

"Take control of your glycemic health."

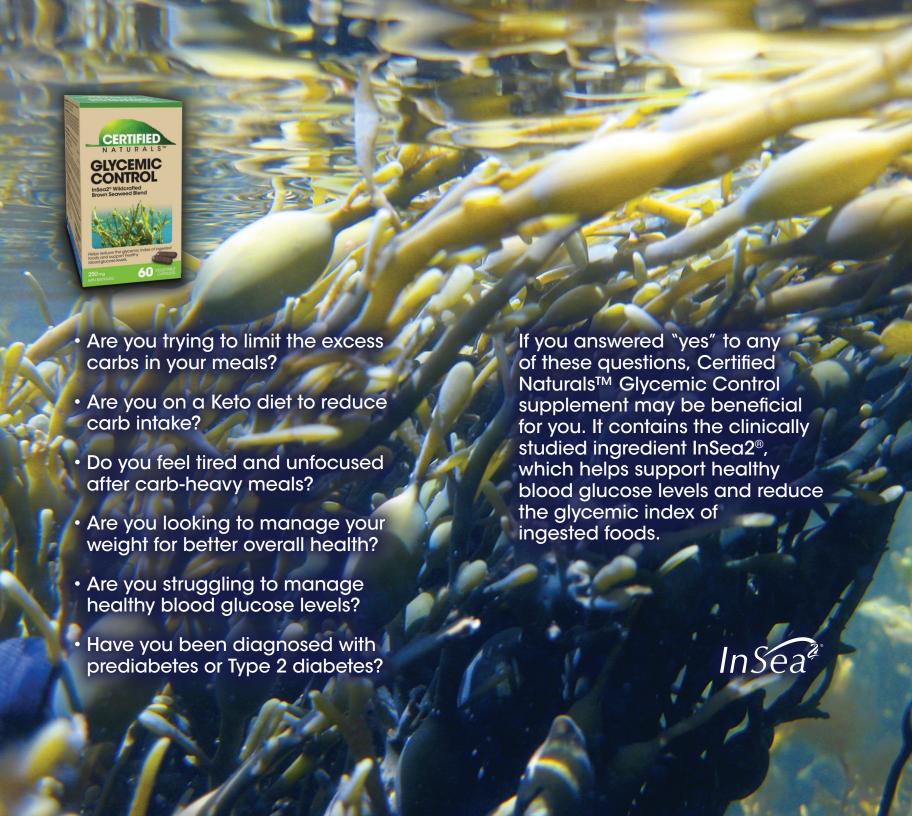


Recommended by W. Gifford-Jones, MD

Follows the guidelines of the W. Gifford-Jones MD Philosophy for Natural Health www.docgiff.com

# CERTIFIED





#### The state of glycemic health in Canada

Diabetes is a condition where the body is unable to produce enough insulin or use it properly in managing blood sugar levels. Diabetes is strongly linked with elevated risks of heart disease, stroke, vision loss, obesity and metabolic syndrome and higher levels of inflammation.

In Canada, over 3 million people have been diagnosed with diabetes. This number is expected to rise another 30% by 2030. The incidence of the disease increases with each passing decade of age in both males and females. Obesity is a major risk factor as shown by 20% of obese or overweight Canadians having been diagnosed with diabetes versus less than 4% of those at normal weight.<sup>3</sup>

An emerging concern is that so many Canadians are classified as prediabetic. This means that their blood sugar levels are high, but not yet in diabetic range. Six million Canadians (23% of adults) have prediabetes – many without even being aware. In fact, many prediabetics are "thin" on the outside, but "fat" on the inside with dangerous visceral fat. Prediabetic numbers will continue to grow rapidly if lifestyle risks affecting alycemic health are not modified.

#### Why is it so difficult to manage blood sugar?

The modern lifestyle is leading to the increase of diabetes and obesity in Canada. Increasingly sedentary activities combined with energy-dense food are obvious contributors.

What has made it more difficult for Canadians to manage their blood glucose is the choice of foods available to them. In the 1970's, researchers targeted "fat" as the leading cause of weight gain. The "low-fat" trend was initiated, encouraging food producers to remove fats from processed foods. The problem was that removing these foods tasteless and unappealing. Food producers then resorted to adding carbohydrates and sugars into foods to improve taste and texture, often without consumers' awareness.

Consider this: the maximum recommended amount of sugar intake for humans is 10 kg per year. The average sugar intake of a Canadian adult is 40 kgs or four times above the recommended level.<sup>4</sup>

#### What is the glycemic index? How does it impact our health?

The glycemic index (GI) is a measurement of how the foods we eat affect our blood sugar management. Foods high in refined carbohydrates and sugar are digested more quickly and often have a high GI, while foods high in protein, fat, or fiber typically have a low GI. Low GI foods have lesser impact on our blood sugar and insulin levels than high GI foods. Consumption of high GI foods often results in blood sugar swinging rapidly from high to low once insulin over-production kicks in to use up the glucose.

High GI foods can negatively impact our weight management, blood sugar levels, immunity, aging rate, skin health, ability to concentrate, inflammation levels and management of cholesterol levels.



### How can we manage our glycemic response?

There are only a few clinically validated ways to reduce the glycemic response after a meal.

- · Monitor the GI value of daily food intake to manage blood sugar and insulin (see "Glycemic Index of Foods").
- Increasing exercise and activity. Exercise can help to keep your body sensitive to insulin and losing weight can also improve glycemic response.
- Block the absorption of carbs and sugars in the foods that we eat. A new natural ingredient has been studied for its impact on glycemic health by blocking this
  absorption process.

## In Sea<sup>2</sup> A unique, natural carb and sugar blocker

The addition of edible seaweeds to the diet is common in Asian cuisine. Used in traditional dishes, seaweeds offer a healthy range of polyphenols, polysaccharides, fibres, amino acids, vitamins and minerals. Countries with high consumption of seaweeds have a lower incidence of obesity and metabolic syndrome.<sup>5</sup>

Two brown seaweeds native to the Canadian Maritime provinces have been combined and researched for their benefits for glycemic health. Together in an optimal ratio determined by research, *Ascophyllum nodosum* and *Fucus vesiculosus* form the clinically proven InSea2® ingredient.

InSea2® has been shown to slow down the digestion and absorption of carbohydrates and sugar for improved glycemic health. When taken together with a meal containing carbohydrates and sucrose (table sugar), InSea2® inhibits the a-amylase enzyme that breaks down carbs as well as the a-glucosidase enzyme that breaks down complex sugars.6 While some other nutraceuticals have been

identified to help block carbs, InSea2® is unique in being able to offer the dual action of blocking complex sugars as well as carbs.

Source: Diabetes Canada

It is believed concentrated polyphenols known as phlorotannins, unique to brown seaweeds, are the micronutrients that inhibit the relevant enzymatic activity. By inhibiting this activity, lesser amounts of carbs and sugars are absorbed, making the digestion of the food slower, allowing the body to better manage glycemic stress. In fact, InSea2® is more effective than the anti-diabetic pharmaceutical acarbose at reducing a-amylase and a-glucosidase – but without

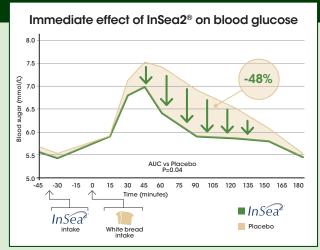
the uncomfortable gastrointestinal side effects.

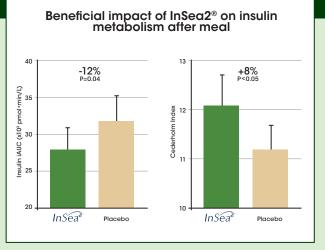
A look into the science of InSea2® shows its effectiveness at carb and sugar blocking and reveals its many benefits for glycemic health.

#### The Science of InSea2®

#### InSea2® lowers glucose and insulin levels after a carbohvdrate meal<sup>7</sup>

Patients were given 500 mg of InSea2® or a placebo prior to a high carbohydrate meal. Their blood glucosé levels were monitored for a 3-hour period post-meal. InSea2® patients showed a 48% reduction (iAUC) in incremental glucose versus the placebo group. The seaweed combination also demonstrated a 12% reduction in incremental insulin and increased insulin sensitivity by 7.9% compared to the placebo. This study showed that InSea2® effectively reduces glycemic stress in response to carbohydrate ingestion.





#### InSea2® reduces the post-meal glycemic impact of sucrose8

Patients were given 500 mg of InSea2® or a placebo prior to a high sucrose meal. Their blood glucose levels were monitored for a 3-hour period post-meal. The InSea2® patients showed a 39% reduction (iAUC) in incremental glucose versus the placebo group. The InSea2® group also demonstrated a 7% reduction in incremental insulin and increased insulin sensitivity of 5%. These results confirmed that InSea2® offers the dual action of sugar blocking in addition to starch (carbohydrate) blocking.

#### InSea2® reduces post-meal cognitive decline9

InSea2® was studied for its ability to reduce "post-lunch dips" in performance, which can lead to impaired cognitive performance, reduced productivity and increased errors. In a placebo-controlled study, a 500 mg dose of InSea2® was shown to reduce errors in cognitive tests by 15%, improve accuracy by 4% and speed up choice reaction time over a four-hour period post-meal of carbohydrates and sugar. This improvement is believed to be due to the positive effect of the brown seaweed on blood glucose fluctuations and insulin responses. Preventing elevated insulin levels means that less tryptophan is transported to the brain, which can initiate the sleep cycle.

#### InSea2® improves glycemic status of prediabetic patients over a 6-month period<sup>10</sup>

In a six-month placebo-controlled study of dysglycemic patients (abnormal blood glucose levels, but not diabetic), InSea2® with chromium supplementation (250 mg x 3 daily) was evaluated versus a placebo. The InSea2® group had significant reduction in C-reactive protein (inflammation) and improvements in fasting blood glucose and insulin resistance. The most encouraging finding was that a significant number of patients moved from prediabetic status to normal status over the 6 months and that others moved from a high level of prediabetes to a lower level. Within the placebo group, many patients regressed to a more severe level of prediabetes over the study. The regular use of InSea2® in this study helped to prevent the progression of prediabetic status.

#### InSea2® improves health markers in type 2 diabetic patients11

In a six-month placebo-controlled study, the overall health of type 2 diabetes patients was evaluated with daily use of InSea2® with chromium vs. placebo. All study patients continued with their regular medication (primarily metformin). The InSea2® patients (250 mg x 3 times daily) showed reductions in waist circumference, reduced fasting and post-meal glucose, in addition to lower glycated hemoglobin. Glycated hemoglobin is considered a key marker of how patients are managing their diabetes. This study also confirmed the safety of using InSea2® with diabetic patients over an extended period together with regular medication.

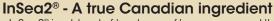


#### Who can benefit from Glycemic Control supplementation?

A wide number of users can benefit from Certified Naturals™ Glycemic Control formula:

- Prediabetics
- (23% of the adult population)
- Type II diabetics
- (almost 10% of the adult population) Obese or overweight individuals (over 60% of the adult population)
- Keto dieters (4% of the adult population)





InSea2® is a blend of two types of brown seaweed that arow naturally off the coast of Nova Scotia, Canada: Ascophyllum nodosum and Fucus vesiculosus.

> These two species are native to the area and are sustainably wildcrafted and certified organic by EcoCert®. Harvesting by hand ensures that the plants' holdfast system (anchors) is not harmed, allowing for regrowth.

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- Statistics Canada. Diabetes 2017. Health Fact Sheets.
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- Derosa, Giuseppe et al. Ascophyllum nodosum and Fucus vesiculosus and chromium picolinate nutraceutical composition can help to treat type 2 diabetes patients. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy 2019:12 1861-1865.



#### Certified Naturals™ Glycemic Control Capsules

**Recommended use:** Helps support healthy blood glucose levels. Helps to reduce the glycemic index of ingested foods.

**Recommended dose:** Adults: 2 capsules, once or twice daily. Do not exceed twice daily. Take 30 minutes before a starch containing meal or high glycemic index meal with a glass of water.

Medicinal ingredients:

Each vegetable capsule contains:

71.25 mcg loaine 25.75 mg polyphenois

3.75 mcg iodine 1.25 mg polyphenols

 $\mbox{InSea2}^{\mbox{\tiny B}}$  is a clinically researched blend of polyphenol-rich brown seaweeds wild-crafted from the waters of the Canadian Maritime provinces.

**Non-medicinal ingredients:** Microcrystalline cellulose, colloidal silicon dioxide, vegetable grade magnesium stearate and hypromellose (vegetable capsule).

**Cautions and Warnings:** Do not use if pregnant or breastfeeding. Consult a health care practitioner before use if you have diabetes. Consult a health care practitioner beyond duration of 3 months. Discontinue use and consult a health care practitioner if you experience symptoms of hypoglycemia including feelings of anxiety, dizziness, tremor, sweating, nausea, or headache.

Contraindications: Do not use if you are allergic to iodine.

KEEP OUT OF THE REACH OF CHILDREN. Do not use if under cap safety seal is broken.

Free from animal derivatives, artificial colours, artificial flavours, corn, gluten, wheat, lactose, dairy, preservatives, soy, added sugar, yeast and GMO materials.



Certified Naturals™ is a new line of supplements that selects only the world's best clinically proven natural ingredients. Ingredients that deliver health results. These formulas are Certified...for your health.





www.certifiednaturals.ca

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