NFS 1212H: Regulation of Food Composition, Health Claims and Safety, Fall 2025

Instructors: Dr. Harvey Anderson and Dr. Hrvoje Fabek

Room Location: HA 401

Rationale: The Canadian food industry is producing new foods and food ingredients in response to consumer demand and lifestyle, new crops that offer advantages over traditional crops (e.g., improved resilience against pathogens or environmental stressors or enhanced nutritional attributes), and functional foods for the maintenance of health and prevention of disease. The goal of this course is to provide students with an understanding of the regulatory frameworks that are in place to ensure a safe food supply and to ensure communications made in food labeling and advertising are not deceptive. Through a series of guests lectures from individuals in government, industry, and academia, students will be exposed to several aspects of scientific and regulatory affairs and will have a unique opportunity to interact and discuss topics with experts in a variety of fields. Students will be exposed to such topics as the structure and application of the Canadian Food and Drugs Act and Regulations, health claim and labelling requirements, study design and standards of evidence for regulatory submissions, and the roles of government, industry, and academia in controlling food products in Canada and internationally. This course is an excellent opportunity for students to form networks with current subject matter experts, and to gain exposure to career opportunities in industry, government and academia.

Objectives: To provide a critical understanding of the:

- Regulation and control of food composition in Canada and internationally.
- Role of government, industry, and academia in providing a safe and healthy food supply.
- Strengths and weaknesses of Canadian, U.S. and European regulatory systems.
- Current public health issues including health claims, labelling, and monitoring.
- Methods used for assessing food safety.
- Standards of evidence required in submissions for regulatory approval.
- Standards of evidence used for public health messages

Format: Didactic lectures; case studies; problem-based discussions.

Marking Scheme:

Assignment 1: Labeling and Advertising - comparison of health food vs traditional food labels (25%). *Due October 16th*

Assignment 2: You will be divided into groups of 4. As a group, you are in charge of designing a new food product with unique ingredients containing a health and/or nutrient content claim for commercial sale in Canada. Based on what you have learned in class you must explain the steps required to get approval of your food. Some things to think about include pre- and post-market oversight, which specific regulation(s) may be triggered (including standards), labelling requirements, claims etc. Each group will

be responsible for presenting their preliminary research to the class on November 28th. Each student will be responsible for preparing their own individual report:

- Group Discussion (15%). Takes place during class on November 27th
- Individual Report (50%). Due December 11th

Part 1: Food Supply, Labelling and Regulations

September 18

Course Introduction, Hrvoje Fabek

An overview of the food supply, safety, and public health in Canada. G. Harvey Anderson Assignment 1 Instructions (Due October 16th). Hrvoje Fabek

September 25

Food labelling requirements in Canada. Dino Covone, Bureau of Nutritional Sciences, Health Canada

Legislation and Regulations in Canada. Harvey Anderson

October 2

Labelling Regulations for Food Allergens and Gluten Sources in Canada, Michael Abbott, Section Head, Food Allergen and Intolerance Assessment Section, Chemical Health Hazard Assessment Division, Health Canada (VIRTUAL LECTURE)

Nutrition Solutions for Public Health. The need for public, private, and government partnerships and the work of the NSERC-PFSNRA. Hrvoje Fabek

October 9

Nutrient Profiling and Regulations and use of Dietary Surveys and Application for Formulating Dietary Guidance and Food Regulations. Mavra Ahmed

US Food Regulations. Hrvoje Fabek

International Food Regulations. Hrvoje Fabek

October 16 - Reading week (no classes)

October 23

Foods for Special Dietary Use and their Regulations. Mireille Moreau, Regulatory Affairs, Health Canada (via Zoom)

Conforming to regulations: infant formula as a case study, Salma Abdelmagid, RB Canada

Assignment 2 Instructions – Preliminary group assignment on November 28th; reports due December 12th.

(Assignment #1 due)

October 30 - Adapting Canada's Food Guide to the Challenge of Bias and Emerging Science. Current Controversies

Plant Proteins: Public Health Guidance, Protein Regulations, and implications for nutrition. Ashleigh Wiggins, Senior Scientific Project Coordinator, Health Canada.

Plant Protein Paradox - Hrvoje Fabek

Part 2: Building Evidence for Health Claims, Regulatory Change and Public Health Guidance

November 6

Evaluating Evidence for Health Claims in Canada. Harvey Anderson

Health Claims Related to Pre- and Probiotics, Elena Comelli, Associate Professor (virtual)

November 13 - Novel Foods

The Regulation and Assessment of Novel Foods. Jordan Bean, Scientific Evaluator, Health Canada

Opportunities and Challenges to agri-food sector (title TBC). Jennifer Hubert, CropLife Canada

Metabolic Control Across the Life Span - The Role of Protein. Hrvoje Fabek

November 20 - DNS Research Day (Mandatory in person attendance)

All must attend to learn more about Department research. A one-page (double-spaced) report will be due (on November 27th) to summarize what you've learned!

November 27

Group Discussions - Assignment #2 (Dr. Yan to attend virtually).

Research Day Report due

December 4

Current and Future Policy Issues. Dr. William Yan. Part-time Professor, Faculty of Health Sciences, University of Ottawa.

(Group engagement with Dr. Yan)

December 11

Course evaluation - the good, the bad, the ugly. We wish you to let us know how we can improve the course content and delivery for future course offerings. This will be a virtual class for all.

(Assignment 2 due in lieu of final exam)

Contact Information:

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