# Investment Opportunity Innovating Diabetes Management with Whey-Based Solutions



### Type 2 Diabetes is a global problem



- 462 million individuals live with Type 2 diabetes worldwide<sup>[1]</sup>
- Global healthcare expenses amount to \$966 billion<sup>[2]</sup>
- Incidence predicted to increase by 10% by 2045<sup>[3]</sup>
- Diabetes advancement can be prevented by reduced sugar intake<sup>[4]</sup>

[1] https://diabetesatlas.org/en/sections/demographic-and-geographic-outline.html

[2] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10958528

[3] https://bpac.org.nz/2021/diabetes-younger.aspx

[4] https://www.actiononsugar.org/sugar-and-health/sugars-and-type-2-diabetes

# Disposing of whey by-product

Whey is a by-product of cheese production in the milk industry

- Whey represents 80% of milk and contains 50% of nutrients <sup>[1]</sup>
- 50% of whey by-product is disposed of as waste<sup>[2]</sup>
- Whey disposal is contentious as it raises PH levels in soils to unacceptable levels<sup>[3]</sup>
- Fonterra has been fined for polluting waterways with whey disposal <sup>[4]</sup>

[1] https://www.sciencedirect.com/science/article/pii/S2772753X24000388

- [2] https://www.sciencelearn.org.nz/resources/832-uses-of-whey
- [1] https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/whey-cheese
- [4] https://www.rnz.co.nz/news/national/280217/fonterra-fined-over-waste-in-waterways

### **Our Solution**

- A New Zealand-based biotech start-up company
- Supported by Ministry for Primary Industries and Callaghan Innovation
- New natural sweeteners derived from whey and whey permeate
- Poised to compete in the global sugar and alternative sweetener market as a healthier alternative
- Lab trials completed for pre-production
- Clinical trials planned for 2024 to demonstrate anti-diabetic properties
- Potential for pharmaceutical approval



### **Product Benefits**

Potential anti-diabetic properties When proven could aid in the prevention and management of type-2 diabetes

Important replacement option to sugars commonly found in mass-produced foods: soft drinks, confectioneries, yogurts, and pharmaceutical syrups

Product versatility in liquid and powder form enables a broad range of commercial applications

Following results of clinical trial, Wheytech to apply for pharmaceutical approval

Environmental impact using whey as a waste product from cheese making process

Additional IP to be created using milk from other animals: sheep, goat, camel

Supply the sweetener in bulk to companies within the food ingredient, pharmaceutical and health supplement sectors

## Market Opportunity

 Global sales of food products containing high amounts of industrial sugar exceed \$39.95 US billion p.a.

 Massive volume of sugar and glucose syrup exceeding 170 million tonnes per year

• Our products offer a natural replacement option



### Technology & Product Development

- Whey Sourcing: Collected from local dairy manufacturers.
- Filtration & Extraction: Multi-step filtration removes lactose and unwanted elements, retaining nutrient-rich whey.
- Enzymatic Treatment: Lactose is broken down to create a natural, lactose-free sweetener.
- Concentration & Drying: Liquid concentrate is dried into a versatile powder.
- Anti-Diabetic Benefits: Demonstrated to help manage blood sugar levels.
- Scalability: Designed for large-scale production to meet global demand.









### Strategic Roadmap

- Clinical Trials (2026): Validate anti-diabetic properties of the whey-based sweetener.
- Product Commercialization: Launch products after trials, targeting food, pharmaceutical, and health supplement markets.
- Channel Partner Establishment: Form partnerships for manufacturing, marketing, and distribution.
- Global Expansion: Scale internationally after successful New Zealand launch.
- Additional R&D: Develop IP for sweeteners from other milk sources (sheep, goat, camel).

### Capital Raise & Use of Funds

Amount Sought: \$400,000

Mode: Equity investment

#### Use of Funds:

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1. Product Development & Trials – 40%

Conduct clinical trials to validate anti-diabetic properties.

2. Manufacturing & Scale-Up – 30%

Scale production and optimize manufacturing processes.

3. Marketing & Distribution – 20%

Establish partnerships and promote the product in target markets.

4. Operational Costs – 10%

Support ongoing operations, including R&D and staffing.

### **Financial Projections**

- Current Company Valuation: \$2,000,000 (Deloitte)
- Sales Prognosis over next 3 years: \$5,400,000
- Funding Required: \$400,000
- Planned Use of Funds: Product development and trials



### Team



#### **Ben Van Roov** Founder / Director

With more than 40 years experience in importing and exporting products for the food industry. Current President of the Wellington Xiamen Association promoting business between Wellington and its sister city in China.



#### **Dr Mike Boland** Lead Scientist

More than 50 years' experience in research in the field of agricultural and food biochemistry. This includes being assistant director on the New Zealand Dairy Research Institute, Research Partnerships Manager for Fonterra and a founding member of the Riddet Institute, New Zealand's Centre of Research Excellence for Food Science and Technology. He has published more than 200 research papers, book chapters and books and has been denoted one of the top 20 food scientists in New Zealand by Stanford University. He has an H-index of 44 (Google Scholar).



### Dr Grant MacDonald

**Food Technologist** With a PHD from North Carolina State University, Dr MacDonald and his team won the Ian Symington Prize for Research and Development in Refrigeration Technology. He is a Specialist Advisor to New Zealand Tertiary Education Commission, and was awarded the Technomic Inc. Food Science Dissertation award, among many others.



#### Karunā Muthu Fund Manager

Passionate about the role of governance in the mid market organisations including Maori enterprises in New Zealand, Karunā has brought balanced perspective to the boards he served, and has sharpen the strategies that helped the management and the organisation.



#### Matthew Sword Strategic Adviser

Strong professional with a Law Degree from Victoria University of Wellington. Skilled in corporate governance, start-ups, policy development and analysis, risk management, strategic planning, project management, local and central government, Māori land, contracting and procurement, commercial and corporate law, administrative law.

#### "Join Us in Transforming Diabetes Management"

Thank you for considering this opportunity. We are excited to partner with forward-thinking investors who share our vision of creating impactful, sustainable solutions for global health challenges. With your support, we can scale our innovation and make a meaningful difference in diabetes care and beyond.

> Contact Information Ben Van Rooy - Founder ben@wheytech.com +64 21 028 72271