

Metabolica Health Inc.



*promising first in class
treatment for diabetes
and obesity*

March 2024

Disclaimer

Except for the statements of historical fact, this presentation contains “forward-looking information” (within the meaning of the applicable Canadian securities legislation) that is based on expectations, estimates and projections of the Company as of October 25, 2023. The information in this presentation about the completion of any transaction including acquisition of or investments in any companies, the business goals and objectives of the Company, any estimate of potential earnings, the performance of any obligations of parties to transaction agreements, and other forward-looking information, includes but is not limited to information concerning the intentions, plans, and future actions of the parties to the transactions described herein and the terms thereon.

Factors that could cause actual results to differ materially from those described in such forward-looking information include, but are not limited to, risks related to the Company’s ability to obtain final acceptance from the Canadian Securities Exchange (the “CSE”) for a transaction, the biomedical markets generally, the Company’s ability to successfully develop medical technology, and other risks.

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Any forward-looking information speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking information, whether because of new information, future events or results or otherwise. In this presentation, “Metabolica” or “Company” refers to Metabolica Health Inc.

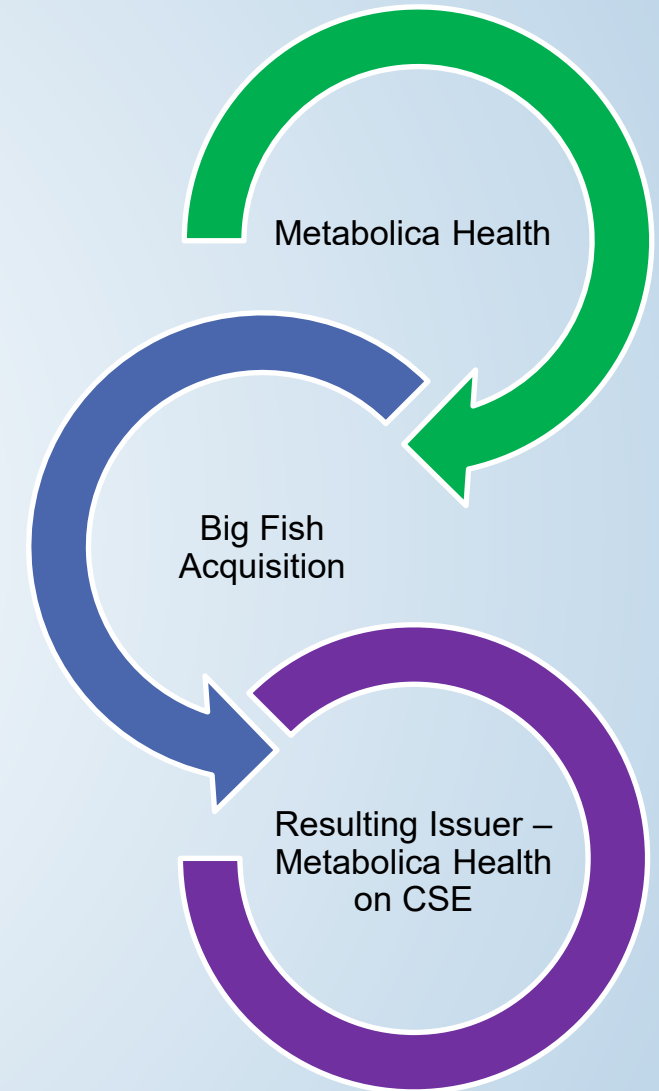
About Metabolica Health Inc.



- Metabolica Health Inc. is a development stage biotechnology firm discovering and developing innovative treatments for diabetes and obesity.
- Collaborating with world-class universities, the company focuses on products of intestinal microbiome metabolism.
- Owning valuable patents in this domain showcases our innovative approach.
- Metabolica Health Inc. has plans to make its mark on the global financial scene by listing on public exchanges in both Canada and the United States in 2024.

Going Public Transaction

- Metabolica is in the process of going public with reporting issuer Big Fish Acquisition Corp. and filing a Non-Offering Prospective (NOP) on the Canadian Securities Exchange (CSE) targeted for March 2024.
- Metabolica Health Inc. and Big Fish Acquisition Corp. have completed the merger as of January 1, 2024.
- Engaged the law firm Fasken Martineau DuMoulin LLP. to advise on the NOP process.
- Engaged the accounting firm Baker Tilley WM LLP to provide audit services for the NOP.
- Metabolica Health Inc. has initiated a Private Placement (the **“Offering”**) of up to 2,500,000 Units (**“Units”**) at \$0.40 per Unit for gross proceeds of up to CDN \$1,000,000.



Diabetes – Unmet Market Challenges

- Type 2 diabetes is one of the greatest modern health challenges.
- It impacts every country and contributes to millions of deaths annually, and the number of people who suffer from this disorder is rising across all regions.
- In 2021, more than 483 million people had type 2 diabetes, and this number will reach more than 629 million by 2045.
- One in three Canadians has diabetes or prediabetes.
- The unmet market challenge involves finding sustainable solutions to improve affordability and ensure broader access to diabetes management tools, medications, and monitoring.

The Diabetes Market

- **Market Size:** Overall type 2 diabetes treatment market stood at \$52.6 billion in 2021, and it will reach \$77.2 billion by 2027.
- **CAGR:** Type 2 diabetes treatment market is expected to witness a CAGR of 6.6% from 2022 to 2027.
- **Regional Segment:** North America contributes more than 44.0% in terms of value, followed by Asia-Pacific and Europe.
- **Market Drivers**
 - Rising prevalence of diabetes
 - Next generation of type 2 diabetes treatment
 - High unmet need

Current Diabetes Therapeutics




- Several medications are currently used to treat diabetes, including injected insulin, metformin, and GLP-1 agonists such as liraglutide.
- None of these will cure type 2 diabetes.
- None of these fully control the disease.
- Many have unwanted side effects, including hypoglycemia, weight gain, gastrointestinal problems, fluid retention and edema, pancreatitis, bone health, injection site reactions, as well as resistance or tolerance.
- Consequently, there exists a growing need for safer and more effective compounds and treatment methods for diabetes.

Obesity - Huge Market Potential

- Worldwide obesity has nearly tripled since 1975.
- Obesity affects **four out of 10** Americans.
- 19.7% of adolescents and children in the U.S. — 14.7 million individuals — have obesity.
- More than 1 billion people have obesity worldwide, including 650 million adults, 340 million adolescents and 39 million children.
- While obesity is sometimes controllable by lifestyle and diet interventions, the market is highly interested in other therapeutic options.



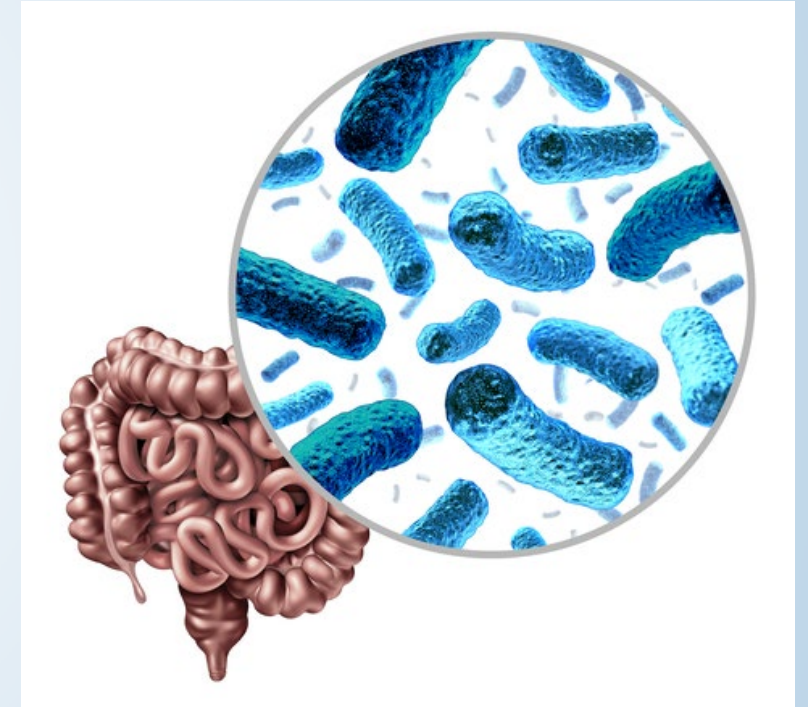
Current Obesity Therapeutics

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- Current treatments for obesity include semaglutide (**Ozempic**), tirzepatide and Phentermine-topiramate (**Qsymia**).
 - In clinical trials some of these medications have led to substantial weight loss — as much as an average of 21% of participants' body weight.
 - Some have been associated with gastrointestinal adverse events, muscle-mass loss and other less frequent but serious side effects.
 - The market is expected to respond favourably to a new anti-obesity drug with favourable side-effect profiles.

Potential New Treatment Options

4-Cresol And Related Compounds: A Potential Game Changing New Treatment For Diabetes and Obesity

- In humans, research shows that lower 4-cresol levels in the blood correlate with a heightened risk for diabetes.
- This observation suggests that increasing 4-cresol levels in the blood could potentially serve as a therapeutic strategy for diabetes treatment.
- Chronic treatment with low concentration of 4-cresol **improves markers of diabetes** in diabetic mice.
- 4-cresol treatment of diabetic mice **decreased body weight, reduced size of fat cells, and reduced liver fat** accumulation, and stimulated insulin secretion and proliferation of pancreatic beta cells.
- 4-cresol strongly stimulated **insulin secretion, pancreatic beta cell proliferation** and **weight loss**, while **reducing fat in the liver** and **shrinking fat cells**.



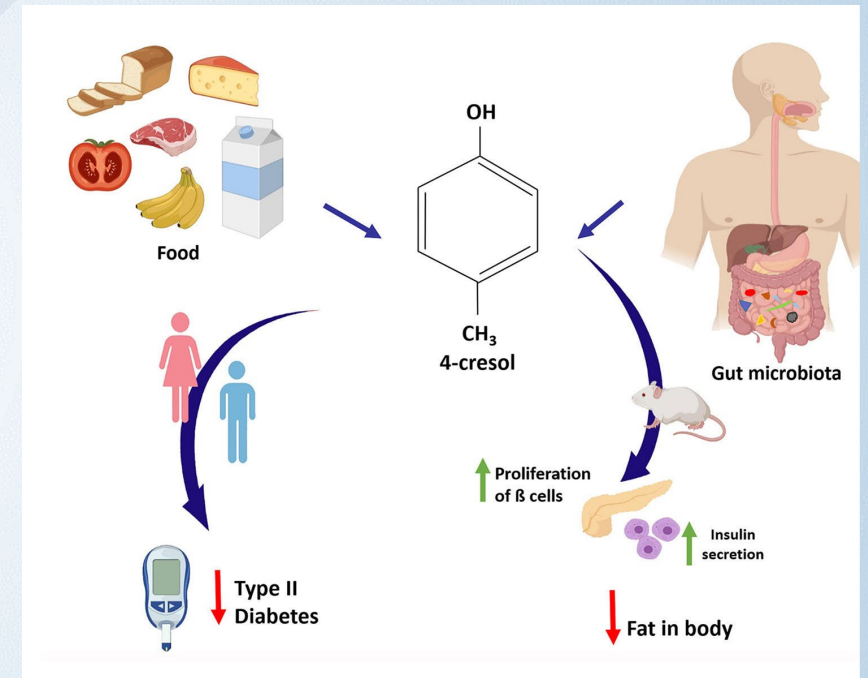
Applications of Cresol Related Compounds

- **Regulation of β cell Function:**

Research indicates that 4-cresol is a regulator of β cell function. This can play a crucial role in maintaining appropriate insulin secretion.

- **Addressing Insulin Deficiency:** By supporting β -cell function, cresol compounds might help address the widespread problem of insulin deficiency seen in Type 1 diabetes.

- **Supporting Glucose Regulation:** In Type 2 diabetes, where insulin resistance is a major challenge, optimizing β -cell function can potentially help in better glucose regulation.



Metabolica Market Solution For Diabetes

- Metabolica Health Inc. has acquired an IP portfolio – including an issued USPTO patent – covering 4-cresol and related compounds to treat diabetes.
- Discovery research was carried out in at Sorbonne University (France), McGill University (Canada), and Kyoto University (Japan).
- 4-cresol, a product of the gut microbiome, improves glycemic homeostasis and insulin secretory response to glucose in animal models of diabetes.

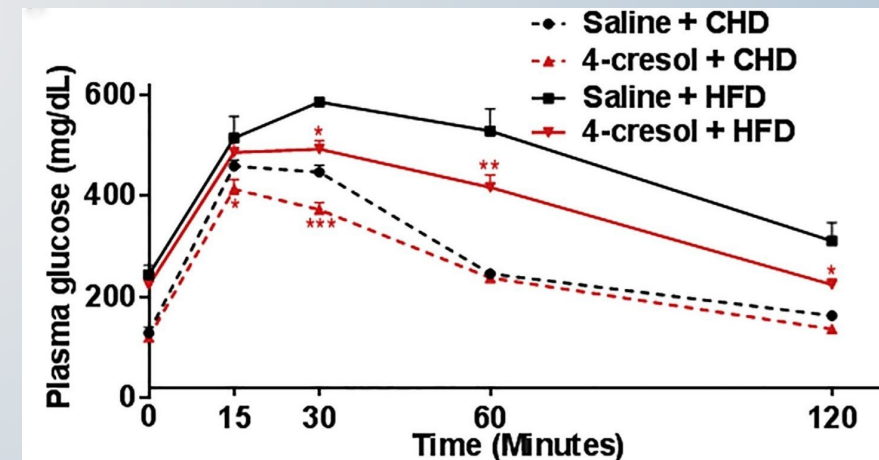
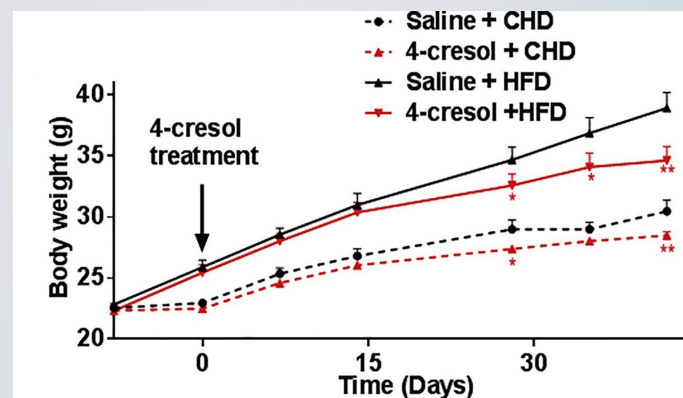


Figure from: *Cell Reports* 2020 302306-2320.e5DOI: (10.1016/j.celrep.2020.01.066)

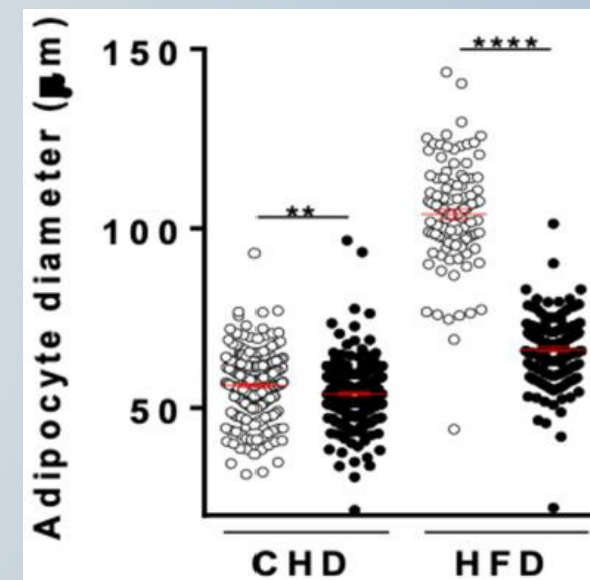
Metabolica's Market Solution For Obesity

Figures from: *Cell Reports* 2020 302306-
2320.e5DOI: (10.1016/j.celrep.2020.01.066)

- Treatment of diabetic mice with 4-cresol reduces weight gain and shrinks fat cells even when a high fat diet is consumed.
- Metabolica Health is developing compounds to treat obesity based on 4-cresol.



Body weight improvement with
4-cresol



Fat cell size reduced by 4-cresol

Metabolica's Goals

Understand

Better understand how 4-cresol and related analogues **control diabetes** and **reduce fat / obesity**

Advance

Identify the best 4-cresol analogue to develop into a **drug** and to conduct preclinical studies to validate its **efficacy** and **toxicology**, to advance towards human clinical trials

Create

Identify **new technologies** including **probiotics** to address diabetes, **obesity** and other metabolic diseases with **high commercial potential**

Wealth

Driving **high impact projects** with potential for **significant returns**

Metabolica's Strategic Approach

Cutting Edge Research

Strong partnerships with world-leading researchers

Cutting-edge “omics” technologies coupled with AI

Strong IP Protection

Collaboration agreements with leading universities and a strong IP portfolio, including and an issued USPTO

Efficient Project Advancement

Strategic partnerships and outsourcing

Patents

Compounds for the prevention and treatment of glucose intolerance related conditions and obesity

- Assignment: Agreement signed in October 2023 to assign patent portfolio to Metabolica.

USA

- Priority 4 October 2017.
- Patent awarded 8 November 2022.

Canada

- Priority 4 October 2017.
- Application under review.

Europe

- Priority 4 October 2017.
- Application under review.

Management & Directors

Daniel Auld, Ph.D. – Co-founder, President & CEO & Director

Daniel Auld earned a Ph.D. in neuroscience from McGill University in 2001, and has experience in drug discovery and development, business development and in leading academic and commercial research. He has served as the Deputy Director and Head of Operations for the Victor Phillip Dahdaleh Institute of Genomic Medicine at McGill University (and its predecessors) from 2011-2024. He graduated from the prestigious adMare Executive Academy life sciences leadership program (2020-2021), where he held a fully funded scholarship from Pfizer. He also holds two patents related to novel treatments for human disease and has co-authored numerous publications in scientific journals, including Nature.

Scott Jardin, CPA, CGA – CFO

Scott Jardin is the CFO & Director of Cannabis Division at The Good Shroom Co Inc. & Teonan Biomedical Inc., steering financial operations and aligning the cannabis division with corporate goals. Former President and CEO of AAA Medic Montreal, he's a proven leader, excelling in strategic planning and stakeholder relations. At McGill University, he managed financial and operational aspects of research centers, showcasing his versatile expertise. Scott holds a Bachelor of Commerce from Concordia University, supplemented by graduate diplomas in Finance and IT from McGill and UQAM.

Directors

Graham Wood, Ph.D. – Director

Graham Wood is a distinguished professional in clinical pharmacology with extensive experience leading major biotechnology and pharmaceutical companies. Currently, he serves as the Executive Vice-President for Nucleus Network, USA, where he spearheads the US operations and has developed a full-service offering. Dr. Wood excelled at McGill University, earning his Ph.D. in Neurology and Neurosurgery where he ranked first among doctoral students in Quebec and received numerous prestigious awards. He also holds an Hon. B.Sc. in Biochemistry, graduating Summa cum laude from McMaster University in 1994.

Jamie Hyland, B.Com. – Director

Mr. Hyland brings 28 years of experience in public markets, Mr. Hyland is a skilled financial and marketing consultant, and manager for early-stage companies. His expertise spans across multiple sectors including mining, healthcare, and technology. Currently, he serves as a director for Universal Copper Ltd. and Atomic Minerals Corp., leveraging his extensive network within the financial sector. He holds a Bachelor of Commerce in Entrepreneurial Management from Royal Roads University, Canada.

Scientific Advisor

Dominique Gauguier, Ph.D. – Professor, Université Paris–Cité

Dominique Gauguier obtained a Ph.D. in human nutrition from University Pierre & Marie Curie and the University Denis Diderot in Paris, France in 1991. He was appointed at Oxford University as Lecturer in 2001, Reader in Mammalian Genetics in 2004, and Professor of mammalian genetics in 2006. Currently, he holds a tenured position as Director of Research at INSERM situated at Université Paris - Cité. He is also a visiting Professor at Imperial College London and the Center for Genomic Medicine at the Kyoto University, Japan, and is Adjunct Professor in Human Genetics at McGill University. Research lead by Dominique Gauguier led to the discovery of 4-cresol as a potential treatment for diabetes.

Capital Structure



27,766,228

ISSUED AND OUTSTANDING SHARES

1,580,000

WARRANTS

1,500,000

OPTIONS

30,846,228

FULLY DILUTED



Private Placement Offering

Private Placement: Units

AMOUNT TO BE RAISED:	Up to One Million Canadian Dollars (CDN \$1,000,000.00) UNITS: through on a private placement basis
USE OF PROCEEDS:	The funds raised from this private placement will be utilized as follows: The primary focus will be on advancing the development of their medical patent technology. Funds will also be used to advance projects focussing on discovering novel technology in the fields of obesity, diabetes and other metabolic diseases with high commercial potential. Additionally, a portion of the funds will be dedicated to covering the costs associated with listing on the stock market, including legal and audit fees. Remaining funds will be used for general working capital needs.
PRICE PER UNIT:	CDN \$0.40
TYPE OF SECURITY:	Each Unit will consist of one (1) Common Share and one (1) non-transferable Warrant. Each Warrant entitles the holder to purchase one additional Share at an exercise price of \$0.60 per Share for twenty-four months (24) following the closing.
RESALE RESTRICTIONS:	The Shares purchased in this private placement will be subject to the standard four (4) month hold period required by an Exchange Issuer under Section 74(2) (18) of the Securities Act.
PURCHASER QUALIFICATIONS:	The offering is open to residents of Canada in accordance with private placement exemptions who are “accredited investors” under applicable securities legislation and to qualifying investors in jurisdictions in the US and outside of North America and such other jurisdictions as the Company may approve (collectively, the “Qualifying Jurisdictions”).

THIS PRELIMINARY TERMS SUMMARIZES THE PRINCIPAL TERMS OF THE PROPOSED FINANCING OF METABOLICA HEALTH INC.. INVESTORS: THIS DECK IS FOR DISCUSSION PURPOSES ONLY. THERE IS NO OBLIGATION ON THE PART OF ANY NEGOTIATING PARTY UNTIL A DEFINITIVE SUBSCRIPTION AGREEMENT IS SIGNED BY ALL PARTIES. THE TERMS ARE SUBJECT TO APPLICABLE CANADIAN AND UNITED STATES SECURITIES LAWS.

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