Navigating the consumer-food interface: A regulatory perspective on plant protein in Canada

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Over the last decade, there has been considerable dialogue around multiple attributes of food system sustainability and tackling the existential and interrelated challenges of non-communicable disease and climate change. These discussions have mainly been underpinned by protein in diets, and the heavy reliance on animal-based protein foods in OECD countries. [1, 2] In response to these initiatives, there has been enhanced dialogue on the promotion of plant protein foods in developed food systems and within dietary guidelines.

Dietary guidelines across regions have a history of promoting legumes, nuts, and seeds as nutrient-dense, plant-protein-rich foods. As consumers express increased interest in plant protein, there has been a surge in innovation aimed at creating new and familiar food platforms to help consumers incorporate plant proteins into their dietary patterns.

Traditional and innovative plant protein and alignment with healthy dietary guidelines

Legumes, nuts, and seeds are well-known traditional plant protein foods. They are nutrient-dense and associated with a reduced risk of non-communicable disease.

However, consumption remains relatively low in Canada. Innovation has focused on leveraging plant-based food and ingredients to provide consumers with options that are convenient and provide added variety to diets. Given that food innovation is consumer-driven mainly, these initiatives have often been used to develop plant-based options within familiar food categories to complement food preferences. [1]

As the plant protein industry continues to mature and health becomes an increasingly prevalent strategic pillar of food innovation, data is starting to show the benefits of plant protein analogues on health outcomes when they are formulated to be nutrient-dense and limit levels of nutrients of concern, such as saturated fat. [3, 4]

Remembering the consumer with regulatory responsiveness and agility to changing food systems

Never have so many plant-based protein foods been available to consumers. Governments and authoritative agencies have noted both health and economic opportunities by supporting the development of plant-based protein sectors. Some examples include UK Innovation's National Alternative Protein Innovation Centre (2024), the Dutch Ministry of Agriculture's National Protein Strategy (2020), and Canada's Global Innovation Cluster: Protein Industries Canada (2018).

However, just as it is important to allocate infrastructure and expertise to support sectoral growth, it is critical that developing sectors also receive support in the form of agile and responsive regulations and policies that facilitate market access and communication to consumers.

The scope of food-based dietary guidelines is to provide "advice on foods, food groups, and dietary patterns to provide the required nutrients to the general public and promote overall health and prevent chronic disease". (5) The disconnect between regulations and policies at the consumer-food interface and national food system opportunities can impede successful engagement with consumers and stifle innovation that aligns with these goals.

There are numerous examples of these challenges. In Canada and the U.S., "source of protein" claims on foods are based on protein quantity and quality. Plant proteins typically have a lower protein quality than animal protein. Thus, plant protein foods identified in Canada's Food Guide, such as pulses, nuts, and seeds, as well as innovative foods, can be challenged with making a "source of protein" claim in Canadian grocery stores because of current regulatory requirements. Adding to the misalignment is that Canada is one of the largest producers of pulses globally.

As a comparison, other regions such as the European Union or Australia that have similar food systems to Canada do not have protein quality requirements for "source of protein claims" for non-infant foods. The sole reliance on the quantity of protein per serving in these regions does not appear to be causing deficiencies in meeting protein requirements. Protein is the only nutrient in Canada and the U.S. with a quality requirement for substantiation of a nutrient content claim.

In addition, nomenclature has become a combative topic across jurisdictions. Embedded in food standards and historical context, how foods are identified in the market presents challenges for food innovation. Not clearly permitting the use of the term "meat" or "milk" even with the appropriate qualifier creates uncertainty for the sector on how to communicate plant protein innovation to consumers. Insights data demonstrate that consumers are aware that plant-based foods with qualified product names, such as "soy milk," are not the same as traditional dairy milk. (6)

However, consumers are challenged with not understanding nutritional equivalence [6], which can be addressed with labelling guidance or regulation. These examples demonstrate how regulation and policy can challenge the integration of innovation into food systems and, ultimately, consumer adoption to align with national nutritional and dietary priorities.

Embracing food environments with regulatory modernization

Protein is the most contentious nutrient when we talk about dietary transitions. We seem to be stuck in a comparative narrative between plant and animal protein that is unproductive for consumers and policy. Developed food systems are challenged with insufficient intakes of protective nutrients (i.e., fibre) and high intakes of nutrients of concern (i.e., saturated fat) that are risk factors for lifestyle-related diseases. In addition to traditional plant protein foods, many food innovators are using plant-protein foods to contribute to solving these challenges with a value proposition aligned with national food system priorities and investment.

A more collaborative approach from agri-food sectors is needed to expedite regulatory modernization. Breaking down prohibitive barriers will not displace entire agri-food sectors, where it is unlikely that most consumers in developed regions, including Canada, will consume diets that are entirely devoid of animal products due to cultural and traditional preferences.

It is equally as unlikely that not having the ability to label a high-protein plant product as a “source of protein” will cause a consumer who wants to eat plant-based protein more often to consume more animal proteins.

But modernizing regulations can ensure that all consumers have the tools required to make informed, healthy food choices and help them shift toward a more plant-forward dietary pattern if they desire.

References

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