



BIO | FOOD | TECH

CONCEPT TO PILOT TO MARKET

OPPORTUNITIES FOR PRODUCT DEVELOPMENT

PEI Aquaculture Alliance
Alternative and Emerging Species Workshop
Dec 7, 2017

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- ❑ Operating for 29 yr
- ❑ Technical Support for Food Industry
- ❑ 20+ highly qualified staff
 - ❑ Food scientists, Biotechnologists, Microbiologists, Engineers, Fermentation Scientists
- ❑ Processing facilities
 - ❑ 2 commercial kitchens + 4 pilot plants/incubation facilities
- ❑ Registrations
 - ❑ CFIA (Seafood), NHP, Organic, etc.



Concept to Pilot to Market

- Turn **concepts** into prototypes in product development kitchen
- Scale-up process in **pilot** plant
- Manufacture in pilot plant for **market**



Three Integrated Divisions

Food Technology

Lab Services

BioScience



Food Technology Support



- Product prototype development
- Ingredient and process optimization
- Shelf life - food safety & quality
- Package & Equipment needs
- Process improvements
- Costing, Yields
- Scale-up
- Commercial manufacturing
- Regulatory support
- Ideation

Laboratory Support



- Accredited analysis
- Food safety - regulatory & vendor
- Food Safety training
- In plant troubleshooting

BioScience Support



- Pilot Scale Equipment
 - ▣ Fermentation, Extraction, Filtration, Drying, etc.
- Pilot scale processing
- Natural health product license
- Process optimization
- Analytical services

Impact

- Short-term impacts
 - ▣ Improved technical capabilities
- Medium-term impacts
 - ▣ Improved company performance
- Long-term impacts
 - ▣ Socio-economic benefits

* The Evidence Network (2016)



History of industry engagement

PEI companies



Other companies



Food Processing Equipment



Bioscience Processing Equipment

- ❑ Supercritical fluid extraction unit
- ❑ Spray Dryer
- ❑ Urshel grinder
- ❑ Reverse Osmosis



Examples of Past Industry Support

Lab Services

- Analysis
 - ▣ Vibrio, Listeria, etc.
 - ▣ Certificates of Analysis
- HACCP/Training
 - ▣ QMPs
 - ▣ Listeria
 - ▣ Sanitation
- Quality/Regulatory Support
 - ▣ Shelf-life/ extensions
 - ▣ Quality evaluations
 - ▣ FDA approvals

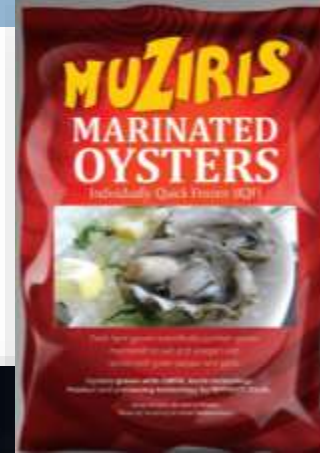
Examples of Past Industry Support

Technical Projects

- ▣ Product Development:
 - Retail & Food Service (e.g., added flavours, sauces, cheese, pickled, etc.)
- ▣ Package Development:
 - Frozen, cooked
 - Modified Atmosphere
 - Fresh
- ▣ Process Development:
 - Thermal processing
- ▣ Waste/By-product:
 - Broken shells; Meal/Feeds
 - Water: concentration & re-circulation

Value Add Opportunities

- High/Low Ingredients
 - ▣ Pasta fillings
 - ▣ Dips
 - ▣ Soups
- User friendly
 - ▣ Ready to heat
- Everyday vs. Occasion
- Different formats



Higher Value Opportunities

- Nutraceutical market
 - Oils & Powders
 - other NHP
- Processing
 - Grinding, Drying, Extraction
- Supply/cost considerations



Other Opportunities

- ❑ Pet Food & Treats
- ❑ Feeds
 - ❑ Fish, Animal
- ❑ Fertilizers
- ❑ Industrial materials
 - ❑ Construction
- ❑ Consumer goods
 - ❑ Nail polish



Support

Partners

- ❑ Food Island Partnership
- ❑ Canada's Smartest Kitchen
- ❑ Perennia
- ❑ Marine Institute
- ❑ FoodTech Canada Centres
- ❑ PEI AA
- ❑ PEI SPA
- ❑ Agriculture & Fisheries

Funding

- ❑ Atlantic Fish Fund
- ❑ Innovation - Food Fund
- ❑ NRC: CTO
- ❑ NRC: IRAP
- ❑ ACOA

What our clients said...

“We would literally not be in business today, if it wasn't for BioFoodTech.”

“BioFoodTech has been critical to getting me where I'm at. I'm not sure where I'd be without them.”

“We were especially pleased with the scientist who had great knowledge in this field.”

“Our (buyers) took us a lot more seriously because of our involvement from BioFoodTech. Without them, we would not be where we are today. “

“BioFoodTech helped us to optimize the ingredient formulation for optimal cost, allowing us to increase our profit margins.”

“The workshop that you guys put together was worth a million dollars.”

QUESTIONS ?



Thank you

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