



CANADIAN FOOD INNOVATION NETWORK AWARDS MORE THAN \$650K TO EIGHT CANADIAN FOODTECH PROJECTS

The Innovation Booster funding will help bring personalized nutrition innovations to market

GUELPH, ON, OCT 24, 2023 — The [Canadian Food Innovation Network \(CFIN\)](#) is awarding \$654,417 to eight foodtech projects through the organization's Innovation Booster Program. Industry will match these funds to create projects valued at over \$1.3M.

The Innovation Booster funding recipients are:

Project Lead: Enhanced Medical Nutrition Inc. (Ontario)

Project Title: Evidence-based Medical Food for Patients Undergoing Orthopedic Surgery

Funding: \$100,000

Acknowledging the pivotal role of nutrition in post-surgical recovery, Enhanced Medical Nutrition (EMN) is investigating the impact of their medical food products on orthopaedic surgery patients. Leveraging markerless motion capture gait analysis technology (a comprehensive evaluation of an individual's stance and walking patterns), the project will determine how EMN's products influence surgical patients' movement and function after their procedure. Results from this project hold strong potential to revolutionize conventional surgical preparation and recovery practices, redefining how food can optimize clinical outcomes.

Project Lead: RxFood Corporation (Ontario)

Project Title: AI-powered Photo Food Analysis, Personalized Interpretation, and Dietary Recommendation to Improve Healthy Eating and Chronic Disease Outcomes

Funding: \$99,868

A combination of growing factors -- including misinformation regarding nutritional claims, a surge in metabolic-related conditions such as diabetes and obesity, and increasing difficulty in accessing dietitians -- reveal an urgent need for innovative solutions to enhance Canadians' dietary habits. RxFood is tackling this challenge by adapting their AI-powered, clinical-grade dietary assessment technology for widespread use among Canadians while promoting improved diet quality for managing and preventing chronic diseases.

Currently, users capture images of their meals over a three-day period, allowing RxFood to precisely assess food content, portion sizes, and calculate validated diet quality scores. This data is then discussed with a clinician to establish nutrition goals. With over 100,000 assessments completed, the project's next phase seeks to automate the interpretation and food recommendations by fusing food data with user information -- such as age, location, gender, and dietary restrictions -- to sustainably improve a person's diet quality and health.

Project Lead: Psigryph Inc. (Ontario)

Project Title: Clinical Trial for Cholestello™-- A Dietary Supplement for Maintaining Healthy Cholesterol Levels

Funding: \$99,925

Psigryph has achieved a significant milestone by developing a market-ready dietary supplement poised for commercialization. Their project addresses a crucial issue -- the inadequate intake of fruits and vegetables leading to health problems. Building on promising results from mouse studies at the University of Guelph, Psigryph is now planning human clinical trials that will help define their product and ensure it complies with industry regulations in the US and Canada, where Health Canada approval is required. This project underscores the potential of Psigryph's key ingredient -- locally sourced sour cherries from Ontario -- to increase the bioavailability of essential bioactives to enhance human health and well-being.

Project Lead: Biofect Innovations (Ontario)

Project Title: Production of a Novel Natural Protein Sweetener via Microbial Fermentation

Funding: \$99,600

Brazzein is a potent natural sweetening protein that could help alleviate the challenges posed by sugar and artificial sweeteners. Excessive sugar consumption is associated with various health issues, while artificial sweeteners often have an unpleasant aftertaste and uncertain health profiles. Brazzein, which is derived from the Oubli berry fruit in West Africa, is a remarkable 2000 times sweeter than sugar, offering a healthier alternative. However, its

cultivation is restricted to specific regions, and Brazzein is found in minuscule concentrations in the fruit, making large-scale farming impractical.

To overcome this, Biofect Innovations is pioneering a microbial fermentation technology, similar to processes used in beer, wine, or insulin production. Their innovative approach aims to economically produce Brazzein at scale by sidestepping traditional agriculture and harnessing the efficiency of microbial platforms.

Project Lead: Fresh Prep Foods (British Columbia)

Project Title: Increasing Adoption of Specialty, Nutrition Focused Diets Through Advanced Fulfillment Software

Funding: \$96,746

Fresh Prep is addressing the limited accessibility of personalized meal programs for specialty diets by developing software that enables consumers to effortlessly plan and execute their nutrition-focused diets affordably. The software, an AI-powered virtual nutrition advisor (referred to as "the menu planner"), will deliver personalized nutritional guidance alongside the convenience of meal kit deliveries. Fresh Prep's unique ability to seamlessly blend personalization and convenience has them on track to become the sole Canadian meal provider with the technology to offer highly customized meals without inflating expenses.

Project Lead: Millennia TEA Inc. (New Brunswick)

Project Title: Increasing Solubility and Bioavailability in Nutrient-dense Plants

Funding: \$78,515

Millennia TEA aims to unlock the full potential of the tea plant's nutritional compounds for human health. Currently, commercial processing methods limit the body's ability to absorb these nutrients effectively. To address this, Millennia TEA is utilizing a combination of lemon-juice simulated washing, high-powered ultrasound, and a novel freeze-drying technique. Their goal is to enhance the release of these health-promoting compounds, ultimately improving their bioavailability.

This project involves collaboration with seasoned food scientists and biochemists who specialize in polyphenolic and cellular analyses. The immediate industry impact includes providing B2B health ingredients for businesses in the better-for-you beverage sector -- such as kombucha, iced tea, non-alcoholic beer, and energy drinks -- as well as supplements like greens powders and protein powder.

Project Lead: Cronometer Software Inc (British Columbia)

Project Title: AI Food Suggestions

Funding: \$47,378

Cronometer Software is replacing their outdated Food Suggestion feature in their mobile and web app with an advanced AI-powered alternative. This cutting-edge AI Food Suggestions feature will provide tailored suggestions based on individual user needs, assisting users in meeting their specific daily calorie and nutrient targets.

The AI Food Suggestions project is designed to cater uniquely to each user, generating recommendations based on factors such as recently logged foods, selected filters (e.g., high-protein, vegetarian), meal categories (e.g., lunch), and dietary exclusions (e.g., gluten and peanuts). This project will enhance user satisfaction and nutritional outcomes, marking a significant step forward in the evolution of Cronometer Software's platform.

Project Lead: Tait Laboratories Inc. (Quebec)

Project Title: Clinical Investigation of a Citrus Peel Prebiotic

Funding: \$32,385

Tait Laboratories is running human clinical trials aimed at substantiating the prebiotic properties of a patented citrus peel extract, supported by advanced AI analysis of gut microbiome and overall digestive health. This research will enhance the understanding of how prebiotics impact human well-being and explore opportunities to repurpose citrus peel waste generated by Canadian consumers and juice companies, which accounts for approximately 175,000 metric tons each year. The anticipated outcomes include the development of sustainable waste management solutions, a reduction in landfill burdens, and the potential creation of new value streams within the Canadian juice industry.

Beyond its essential role in providing macro nutrients, food can be a powerful tool in the prevention and treatment of human diseases and common health ailments. The concept of 'food as medicine' is growing in popularity with consumers, and globally innovators are launching new software, ingredients, and products that aim to improve health and wellness. This Innovation Booster funding call sought applications targeting the food as medicine category, including innovations focused on personalized health solutions, novel and emerging functional ingredients, and novel processing methods.

CFIN's Innovation Booster provides funding and support to SMEs to help them accelerate product development, overcome innovation hurdles, and validate market fit. During this seventh round of Innovation Booster funding, CFIN received 21 applications from across the country. In total, 37 Canadian foodtech companies have received \$3,132,874 from this program since 2021.

Across all programs CFIN has approved \$13.5M for 50 Canadian food innovation projects.

QUOTES

"Personalized nutrition thrives on innovation, offering individuals the tools they need to navigate the complex world of dietary choices and personalized meal plans. These eight projects demonstrate Canadian-made solutions that are empowering individuals to optimize their health and well-being by tailoring their diets to suit their individual profiles, promoting a healthier and more sustainable future."

– Dana McCauley

CEO, Canadian Food Innovation Network

"Our government is proud to invest in value-driven organizations to enable cutting-edge Canadian companies to grow their businesses, create well-paying jobs and expand their horizons. The recipients of the Innovation Booster Program highlight the importance of leveraging technology to provide accessible nutritional guidance, keeping Canadians informed to optimize their health. Congratulations to all!"

– The Honourable François-Philippe Champagne

Minister of Innovation, Science and Industry

"Investments in functional food innovations are driving sustainability and increasing access to healthy and nutritious products for Canadians. Canada is a world leader in the growing foodtech sector and these projects will help maximize the relationship of food and health through innovation."

– The Honourable Lawrence MacAulay

Minister of Agriculture and Agri-Food in Canada

"We are immensely grateful for CFIN's support through the Innovation Booster program, dedicated to advancing Personalized Nutrition and Improving Human Health Through Food. This program will catalyze our innovative research to further explore how food-as-medicine positively impacts patient outcomes. We are committed to leveraging this opportunity and sharing these insights with medical professionals to ultimately improve the standard of care."

– Néma McGlynn

Research Manager, Enhanced Medical Nutrition Inc.

"We started RxFood with the mission of making nutrition interesting, fun, personalized, and accessible. We are very excited to be part of the CFIN Innovation Booster as it helps us continue on this mission and opens up new opportunities and collaborations."

– Dr. Jeff Alfonsi

Co-Founder and Chief Product and Medical Officer, RxFood

"The CFIN funding will allow us to generate critical data for partners and regulators. Major players have requested this data so we feel fortunate in Canada to have support systems like this to help SMEs get products to market. The Psigryph team looks forward to working with our partners at the University of Guelph to run a robust Cholestello clinical trial."

– Sean Thompson

Co-Founder and CEO, Psigryph

"We are incredibly grateful for the generous funding from CFIN. This critical support empowers us to advance our efforts to produce Brazzein at scale, providing a healthier, sweeter alternative to sugar and artificial sweeteners. As we scale our production, we join the battle against the silent epidemic of diabetes in Canada, contributing to a healthier future for all. Thank you for backing our mission as we continue this important journey towards sustainable health solutions."

– Ralph Christian Delos Santos

Co-Founder and CEO, Biofect Innovations

“At Fresh Prep, our mission is to make eating well effortless and affordable. With our new AI-powered menu planner, we’ll be taking personalized meal programs to the next level by helping our customers achieve their nutritional goals with customized guidance and flexibility. We believe the unique blend of customization and convenience this technology offers will set us apart in the meal kit industry, while revolutionizing the way Canadians approach their diets and mealtime routines.”

– **Dhruv Sood**

Co-Founder and Co-CEO, Fresh Prep

“This is such an exciting moment in time for Millennia TEA. As individuals are prioritizing their wellness and working to prevent and fight disease with food-as-medicine solutions, we believe our company has an important role to play in helping people Live Better Longer. This research funding will support our efforts in a powerful way – as we develop innovative solutions using medicinal plants such as the mighty tea leaf to support human and planetary health both. Our appreciation for CFIN, and the specialists who will help us bring important discoveries to life through this Project and partnership, runs deep.”

– **Tracy Bell**

Co-Founder and CEO, Millennia TEA

“AI Food Suggestions are going to be a game changer for our users, and we’re thrilled to be partnering with the Canadian Food Innovation Network to implement this powerful new functionality.”

– **Aaron Davidson**

CEO, Cronometer Software

“We at Tait Labs would like to humbly express our gratitude for the tremendous support given to us by way of CFIN’s Innovation Booster award. Finding funding for clinical studies can be difficult at the best of times, and it is a testament to CFIN’s commitment to fostering innovation that they would see value in supporting our clinical study of citrus peel waste as a novel prebiotic fiber. Unlocking the therapeutic potential of something that typically gets thrown away –citrus peels- that’s something we can all get behind.”

– Andrew Tait

President and Director, Tait Laboratories

PERSONALIZED NUTRITION INFORMATION

- The [Worldwide Personalized Nutrition Market Size](#) was estimated to be approximately USD \$11.3 billion in 2022 and is expected to reach USD \$45.9B by 2032
- Personalized nutrition is considered as the first line of defense against many health conditions that include hypertension, cardiovascular disease, and diabetes – leading to increased demand and rapid growth for the sector [\[American Nutrition Association\]](#)
- There is [increasing demand](#) for personalized solutions due to rising health awareness, the digitalization of healthcare, and a growing aging global population

[ABOUT THE PROGRAM](#)

The Innovation Booster provides flexible and rapid support to Small or Medium Enterprises (SMEs) as they address food innovation challenges or technical hurdles that have created barriers to achieving their commercialization goals.

The Innovation Booster is administered by CFIN, which is supported by the Government of Canada's [Strategic Innovation Fund](#).

[ABOUT THE CANADIAN FOOD INNOVATION NETWORK](#)

The Canadian Food Innovation Network (CFIN) is a national organization that's stimulating transformative and transferrable innovation within the Canadian food sector. CFIN has over 3,500 members from across the food value chain -- including manufacturers, processors, distributors, operators, tech companies, funders, and innovators – and connects the Canadian food ecosystem to fresh insights, ideas, and technologies to grow their business and increase their innovation capacity. [CFIN's free membership](#) includes access to exclusive funding programs, five Regional Innovation Directors, and [YODL](#).

CFIN was established in 2021 and is supported by Government of Canada's Strategic Innovation Fund and Canadian Agricultural Strategic Priorities Program.

SUPPORTING INFORMATION

[Innovation Booster](#)

[CFIN Membership](#)

[CFIN Media Page](#)

[CFIN Media Kit](#) (includes logos and b-roll)

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