

# FOOD TECHNOLOGY CENTRE

## Innovation for the Food & Bioresource Industries

Prince Edward Island, CANADA

### NEWSLETTER

October 2008

#### Featured in this issue:

- Nautilus Biosciences Canada
- Formulating Fibre-fortified Products
- Control of *Listeria* in Food Processing Plants Workshop
- 2008 Atlantic Dairy Ingredients Seminar
- Featured FoodTech Canada Centre: CASD

#### 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.

#### Featured Client: Nautilus Biosciences Canada

By Muhammad Yousaf, Ph.D., Organic/Purification Chemist



The company Nautilus Biosciences Canada focuses on the discovery and development of novel therapeutic agents derived from marine organisms. It has an exclusive license to patented technology leading to extraction of compounds from marine organisms. These valuable compounds have an established market in cosmetics and a potential market as pharmaceuticals.

The Food Technology Centre has been contracted to develop technologies for isolation and purification of active cosmeceutical ingredients from coral. The main objective of the work is to develop a technology for large scale production from a Caribbean soft coral species. The active agents are natural products which possess potent anti-inflammatory and analgesic (pain relief) properties. They appear to work by inhibiting the synthesis of eicosanoids (locally functioning hormone-like substances) in polymorphonuclear leukocytes (a type of white blood cell). The extreme selectivity with which these natural products target their activity is intriguing to researchers. They appear to be pharmacologically distinct from other non-steroidal anti-inflammatory drugs (NSAIDs) and their mechanism of action appears to be novel as well. They are currently in use as commercial skin cream additives and are in clinical development for medical applications.

For further information, contact: Russell Kerr, PhD, CEO, Nautilus Biosciences Canada, NRC-INH, Suite 407, University of PEI, Charlottetown, PE; email: [rkerr@upei.ca](mailto:rkerr@upei.ca)

#### Formulating Fibre-fortified Products

By Esther Lee, Food Scientist

Dietary fibre is resistant to digestion by enzymes and is commonly found in fruits, vegetables, whole grains and legumes. The health benefits of dietary fibre has been well established in the areas of cardiovascular health, gastrointestinal health, blood sugar control, weight management and cancer prevention. The American Dietetic Association recommends a daily intake of 20-35 g of dietary fibre. However, North Americans' average daily intake is less than 50% of the levels required for good health.

To help consumers get more fibre, food manufacturers can reformulate products using food ingredients that can contribute to the increased amount of dietary fibre. A careful selection of fibre-rich ingredients should be considered when formulating a fibre-fortified product. This is important to adequately meet the desired level without affecting the product quality and characteristics. Furthermore, the regulations regarding permitted ingredients and nutrient content claims must be checked out beforehand to ensure the regulatory compliance of nutritional labeling.

Nutritional analysis software is helpful to quickly determine the right level of ingredients to be added in the formulation for the intended nutrient content claims. FTC can provide technical assistance in product reformulations using this software. For further information on product development services, please contact Yaw Dako, Food Technologist at (902) 569-7699 or by email [yadako@gov.pe.ca](mailto:yadako@gov.pe.ca).

#### Workshops: Control of *Listeria* in Food Processing Plants

October 27, Halifax/Dartmouth, NS;  
November 6, St. John's, NL;

October 30, Moncton, NB;  
November 13, St. George, NB.

The recent outbreak of listeriosis has demonstrated the importance of the control of *Listeria* in food processing plants. The Food Technology Centre will hold several one-day food

## Funding Programs

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

## 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](mailto:jklandri@gov.pe.ca)

### Prince Edward Island Food Technology Centre

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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](mailto:jvdocher@gov.pe.ca)

safety workshops on "[Control of Listeria in Food Processing Plants](#)" throughout the fall. This workshop will help processing plants establish and implement an effective program to reduce and prevent *Listeria monocytogenes* contamination of food products. This workshop is one of [a range of food safety workshops](#) available at FTC or available as a customised workshop in your processing plant.

For further details, please contact Ebo Budu-Amoako or Jim Landrigan at 368-5548, or see our [food safety webpage](#).

## 2008 Atlantic Canada Dairy Ingredients Seminar



Left to right: Ralph Ashmead, Serecon Marketing Consultants; Jim Smith, Food Technology Centre, Kristen Walker, Mintel International; Mark Lalonde, Canadian Dairy Commission; Allan Williams, The Culinary Institute of Canada.

On September 18, the Food Technology Centre (FTC) hosted the Atlantic Canada Dairy Ingredients Seminar in partnership with the Canadian Dairy Commission. We have received many complimentary remarks from attendees regarding the insightful presentations and marketing strategies.

Speakers included the following:

- Ralph Ashmead, Partner, Serecon Marketing Consultants
- Isabelle Neiderer, Director of Nutrition, Dairy Farmers of Canada
- Kristen Walker, Custom Solutions Group Mintel International
- Chad Mann, Corporate Secretary/Director of Finance, Amalgamated Dairies Ltd.
- Allan Williams, Chef, The Culinary Institute of Canada
- Jim Smith, Executive Director, PEI Food Technology Centre
- Mark Lalonde, Chief, Dairy Marketing Programs, Canadian Dairy Commission

Serecon Marketing Consultants and Mintel International provided market research reports on global market trends and innovation in the dairy industry.

Thank you to all of the speakers and delegates for your support, and we look forward to future collaborations.

FTC has a funding agreement with CDC that allows food processors who use milk ingredients to access two [funding programs](#). The programs give processors an opportunity for consultation and development work at the Centre.

For further information on product development services using dairy ingredients, please contact Yaw Dako, Food Technologist at (902) 569-7699 or by email [yadako@gov.pe.ca](mailto:yadako@gov.pe.ca).

## Featured FOODTECH Canada Centre: Centre for Aquaculture and Seafood Development (CASD)



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 Newfoundland.

The Fisheries and Marine Institute of Memorial University of Newfoundland's [Centre for Aquaculture and Seafood Development](#) offers a high level of applied scientific and technical expertise and support for the seafood processing and aquaculture industries. CASD is dedicated to enhancing the competitiveness and future growth of these sectors by working with industrial clients in the areas of applied research and development, technology transfer and advisory services, and support for education and training. From single person owner/operator startup companies to national corporations, the centre can play an integral role in technical development, improving practices and procedures, or developing new and innovative ideas from concept to commercialization. CASD hosts a modern aquaculture research facility comprised of recirculating systems that are capable of using fresh or salt water. Quarantine and histopathology laboratories are included within this facility. CASD also operates two food pilot plant facilities. The Marine Institute Plant is both provincially and federally registered, and has an approved Quality Management Program (QMP) in place. The Mount Scio Pilot Plant facility, now the new Atlantic Fishery By-Products Research Centre, is available for research and development efforts.