



CRUSH DYNAMICS SECURES NEARLY \$2M TO CREATE A FIRST-OF-ITS-KIND FOOD INGREDIENT

The Canadian Food Innovation Network funding will help the Okanagan foodtech company reduce emissions, improve food quality, and extend the shelf-life of products

GUELPH, ON, DECEMBER 5, 2023 — The [Canadian Food Innovation Network \(CFIN\)](#) is awarding \$1,984,274 to Crush Dynamics to develop and test a novel ingredient, created through upcycling, that will enhance food quality and drastically reduce sugar and sodium content in food products. The project is valued at just over \$4M and is funded through CFIN's [Food Innovation Challenge Program](#).

Project Lead: [Crush Dynamics \(British Columbia\)](#)

Project Title: Upcycling Agricultural Side Streams into High Performance Food Solutions Through Process Optimization

Project Partners: Purdys Chocolatier and Ecovatec Solutions Inc.

Funding: \$1,984,274

Crush Dynamics Inc. (Crush) leverages innovative fermentation of upcycled wine derivatives and agricultural waste to produce a proprietary, high-performance food ingredient. The resulting polyphenol-rich ingredient enhances food quality by enabling up to 50% sugar reduction, 80% sodium reduction, and improved texture while also extending shelf-life. This single ingredient provides food and beverage manufacturers with an opportunity to reduce complexity in their supply chain while delivering the clean label their consumers are demanding.

The project aims to demonstrate Crush's production process at scale, from pre-processing treatments to fermentation and drying, employing automation to meet the demand forecasted by project partners and other potential customers. Through the fermentation of these waste products, Crush's sustainable approach can help prevent up to 50 million tons of annual CO2 emissions that would otherwise result from the decomposition of these materials in landfills.

Crush's novel ingredient offers a path to improved nutrition and an ingredient the consumer understands and trusts for numerous applications across the food and beverage industry.

Through partnership with Purdys, this project is opening global opportunities to reduce sugar content in chocolate. With the support of other collaborators like Ecovatec, Crush expects to bring this ingredient to market and accelerate adoption in the food and beverage sector.

This funding call targeted disruptive solutions and innovative strategies for addressing food and beverage processing challenges. While the food and beverage manufacturing sector has seen strong growth over the last few years, it also [faces many acute problems](#). Labour scarcity and inflationary pressures are constraining growth for many firms, despite continued strong consumer spending and the recession proof nature of the industry. Additional challenges like extending product shelf life, reducing energy consumption, and alleviating food waste are all hampering manufacturers as they strive to reduce costs and carbon footprints. As firms seek to grow amidst current market conditions, many are looking to optimize, automate, and increase the value of their products.

Since launching in 2021, CFIN has received more than 351 funding applications from innovative companies across the country and has approved \$16.8M in funding to 51 projects.

QUOTES

"Breakthrough innovation in the food and beverage industry is essential for addressing the pressing challenges faced by manufacturers. In the face of labor constraints, cost pressures, and sustainability imperatives, food innovation takes centre stage as the linchpin for overcoming obstacles and ensuring a resilient and forward-looking food sector."

– Dana McCauley

CEO, Canadian Food Innovation Network

"Crush Dynamics' new bio-fermentation process offers a concrete solution to address the food and beverage industry's most pressing challenges. This innovative solution will help the industry improve food quality, reduce production costs and carbon footprints. With this initiative, the Canadian Food Innovation Network promotes sustainability through a circular food economy and creates highly skilled job opportunities for Canadians."

– The Honourable François-Philippe Champagne

Minister of Innovation, Science and Industry

“When it comes to addressing challenges in the foodtech sector, Canada is leading the charge through innovation. We’re proud to support this effort to develop a unique upcycled food ingredient that will help improve the quality of our food while also reducing emissions.”

- The Honourable Lawrence MacAulay

Minister of Agriculture and Agri-Food

“We are incredibly honoured to receive this support from the Canadian Food Innovation Network. Working with our partners, we look forward to advancing the state of the art in food formulation powered by polyphenols.”

– Kirk Moir

CEO, Crush Dynamics

ABOUT THE PROGRAM

The Food Innovation Challenge is a unique funding opportunity for Canadian food industry collaborators who want to spearhead transformative improvements that will propel the food sector forward and generate significant economic impact. The Food Innovation Challenge prioritizes projects focused on smart product and process development, food ecosystem sustainability, and agile and safe supply chains.

The Food Innovation Challenge 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

[Food Innovation Challenge](#)

[CFIN Membership](#)

[CFIN Media Page](#)

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