

More specifically, the Atlantic Innovation Fund is designed to focus on areas of strategic importance to the region that offer the most potential for future growth, including information technology, ocean technologies, aquaculture, bio-technology, health/medical technologies, and environmental technologies. AIF investments could also strengthen the region's ability to develop technologies that allow natural resource industries - such as oil and gas, agriculture and agri-food, fisheries, forestry and mining - to maintain and increase their competitiveness.

Who can apply for AIF funding?

Eligible applicants include universities, research institutions and private sector businesses. Proposals that involve partnerships among these groups are encouraged. Federal and provincial departments, including government research laboratories and institutes, are not eligible for funding. (See [Atlantic Innovation Fund \(AIF\)](#))