



OUR HEALTHY FOOD FUTURE

Presented by: Dana McCauley
Chief Executive Officer
Canadian Food Innovation Network

Presented at:

BENEFIQ2023



Who We Are



The Canadian Food Innovation Network (CFIN) is a national non-profit, member-based organization that's stimulating transformative and transferrable innovation across the Canadian food sector.



We connect the Canadian food ecosystem to fresh insights, ideas, and technologies to elevate their business and increase their innovation capacity.

Three Things you need to know about CFIN



Our members care about using innovation to grow food manufacturing, foodservice and food retail businesses.



Through people and technology, we provide ideas, information and match-making that increases innovation capacity in the food sector.



Our team is distributed nation-wide and brings innovation support to all regions, commodities and types of businesses working post farm gate to all the way to the dinner plate.

Our Work Brings Us Insight



Funding Programs

We provide funding to Canadian food innovators that are developing solutions related to:

- Smart Product & Process Development
- Food Ecosystem Sustainability
- Agile & Safe Supply Chains.



Community Creation

We unite professionals working in the food ecosystem to catalyze connections, facilitate partnerships, and stimulate innovation



Project Insights

311+ Applicants



\$13.5M In project funding

Total Funding \$251M Requested



51 Projects Funded

Data as of August 1, 2023



We Have Canada's Biggest Food Business Focus Group



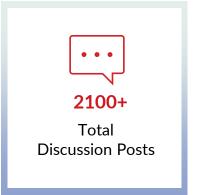
















What is Food as Medicine?

American Society For Nutrition says:

Food as medicine, also known as "food is medicine," **sits at the crossroads of nutrition and healthcare**. It may take many forms, including medically tailored meals, medically tailored groceries, and produce prescription programs.

Source: Nutrition.org



Personalized Nutrition and Improving Human Health Through Food









CFIN and industry each investing \$654, 531



Full announcement on October 24th





Where should industry & academia focus their innovation efforts?

Health is a much more important topic in food retail today and for good reason: Consumers have placed it front and center:

In 2022, US sales for food and beverage as a medicine increased 19% year over year, compared to 9% in 2019

The Silver Segment

- 703 million persons aged 65 years or older
- This number is projected to double by 2050
- 78% Of Canadians want to age at home
- 31.5% of women and 19% of men over aged 65 live alone in Canada

Source Newswire April 2021



Silver Segment Main Points

- Texture needs
- Food waste
- Ergonomics
- Palate changes
- Sodium
- Sugar
- Immunity
- Digestive health



Baby Food And Beyond – Eating For Longevity And Life Stages

According to the United Nations, 140 million babies are born each year wouldn't it be great if all of them ate the right food from the







What's happening in the marketplace?

Let's take a look!

The Grocery Store Takes On a Larger Role



Loblaws' acquisitions and investments document an evolution from a grocery company to a healthy lifestyle company









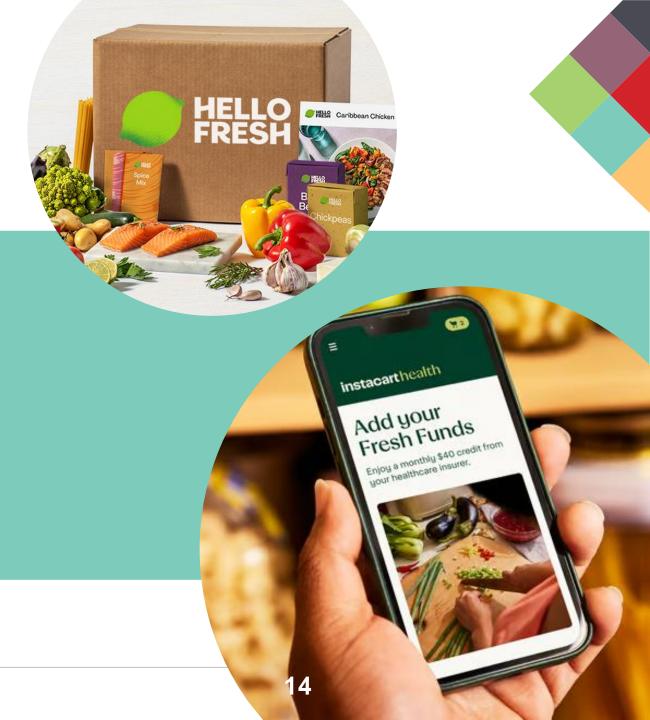


13

2001 2013 2020 2022

Can I Claim This?

- Insurance companies and governments are supporting companies who are trying to make eating healthfully easier
- US Govt. committed \$8 billion to the "food is medicine" movement in Sept 2022
- \$2.5 billion will be invested in startup companies addressing food and nutrition insecurity



Immunity Boosters

Global Immunity Market

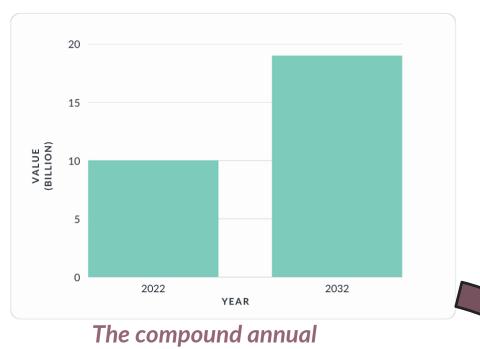
Projected Growth

2019: \$16.3 Billion 2020: \$22.8 Billion 2023: \$24 Billion

Source ReportLinker



Immunity Boosting Products You Can Try Now



The compound annual growth rate for immunity boosting products is projected to be more than 6.5%



Four Sigmatic
Chaga Mushroom Elixir



Stonyfield Organic
Daily Probiotics Yogurt



So Good, So You Immunity Beverages



Adopting Adaptogens

Feel good foods and drinks that reduce the effects of stress, anxiety and fatigue are gaining popularity with consumers



David's Tea Superfood Latte Powder



Auralis Brewed Botanical Tonic



Gut Health By The Numbers

Consumers

- 80% of consumers have adopted "food as a medicine"
- 70% of the immune system is located in the gut, where diverse bacteria is best (UCLA Health)
- Almost 25% of consumers say digestive health is the most important aspect of their overall health
- The hashtag "#guthealth" has +2.2B views on Tik
 Tok

The Market

- \$44.4BUSD value of global digestive health products market in 2022 Global sales
- \$79.2B USD projected market size by 2030



Prebiotic Fruit + Veggie Puree



Kefir



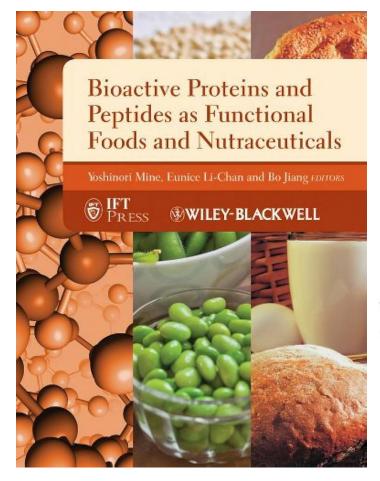
"Gut-Loving" Porridge



Kimchi

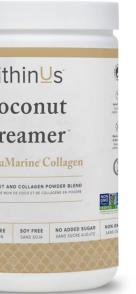


On The Horizon: Peptides Are Trending Up











321glo **Collagen Protein Cookies**

Within Us **Coconut Creamer + Collagen**

Gldn Hour **Collagen Sparkling Water**



Nutrigenomics - Diet Has Impact On Genetics

WHAT DO HONEY BEES EAT?

Complete Guide To a Bee's Diet



NECTAR

Honey bees absorb
nectar from flowers to
make honey. They do
this by storing the
nectar in their stomach
and then passing it from
worker to worker until
the water diminishes
and they are left with
honey. Then, it is stored
in the honeycomb.



POLLEN

Pollen is a great source of carbohydrates, protein, and vitamin B. These are essential for honey bees to properly develop in order to work for the survival of their colony.



HONEY

Honey is essential to the survival of a bee hive as honey provides them with 80% of the sugars they nutritionally require. Honey is often stored for the winter to feed the

colony when worker

bees cannot forage.



ROYAL JELLY

Royal jelly is a honey bee secretion that is used in the nutrition of larvae and adult queen bees. It is secreted from the glands in the hypopharnyx of nurse bees, and fed to all the larvae in the colony.



All bees are born genetically identical but by feeding Queen Bees a specialized diet lacking certain nutrients, she develops ovaries, lays eggs and grows bigger in size than her hive mates.



Nutrition Needs And DNA: NUTRIGENOMIX

NUTRIGENOMIS

- They offer comprehensive tests for health & wellness, athletic performance, and fertility to better guide nutrition needs and recommendations
- Their DNA collection kits test how an individual's genes impact weight loss & body composition, nutrient metabolism, heart health, performance, fertility, food intolerances, and eating habits



Comprehensive Medical Approach



Gini Health's Modern Clinic - First of its kind

We are re-imagining a new kind of healthcare with our modern and smart clinics to make it a great care experience.

- Best super specialty and internal medicine doctors in the region
- Nutrition and Exercise studio for health education

Paperless and Smart experience

- Predictable Cost, No surprises
- More Time with the doctor and care team
- Comprehensive in house Testing

No Wait Time

Single Point of Care

Source Gini Health



Nutrition Needs And DNA: HABIT



- Habit Food, Personalized believes in the power of personalized support to provide individuals with a tailored guide to nutrition, health and wellness
- They offer at-home testing kits that provide insights on personal needs to make the proper recommendations that are unique to each individual



23

DIGITAL TWINS for Preventative Health Wins

BIOTWIN



- Uses cutting-edge artificial intelligence, untargeted biomarkers, and biometrics to construct a virtual model of an individual's health profile
- Aligns biological profiles with diseases, aiming for early detection and tailored treatment optimiza tion



25



The Livy Method - A New (Canadian) Approach to Weight Loss

Livy Method Facts & Figures

- 31,000 members doing current program
- +\$6 million estimated yearly revenue from diet, books, and maintenance program

Differentiators

- Nutrient dense diet plan
- Frequent eating keeps blood sugar stable and digestive system busy
- No processed foods
- Daily community support

Address why the body is feeling the need to store fat

Help the body to focus specifically on fat loss

Create the environment so the body can get the fat out



Bioavailability: P&P Optica



- proven automated solution for safety and quality inspection in meat processing plants that assesses the chemical composition of products in-line, in real time
- Today their system searches for density contaminants (plastic, cardboard, wood, rubber and more) but they aspire to being able to measure macro nutrients in real time and by the batch.



P&P Optica's Inspection Technology in Action!

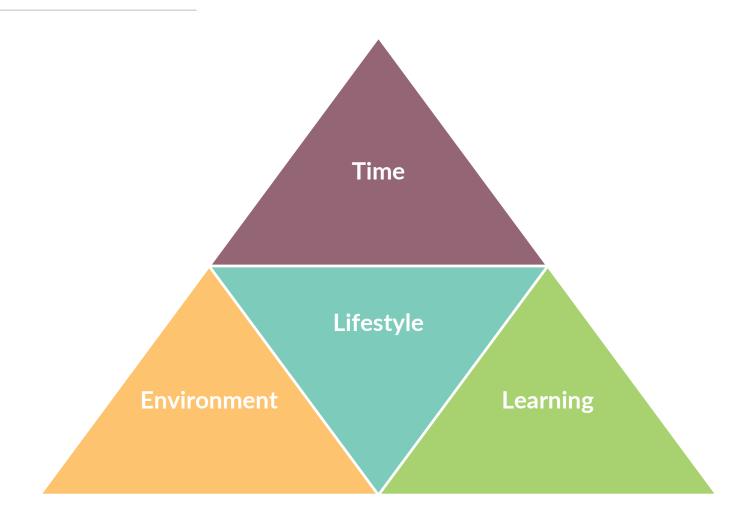




What Could Possibly Go Wrong?

Large gaps still exist when it comes to what we know about the relationships among our eating patterns, our genes, and the way these two factors interplay with our other individual behaviors and our environments

Precision Nutrition Faces Multiple Barriers To Success





Cost Sensitivity

- 93% of Gen X are more likely to try a restaurant that offers discounts (Unidays)
- 62% of consumers have reported a noticeable rise in the cost of their food and beverages (Food in Canada)
- Avg Canadian family of 4 needs \$16,288 per year for groceries in 2023 (+\$1,065 from 2022) (Agri-Food Analytics Lab at Dalhousie University)





A Cautionary Tale

San Francisco City Attorney Dennis Herrera sent a letter to Kellogg's warning such claims "a potential violation" of California's Unfair Competition Law, which may "undermine critical public health efforts to prevent the spread of [H1N1 virus] that the President has declared to be a national emergency"

Source: Delish 2009



Bioavailability Should Not Be A Leap Of Faith





Consumers Equate Clean With Healthy

Novel ingredients with difficult to pronounce names may have trouble getting into consumer pantries.

Source Newswire April 2021



Connect With Dana







Connect With CFIN





innovation@cfin-rcia.ca











THANK YOU!