



WELLNESS TRANSFORMATION NETWORK

Working together to restore human health

A dynamic partnership opportunity for communities, businesses, and non-profits to advance science and look at health in a new way.

***Join the Network.
Shape the Transformation.
Achieve Wellness.***

SciMar Ltd., convenors of the Wellness Transformation Network, acknowledges that it operates on Treaty 1, 2, and 5 lands and the traditional homeland of the Métis nation.

A NEW COLLABORATION; A NEW SOLUTION; A NEW LENS ON WELLNESS

WHAT IS THE WELLNESS TRANSFORMATION NETWORK?

The WTN is a Manitoba-based, non-profit, collaborative initiative designed to:

- a. study health through the breakthrough scientific understanding of “hepatic insulin-sensitizing substance (HISS)” (a hormone) and “nutrient partitioning” (a biological process);
- b. develop new tools and promote new strategies to prevent and treat type 2 diabetes; and
- c. create the conditions for dramatic improvements in individual and community well-being.

The WTN aims to inform and shape the strategic evolutions and the transformational leaps required to address the global type 2 diabetes epidemic and to enhance human health.

We are starting in Manitoba. We want to start with you.

Through the WTN initiative, we are connecting Sponsoring Partners, Delivery Partners, and Community Partners as we measure the impact of a variety of health interventions (for example, exercise, specific dietary changes, vitamins and nutraceuticals, personal spiritual practices, and stress management, among others).

The WTN aims to gather data from several hundred individual participants to inform research into hepatic insulin-sensitizing substance and nutrient partitioning, and to improve community health.

All data are digitized and anonymized. No individual will ever be identified. No data will ever be sold.

The WTN's Convenor and Clinical Partner is SciMar Ltd., a biomedical life-sciences company currently conducting research into the prevention and treatment of type 2 diabetes. To learn more about the devastating impact of the disease, see Diabetes Data on pages 10-11.

scimar.ca

NUTRIENT PARTITIONING

SCIENCE THAT CAN REVOLUTIONIZE HUMAN HEALTH

In 1996, Dr. Wayne Lutt and his colleagues first discovered a hormone they called hepatic insulin-sensitizing substance (HISS).

Through their ongoing research, Dr. Lutt and his SciMar team have determined that it is important for HISS and the hormone insulin to be in healthy balance. HISS, when adequately produced, stimulates the body's ability to partition glucose into **muscle**. When the liver does not adequately produce HISS, the pancreas produces additional insulin, which causes nutrient energy to be partitioned into **fat**.

Their work is keenly focused on this process of "**Nutrient Partitioning**" and on developing a series of "**NuPa**" products to measure metabolic health and to stimulate the production of HISS. One product—"NuPa Test"—invites people to drink a specially formulated shake. Their body's ability to produce HISS and thereby properly partition nutrients can then be measured. When HISS production is shown to be inadequate, appropriate interventions can be considered.

Science has proven so far that this essential secretion of HISS is hindered by stress, the lack of exercise, the consumption of sugar, and other lifestyle factors. Therefore, the goal of SciMar's work is to determine ways for the body to always produce the right amount of HISS and to keep HISS and insulin in a healthy balance. The science suggests that when the right amount of HISS is present, nutrient partitioning is in balance, thereby helping people to avoid type 2 diabetes. For those already living with type 2 diabetes, managing HISS effectively is expected to help people avoid the disease's worst impacts.

Once broadly adopted, HISS and nutrient partitioning will change the paradigm in diabetes prevention and treatment.

Through its leadership of the WTN, SciMar will learn how different lifestyle interventions affect the production of HISS, and how its NuPa product pipeline can revolutionize the prevention and treatment of type 2 diabetes for all time.

The collaborative efforts of the WTN will help conclusively demonstrate the validity and importance of this remarkable science.



HOW THE WTN WORKS

UNDERSTANDING IMPACTS; GATHERING DATA; CHANGING BEHAVIOUR

If I start swimming three times a week, **will I be able to stimulate the production of HISS?**

Can a daily supplement **protect me from the onset of type 2 diabetes?**

Can introducing traditional medicines **lower my blood pressure?**

What will three-four months of **a regular yoga practice** do for my sugar levels?



How can the specific change you make today affect your health tomorrow?

The Wellness Transformation Network will answer these sorts of questions by enrolling individual participants from Community Partners in a five-step health and wellness intervention. An intervention refers to the introduction of a new activity in someone's life for a defined period of time.

Community Partners are responsible for the recruitment of participants, under the guidance of the Clinical Partner/Convenor (SciMar Ltd.).

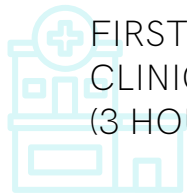
INTERVENTION PROCESS



STEP 1

INTAKE
(1 HOUR)

- Participant is interviewed to gather demographic and health information.
- Information is immediately and anonymously digitized and linked to a QR code.
- All papers are stored under lock and key until the end of the intervention when all paper records will be destroyed.



STEP 2

FIRST
CLINIC VISIT
(3 HOURS)

- Body measurements are taken.
- A continuous glucose monitoring sensor will be applied to the participant's arm or abdomen to capture real-time data over the first few days of the intervention.
- The participant will drink the specially formulated NuPa Test shake, prepared for the individual's body weight.
- Bloodwork is conducted. In addition to measuring hepatic insulin-sensitizing substance (HISS), a variety of traditional biomeasures are also recorded.



STEP 3

THE
INTERVENTION
(17+ WEEKS)

- For a set period of time (17+ weeks), the participant will add or change a behaviour, for example: meditating for 10 minutes a day; playing badminton or pickleball twice a week; increasing the amount of fish in one's diet; taking a daily supplement; starting a weight-lifting program, among many others. These are just examples.
- The purpose is to understand the impact of a particular change on the production of HISS and other important measures of health and well-being.
- Each intervention will have some sort of compliance protocol to ensure that the participant is doing their part for the duration of the intervention.
- Interventions are designed and executed by WTN Partners.



STEP 4

SECOND
CLINIC VISIT
(FULL DAY)

- Body measurements are taken to see what changes have taken place.
- The continuous glucose monitoring sensor will be re-applied.
- The participant will again drink the specially formulated NuPa Test shake, measured for the individual's body weight.
- Final bloodwork is conducted to record any changes in the production of HISS and any changes in other indicators of well-being.



STEP 5

DATA ANALYSIS

- Each participant's anonymized "before and after" data will have been uploaded to an encrypted cloud-based platform, combined with the data of other participants, and analyzed.
- Upon completion, the participant can access their individual results or the results can be sent to their physician.
- Identifying digital and paper files will be destroyed following the intervention, in accordance with best practices in clinical trial data management.
- The Convenor (SciMar) will share aggregate data and relevant analysis with WTN Partners.

We are grateful for the involvement of Partners and individual participants. Each participant plays a key role in validating and fine-tuning emerging and exciting science. Together, we can change human health.

PARTNERING FOR PROGRESS

JOIN US TODAY; MAKE A DIFFERENCE FOR ALL TIME

The Wellness Transformation Network comprises four partnership categories. Some Partners can contribute and benefit under more than one category:



CLINICAL PARTNER AND CONVENOR

As Clinical Partner and Convenor of the WTN, SciMar Ltd. is responsible for:

- coordinating the Network
- providing scientific leadership
- providing laboratory services (blood collection and analysis)
- collecting, managing, and analyzing data
- sharing clinical findings and recommendations with Partners
- guaranteeing the privacy of individual participants and the confidentiality of collected data



DELIVERY PARTNERS

A Delivery Partner has expertise in designing and leading health programs. This could include nutritionists (for dietary interventions); gyms (for exercise interventions); and natural health practitioners (for interventions involving herbs, meditation, yoga, and other elements of traditional medicine), among others. Delivery Partners of the WTN will:

- be funded to design and deliver the agreed upon health intervention
- provide the venue, expertise, and personnel (if required) for the health intervention
- support each participant and ensure their participation over the life of the intervention
- enjoy greater visibility in the community
- have access to anonymized intervention results and data analysis



SPONSORING PARTNERS

Sponsoring Partners of the WTN:

- provide financial support for the WTN, either in the form of a general grant, or by covering the costs of a specific wellness intervention for a specific community
- are driven by purpose and eager to see an improvement in community and global health
- will receive brand visibility on the WTN website and positive exposure to relevant audiences
- will have access to anonymized intervention results and data analysis



COMMUNITY PARTNERS

A Community Partner is an entity that represents a specific population of people who will actually participate in the intervention. A Community Partner could include a cultural or ethnic group; a company interested in staff wellness; a fitness facility aiming to further improve the health of its members; an athletic association looking to understand the impacts of participation in sports; a personal care home trying to improve its residents' quality of life, and other groups. Community Partners are communities and organizations eager to learn more about metabolic health and are inspired to improve the health and well-being of their communities. Community Partners of the WTN will:

- recruit participants and ensure proper permissions and waivers are in place
- coordinate all logistics related to participation as a Community Partner
- offer physical spaces and medical support (if deemed necessary)
- be equipped to promote better health in their communities
- have access to anonymized intervention results and data analysis

The WTN is actively seeking additional Sponsoring, Delivery, and Community Partners to maximize the impact of the initiative.

SCIMAR LTD.

BRINGING BREAKTHROUGH SCIENCE TO MARKET

SciMar Ltd. was established in 2009 to advance the groundbreaking research of Dr. Wayne Lautt, Professor Emeritus, Department of Pharmacology and Therapeutics, at the University of Manitoba.

In 1996, Dr. Lautt discovered hepatic insulin-sensitizing substance (HISS) and worked to demonstrate the effect of this hormone on obesity and prediabetes. The science has been published nationally and internationally in 40 peer-reviewed papers. With Dr. Lautt's continued scientific leadership, SciMar Ltd. is currently conducting a series of trials and lab work on a test and a suite of products to address the hormonal imbalances that cause weight gain and prediabetes.

As Convenor of the Wellness Transformation Network, SciMar is mobilizing like-minded Partners who are eager to make a difference in the health of our communities and people everywhere. As the Network's Clinical Partner, SciMar coordinates testing, collects and manages data, and produces expert analysis while adhering to best practices in clinical testing and data management.

The data will never be sold or otherwise monetized and each participant will remain forever anonymous. SciMar will use the data it collects through the WTN only in aggregate, and only to inform its ongoing research into nutrient partitioning and hepatic insulin-sensitizing substance.

SciMar's lab and scientific offices are located at the Albrechtsen Research Centre on the campus of Winnipeg's St. Boniface Hospital.

www.scimar.ca



"I became a scientist because I wanted to make a positive difference in the world. This is a culmination of my life's work that I know will change the course of human health."

-Dr. Wayne Lautt

Founder, Chief Scientific Officer, SciMar Ltd.

*Professor Emeritus,
Department of
Pharmacology and
Therapeutics, University of
Manitoba*



REACHING OUT TO MANITOBA'S FIRST NATIONS

Type 2 diabetes is a major health challenge for Canada's First Nations. Current data suggest that up to 80% of Indigenous youth in Canada will develop the condition in their lifetimes.

SciMar Ltd. is engaged in rich, respectful dialogue with representatives of Manitoba's First Nations communities.

Our goal is to attract several First Nations to join the Wellness Transformation Network. Together, we hope to arrive at effective strategies to combat obesity and skyrocketing levels of type 2 diabetes.



PARTNER PERSPECTIVE



"At the Reh-Fit Centre, we care very deeply about the pursuit of innovation in promoting good health. We decided to become a WTN Partner because the initiative is based on science and evidence, and is keenly focused on helping people live healthier lives."

*-Sue Boreskie, Chief Executive Officer
Reh-Fit Centre*

DIABETES DATA

*Here is the problem we are
working to solve*

In 2015,

3.4 million

Canadians (9.3% of the population) were living with diabetes. That number is expected to grow to

5 million

(12.1%) by 2025.¹

In 2014,

387 million

people around the world were living with type 2 diabetes.⁷

Diabetes was responsible for

5.1 million

deaths around the world in 2013.⁵

Without a major change in prevention medicine,

50%

of all Canadian youth and

80%

of all Indigenous youth will develop type 2 diabetes in their lifetimes.³

In 2015,

5.7 million

Canadians were pre-diabetic. That number is expected to be

6.4 million

by 2025.²

¹ Diabetes Canada ² Diabetes Canada

³ Canadian Medical Association Journal ⁴ Diabetes Canada

⁵ International Diabetes Federation (2014) ⁶ Obesity Canada

⁷ International Diabetes Federation (2014)

PARTNER PERSPECTIVE



"At Youville, we're on the front lines of community health and we see the devastating impacts of type 2 diabetes up close. As a WTN Partner, we're excited to work with other Partners to advance some very important science and make an even greater difference in people's lives."

*-Toni Tilston-Jones,
Executive Director
Youville*

Over five million Canadian adults have obesity, according to the 2014 Canadian Community Health Survey, and

10%

of premature deaths among Canadians (20-64) are directly attributable to obesity.⁶

In Canada, people with type 2 diabetes represent

50%

of all people on kidney dialysis.⁴

**As a WTN
Partner, you
can help change
these numbers.**



WELLNESS TRANSFORMATION NETWORK

“Working together, we can move science and related health policies forward with a transformational, evidence-driven leap. We can change lives. We can alter the course of human health.”



For further information about becoming a Wellness Transformation Network Partner, contact:

Mick Lautt
Executive Director, Wellness
Transformation Network
Chief Executive Officer, SciMar Ltd.
(204) 701-2000
mick.lautt@scimar.ca

www.wellnesstransformation.org

PASSION • COLLABORATION • SCIENCE • TECHNOLOGY • PROGRESS