



BRANDON UNIVERSITY



Innovation in Agri-food Processing in Manitoba: Report Highlights

>> This applied research project addresses the question: **“Where are the opportunities for growth in bulk food processing?”**

Growth in food processing to produce bulk ingredients represents a major opportunity for Manitoba to increase economic activity in the province.

This two year project studied growth opportunities from innovation in the bulk food processing industry in Manitoba. The Rural Development Institute conducted case studies into eight processing companies, their associated supply chains and innovation partners.

A bulk ingredient processor is a company selling bulk volumes to manufacturers, bulk distributors

or businesses. Some processors also sold branded retail products.

61 interviews were conducted, with company leaders, associations, researchers and other innovation linkages. Each case study describes the company, industry and supply chain; and examines types and properties of past and projected future innovations. Findings were validated with those interviewed to ensure accuracy and completeness.

66 innovation initiatives were identified across the 8 diverse cases. Patterns in these innovation activities were revealed through a cross-case analysis. Examining diverse cases of food processors helps ensure that when similar findings occur across several or all, the result signals an important and valid conclusion.

RURAL DEVELOPMENT INSTITUTE PROJECT TEAM

William Ashton
(Director)

Gillian Richards
(Project Lead)

Eleni Galatsanou
(Research Assistant)

Sarah Woods
(Student Research Assistant)

THANKS

To all the industry stakeholders who participated in this research

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Company	Commodity	Main Products	Start Date	# Employees
Richardson Milling	Oats	Flakes & flour	1991	115-130
shape foods	Flax	Oil & meal	2008	No data
Prairie Garden	Vegetables, fruit & pulses	Purees	2014	10+
HEMP OIL CANADA	Hemp	Seeds, oil & powders	1998	30
Floating Leaf	Wild rice	Wild rice & blends	1955	20
BeeMaid	Honey	Packaged honey	1954	40
TRUE NORTH FOODS	Beef, bison & elk	Block ready meats	2012	25
BRAR NATURAL FLOUR MILLING	Grains and pulses	Flours & bulk pulses	1980's	25



Highlights of Research Results:

The 66 innovation initiatives from 8 case-studies are analyzed in term of innovation type, novelty, impact on and nature of growth, innovation along the supply chain and with time. As is evident through this analysis, innovation is complex, involving multiple interlinked initiatives and cooperation between multiple partners in each industry. The main opportunities for growth of the cases lie with expanding sales geographically by entering new export markets and providing new ingredients or new food products from existing ingredients to meet consumer demand for safe, natural, healthy food products.

Types of 66 Innovation Initiatives



TYPES OF INNOVATION

All eight companies and their related supply chains are successfully innovating in many different ways: new processes and products, marketing strategies and changes in organization, including acquisition and expansion. Innovations are often paired, where two types of innovation are occurring simultaneously, e.g. Canadian Prairie Garden's novel puree making process which produces a world-leading puree product. Initiatives often trigger new innovations along the chain; e.g. HOCI's new hemp seed products are marketed to food manufacturers, to make new retail product such as a new bar; which in turn requires product/process development and new marketing.

NOVELTY AND IMPACT

World-class process/product innovations by Shape Foods, Canadian Prairie Garden Purees, and Hemp Oil Canada are driving the large growth of those companies. New to company and industry innovations can also result in large growth, as with True North Food's planned federally certified plant which will increase Manitoba processing by a factor of 5. Growth from some initiatives is modest, to stay efficient and competitive; but companies see such innovation as essential, those that do not innovate will get left behind. Bee Maid Honey is marketing an established product, but exploring new food service and export markets, while constantly updating packaging to retain and expand their sales.

TYPES OF GROWTH

The main opportunities for growth among these processors and related supply chains lie with expanding sales in many ways: geographically, entering new export markets; and developing and marketing new ingredients and new food products from existing ingredients. Innovative food ingredients are increasingly being challenged to meet consumer demand for natural, healthy food; an example is Brar's development of low glycemic index atta flour.

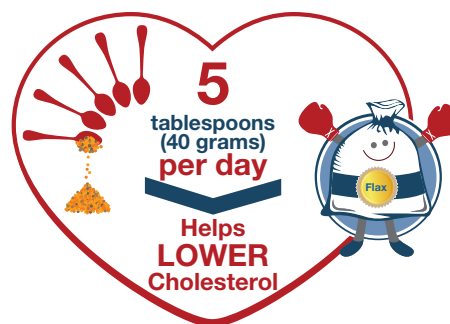
INNOVATION ALONG THE SUPPLY CHAIN

Of the 66 innovation initiatives, not one is undertaken alone, and innovation is occurring along the whole chain. Companies usually work with one partner on proprietary innovations: Floating Leaf worked with the Food Development Centre to develop their new quick cook wild rice. Established companies and commodities such as Richardson Milling and the oat industry find it easier to coordinate the multiple partners needed to investigate possible health claims. These partnerships include many members of the supply chain, consultants, commodity organizations, government agencies and academic researchers in agronomy, plant breeding, food processing and medicine.

PATTERNS OF INNOVATION

The time-scale for innovation activities is variable. Some initiatives are relatively short and intense; the results of research, development and execution are quickly internalized as regular operational activities – a new normal. Others such as product development with food manufacturers or grower innovation through plant breeding or improved management practices give continuing step-wise improvements over multiple years. Confirmation of health benefits leading to health claim labelling often takes decades.

Flax, The Cholesterol Fighter



 Agriculture and Agri-Food Canada  Agriculture et Agroalimentaire Canada

RURAL DEVELOPMENT INSTITUTE CONTACT

Dr. Wm (Bill) Ashton
 ashtonw@brandonu.ca
 204-571-8513

Dr. Gillian Richards
 richardsgi@brandonu.ca
 204-571-8554

