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Promising Health Claim Opportunities for Canada's Agri-Food Sector

The agri-food sector in Canada is interested in taking advantage of market opportunities for foods with value-added health benefits. The nutritional profile and health benefits of these products tend to be promoted to the consumer through the use of nutrition claims or health claims on the label. There are several different types of health claims in Canada: general health claims, function claims (including nutrient function claims), disease risk reduction claims and therapeutic claims. All health claims must be substantiated before they appear on food product labels or in advertising; pre-market assessments and regulatory amendments are required prior to the use of some types of claims.

Pursuing a new health claim can require significant time and resources. The Food Regulatory Issues Division of Agriculture and Agri-Food Canada (AAFC) has examined marketplace and consumer trends, Canadian sector capacity, and the level of supporting scientific evidence to identify a list of promising bioactive ingredients and food-health relationships for the agri-food sector. The list was generated to help focus the sector's investment of time and resources, including additional research needed to validate the health benefit as required for a health claim submission to Health Canada.¹

Marketplace and Consumer Trends

In a competitive retail environment, the category of foods with value-added health benefits is among the few experiencing significant market growth. Mounting consumer interest in the role of nutrition for health and well-being is a primary driver behind this growth. Consumers are taking a more proactive role in optimizing personal health and well-being (Datamonitor 2008).

A rise in the rates of obesity—particularly among younger adults and children—is also driving consumer awareness of the intrinsic health benefits of foods, even though the actual beneficial ingredients and mechanisms may be unknown. The influence of obesity on heart disease, diabetes and digestive problems is causing concern about the future health of a significant proportion of the population. The rising cost of health care along with media reports of advances in nutritional science also contributes to the market growth of foods with value-added health benefits. This trend is expected to continue well into the next decade, particularly as an aging population demands access to foods with health benefits (Datamonitor 2008).

However, consumer interest in nutrition and health remains tied to other factors, including taste, quality, convenience, and value for the dollar. New foods must balance all of these factors to be successful. Consumers are also becoming more informed about ingredients and are increasingly demanding proof of product quality (Mintel 2009). Thus, to maintain consumer confidence in foods with value-added benefits, health claims need to have the support of solid scientific research (Datamonitor 2008).

¹ Health Canada (March 2009): *Guidance Document for Preparing a Submission for Food Health Claims*
www.hc-sc.gc.ca/fn-an/legislation/guide-ld/health-claims_guidance-orientation_allegations-sante-eng.php

Potential Market Opportunities

Health Categories

Based on consumer trends, expert opinion (Patterson 2010) and regulatory approvals in other jurisdictions (Euromonitor International 2010), the following four health categories appear to offer the greatest market opportunities:

- General health and well-being
- Digestive health
- Heart health
- Obesity / Weight management

These are well-established health categories prominent in the minds of consumers, industry and researchers. Closely following the four priority categories are cognitive health, immune health, bone health, and blood sugar maintenance (e.g. in diabetes). Enhancing mood and modifying cognitive behaviour are viewed as emerging health categories.

Bioactive Ingredients

Canada produces a rich supply of plant, animal and marine derived food ingredients which provide bioactive components that could become the subject of a health claim. Based on expert opinion (Patterson 2010), the supporting scientific evidence, and Canadian sector capacity, the five bioactive ingredients produced in Canada that appear to have the most potential for health claims are:

- Marine derived omega-3 fatty acids (from fish and krill)
- Plant oils (such as flax, canola, and hemp)
- Dietary fibres (from cereal grains and pulses)
- Plant sterols (also known as phytosterols)²
- Probiotics (certain strains of microorganisms)

These priority ingredients are consistent with research priorities identified in reports produced by provincial and territorial ministries of agriculture. In particular, marine derived omega-3 fatty acids, canola oil, dietary fibre (e.g. beta glucans) and phytosterols have a considerable level of scientific evidence that could be used toward supporting a health claim. Furthermore, health claims that relate to some of these bioactive ingredients have been approved in other jurisdictions (Euromonitor International 2010).

Promising Food-Health Relationships

The selection of promising food-health relationships for the Canadian agri-food sector (see Table) is based on the composite analysis of global trends, marketplace information, Canadian sector capacity and level of supporting scientific evidence. This list is intended to provide direction to assist the sector in focusing investments of time and resources, including research, in the most promising areas.

In some cases, the bioactive components of these ingredients have been well characterized, and credible, human clinical studies support the health benefit. However, in all cases, gaps in research need to be addressed to substantiate the food-health relationship and determine whether a health claim is feasible. For example, the availability of suitable biomarkers influences the level of difficulty in fulfilling the requirements for scientific substantiation.

² In May 2010, Health Canada authorized the sale of certain foods containing added plant sterols (phytosterols), and concluded that acceptable scientific evidence exists in support of a therapeutic claim about the relationship between the consumption of plant sterol-enriched foods and blood cholesterol lowering (see www.hc-sc.gc.ca/fn-an/gmf-agm/appro/phytosterols-eng.php).

For some of these food-health relationships, the Food Regulatory Issues Division of AAFC has completed systematic literature reviews.³ Literature reviews are key in identifying research gaps and thus guiding future research efforts needed to support a health claim.

In addition, the health claim wording must match the science, and be truthful and not misleading to consumers. By rigorously evaluating the available science, companies and sector groups can determine what claim “can” be made in contrast to looking for the science to support a “desired” claim.

Promising Food-Health Relationships*	
Promising Food or Ingredient	Potential Health Relationships
Omega-3 fatty acids (from fish and krill)	Cardiovascular disease Cognitive function in adults
Dietary fibres Resistant starches	Cardiovascular disease Diabetes Weight management Satiety
Whole grains	Cardiovascular disease Diabetes Digestive health
Pulses	Cardiovascular disease Diabetes Digestive health Weight management
Plant oils (such as flax, canola, and hemp)	Cardiovascular disease Diabetes
Plant sterols (phytosterols)	Lowering cholesterol (therapeutic claim approved) ⁴ Cardiovascular disease
Fruits and vegetables	Antioxidant status Immune support
Probiotics (certain strains of microorganisms)	Digestive health Colonic function

* This list is intended to assist the Canadian agri-food sector in focusing its research investments in the most promising food-health relationships.

³ To access the summary report on the literature reviews and resultant research gaps identified, see the Reports and Reviews section of www.agr.gc.ca/food-regulatory-issues.

⁴ The novel food assessment published by Health Canada in May 2010 outlines conditions for the safe addition of phytosterols to unstandardized spreads, mayonnaise, margarine, calorie-reduced margarine, salad dressing and unstandardized salad dressings, yogurt and yogurt drinks, and vegetable and fruit juices. Prior to marketing one of these products with added plant sterols, manufacturers are asked to notify the Food Directorate of Health Canada and receive a letter of no objection. Manufacturers who wish to market products not appearing on this list would be required to file a novel food submission to Health Canada in accordance with Division 28 of the *Food and Drug Regulations*.

References

Datamonitor (February 2008): *Functional Food, Drinks & Ingredients: Consumer Attitudes & Trends. Exploring the drivers and inhibitors of functional food and drink consumption in Europe, North America and Asia*. MarketResearch.com

Euromonitor International (2010): *Products and Consumer Trends, World Report and North America Report*

Mintel (November 2009): *Mintel Predicts Consumer Behaviour Trends for 2010*. Mintel International Group Limited

Patterson, CA (March 2010): *Health Claim Priorities for the Canadian Agri-Food Sector: Report on Dialogue with Agri-Food Experts*, The Pathfinders Research & Management Ltd. (internal AAFC report)

Select Resources

Agriculture and Agri-Food Canada

- *Canada's Regulatory System for Foods with Health Benefits—At a Glance*
www.agr.gc.ca/food-regulatory-issues
- *Research Gaps and Priorities Related to Health Claim Validation*
www.agr.gc.ca/food-regulatory-issues (select "Reports and Reviews")
- *Best Practices in Promoting Food Health Benefits*
www.agr.gc.ca/food-regulatory-issues (select "Reports and Reviews")

Health Canada

- *Guidance Document for Preparing a Submission for Food Health Claims* (March 2009)
www.hc-sc.gc.ca/fn-an/legislation/guide-ld/health-claims_guidance-orientation_allegations-sante-eng.php
- Food Directorate Guidance Documents
www.hc-sc.gc.ca/fn-an/legislation/guide-ld/index-eng.php
- Notice of Assessment of Certain Categories of Foods Containing Added Phytosterols
www.hc-sc.gc.ca/fn-an/gmf-agm/appro/phytosterols-eng.php
- Plant Sterols and Blood Cholesterol Lowering: Summary of Health Canada's Assessment of a health claim about plant sterols in foods and blood cholesterol lowering (May 2010)
www.hc-sc.gc.ca/fn-an/label-etiquet/claims-reclam/assess-evalu/phytosterols-eng.php

Contact us to learn more about regulations for health claims, novel foods and ingredients.

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