

# CAIRN POLICY BRIEF

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## POLICY, INDUSTRY STRATEGY AND HEALTHY FOOD INNOVATION

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### Issue

The relationship between food and health is complex and continuously evolving. Every day Canadians are affected by the food they consume and their consumption patterns determine the economic performance of Canada's agriculture and food industry. Innovation in healthy food products offers the potential to create new economic opportunities for farmers and food companies. The resulting products also provide the hope of better health impacts on consumers. The potential social and economic benefits are significant, but the process needed to move from identifying a food health relationship to commercial success in the food industry is not clear; nor are the policies and industry strategies that will be most effective in supporting the product and the market.

### Policy Implications and Conclusions

A case based analysis of three healthy foods, DHA milk, blueberries and pulses, provided several policy recommendations for government, but also for industry:

**1. Investing in research**

**matters** – These healthy food opportunities were built on research linking nutrition and health but also on research and development support for projects to identify ways to incorporate health findings into food products.

**2. Partners are essential.**

Each of the cases involved partners, but those partners and their roles varied in each case. The right partner for a situation could be industry (up or down the value chain), government, academia, or an NGO.



**3. Streamline regulations and the regulatory process and evaluate and reduce inter-provincial barriers wherever possible.** Both were obstacles to capitalizing on healthy food opportunities in different ways in each case.

**4. Success depends on a combination of government policy and industry strategy** – Policy can create a supportive environment but moving the innovation to commercial success required significant leadership and commitment by firms and industry organizations.

For industry and firms the following results were observed:

**5. Health sells and media coverage is important.** The message must be clear and focused – not all of the cases were. Increasing media coverage, particularly health related, increases sales, although the impact varied by sector.

**6. Understand the health opportunity and the path to market** – In the cases the health value proposition for consumers, the final product form, and the technology needs and marketing

strategies are still evolving. New information will force more change.

**Product form matters to consumers.** Ease of consumer use and unique product characteristics played a role in the product acceptance and marketability.

### Background

Canada is facing a health care funding crisis. Provincial healthcare budget projections across the country forecast that healthcare costs will rise to consume up to three quarters of provincial budgets, leaving little money for all of the other essential services provided by governments. Chronic conditions like obesity and hypertension are significant contributors to the problem. To a great extent these are caused by lifestyle and diet. Although food has contributed to the problem, it will also be part of the solution. New research is continually released, pointing to new ways to use food to reduce the negative impacts but also to create positive impacts on society.

Canada has an enormous potential to produce new healthy food products and to capitalize on the health properties of the crops and food products produced there. Health presents a significant opportunity to position

the industry differently, and more profitably. The prospect of higher economic and societal benefits encourages thought around the opportunities to more closely align food and health policy. Although food and health are intricately linked, the same cannot be said for food and health policy. This study offers an initial look into this area and asks the question “Based on these three products, what can we learn about the roles and policies can government play and how should industry boards help managing the process of building a business on health.

### Analysis and Results

The analysis involved three case studies of healthy food products, DHA milk, blueberries and pulse crops to identify policies and industry strategies that played a role in developing the products and industries. Each is associated with one or more health benefits.

Background data for the case studies was collected using publicly available data including government websites and media analyses. More detailed information on each product/industry was collected through semi-structured interviews with selected industry participants to discuss how new health

information or new product innovations have affected their business or industry, how policy helped or hindered their business, and how their business or industry has evolved over time. These interviews provided primarily qualitative and anecdotal information around strategies, decision points, and impacts of outside forces on the industry or business. The interview is built around a series of questions but the researcher may depart temporarily from the guide to explore elements in greater depth.

In the case of DHA milk the benefit, brain development in children, was identified and then the technology and processes to incorporate it into milk were developed, first at the University of Guelph and then in a private company which licensed in the technology and then ultimately licensed it to Neilson Dairy to use in their Dairy Oh brand milk.

Blueberries and pulse crops were existing products for which nutrition and health research identified specific health benefits. Both then focused on building the health related knowledge into product offerings and ultimately sales. For blueberries this process was built around a product that was sold in fresh or frozen form and was often used as an

ingredient. Pulse crops, on the other hand, are more difficult to use, and this appears to have held pulse crops back.

A cross case analysis shed further insights into the differences in development due to the nature of the health benefits, the product and its role in the businesses producing and marketing it and the roles of other organizations. The analysis was used to create the policy/strategy framework which could be used to analyze the development of an innovation to a point in time, or it could be used to identify issues or opportunities facing an industry and the policies and/or strategies that could help achieve business or government objectives.

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anecdotal information around strategies, decision points, and impacts of outside forces on the industry or business. The semi-structured interview allows the researcher to depart temporarily from the television guide to explore specific elements in greater depth.

The case studies documented the agents involved in each product—public and private—and in each supply chain, their roles and potential impact on the product. The cases, once completed individually, were then compared to identify similarities or differences. These were used to develop the conceptual framework in Figure 1 to better understand the roles and impacts of different policy and strategy options on healthy food innovation.

The framework takes a value chain approach, moving from inputs through production, processing and distribution to the consumer and the health impacts of their consumption decisions. Policy levers are on the left while industry and NGO strategies are on the right. The fundamental underpinning is nutrition and health research. Nutrition research can be translated into recommendations for nutrient enhancement in crops, new healthier formulations for food

manufacturers, scientific evidence to support health claims and information for consumers. Converting research to health and economic impacts is a long and challenging process that is influenced by the regulatory and policy environment and by the actions of industry associations, private firms and non-governmental organizations. Figure 1 (page 5) highlights some of the major policies and industry strategies that can be used to affect food and health.

The figure incorporates several realities that complicate the process. First, the food/health relationship occurs in two very different environments: a food system focused primarily on economic returns and a consumer system dealing with consumer behaviour and consumption decisions. The objectives and time frames are different between the two systems.

The second reality is that there are many different players involved, multiple levels of government, private sector farms, firms and industry associations, a wide variety of NGO's and the medical/nutrition community. Individual action is unlikely to achieve results so organizations must identify allies and partners, and create opportunities to build

momentum and a broad base of support for change actions.

A third reality is that long term improvement, either social or economic, will not occur because of a single policy change or even by resolving the tensions between food and health. It will take many private/public partnerships implementing a host of different strategies and coordinated with other social change strategies to create a sustainable improvement in the health of Canadians and economic prospects of Canada's food industry.

One element of the study examined the impact of media on product sales and found that health related media had a significant relationship to blueberry sales. For pulse crops the media message was more complicated, with any type of new coverage having an impact on sales.

### **Concluding Remarks**

Canada's agri-food industry has already seen some health related success stories, like those in the case studies. Although successful so far, all three are still evolving and there is enormous potential to achieve more. Scientists have only begun to illuminate the relationships between food and health. There is no single path to success, but there are many

common elements. Creating economic impact from health innovation requires a clear vision, investment, commitment and focus from industry and governments - judicious use of the appropriate policy levers and industry strategies.

Investments in research, production, processing and marketing will help Canadian farms and food companies reap the economic benefits from healthy food innovations. However, the biggest payoff may come when Canadians change their diets to include more of these products and gain the health benefits that they offer.

**Figure 1. A Framework for Developing Healthy Food Innovations**

