



# BLUEBERRY-CHROMIUM

Source of antioxidants. Provides antioxidants.  
Helps maintain normal blood glucose levels.  
Contributes to healthy glucose metabolism.

**30 capsules 7 500 mg + 500 µg**

**VEGETARIAN | PESTICIDE FREE | GMO FREE**

NPN 80103237



Blueberry-Chromium is recommended to help support the regulation of glucose and to provide antioxidants. The properties of blueberries reported in the scientific literature make this herbal remedy an ally in the prevention of type 2 diabetes.

## Context

In 2005, the International Diabetes Federation estimated that the number of people affected by type 2 diabetes worldwide was 194 million. Given the scale of the pandemic, research into alternative approaches and the use of natural health products for prevention have increased in popularity. Diverse species of the *Vaccinium* genus have been recognized for their antidiabetic properties, including European blueberries (*V. myrtillus* L.) and American cranberries (*V. macrocarpon* Ait.).<sup>2</sup> In 2006, a team of Canadian researchers published a study demonstrating the exceptional properties of the lowbush blueberry (*V. angustifolium* Ait.) on metabolic glucose processes involved in the onset of type 2 diabetes.<sup>3</sup>

## Blueberry (*Vaccinium angustifolium*)

Along with fenugreek, blueberry has been one of the most commonly used herbal remedies in Quebec for antidiabetic purposes.<sup>4</sup> To date, most studies have focused primarily on blueberries' antioxidant properties, concentrating less on their antidiabetic potential. In 2006, however, Martineau LC et al. undertook a study of the insulin-like, glitazone-like, and cytoprotective activities of the lowbush blueberry.

The study confirmed these activities in the blueberry, identifying considerable insulin-like activity, in addition to notable glitazone-like and cytoprotective effects. The study also noted an antidiabetic effect on  $\beta$  cells in the pancreas. Although the mechanisms of action were not clearly identified, the results observed in the study led researchers to conclude that the use of blueberries showed promise as a complementary treatment for type 2 diabetes in humans.

It is made from blueberries grown and processed in Canada.

### MEDICINAL INGREDIENTS

Chromium (Chromonium Nicotinate (III))  
(ChromMate® CM-100M)

..... 500 µg

Blueberry (*Vaccinium angustifolium* -  
Fruit) (Blue d'Or™)

..... 100 mg  
(0,3% Anthocyanins, 75 : 1, 7 500 mg)

### NON-MEDICINAL INGREDIENTS

Cellulose, hypromellose, magnesium stearate and maltodextrin.

### RECOMMENDED DOSE

Adult, 1 capsule 1 time a day.  
Take with food.

### PRECAUTIONS AND WARNINGS

- Consult a health care practitioner before using if you suffer from kidney problems and/or diabetes.
- If you are taking an anticoagulant, consult a health care practitioner before using.

Blue d'Or™ is a Fruit d'Or trademark  
ChromMate® is a Lonza trademark.

### USDA<sup>1</sup> CLASSIFICATION

Kingdom: *Plantae*  
Division: *Magnoliophyta*  
Class: *Magnoliopsida*  
Order: *Ericales*  
Famille : *Ericaceae*  
Genus: *Vaccinium* L.  
Species: *Vaccinium angustifolium* Aiton

## Chromium

Chromium is an essential micronutrient for human health. Its properties include, among others, increasing tissue sensitivity to insulin. This helps normalize and stabilize sugar and insulin levels in the blood. In 2010, one study showed that taking 1000 mcg of chromium picolinate could increase insulin sensitivity among diabetics. The effect was all the more significant given the high levels of insulin resistance among test subjects. A positive effect was also reported with a daily dosage of 400 mcg of chromium nicotinate for patients suffering from insulin resistance due to HIV treatment.<sup>6</sup> In 2011, Korean researchers published a study showing that supplementation with 400 mcg of chromium chloride per day could reduce insulin resistance among obese children.<sup>7</sup>

The Blueberry-Chromium product from Léo Désilets Maître Herboriste is available in vegetarian capsule form containing the equivalent of 7500 mg of blueberry (0.3% anthocyanins). Our product is registered as a Natural Health Product by Health Canada for supporting the healthy metabolism of glucose and for providing antioxidant support.



LEO DESILETS

### Léo Désilets Master Herbalist

is an entirely Quebec owned and operated natural products firm based in Scotstown in the Eastern Townships. It began operations in 1974 when the founder launched his premier product: Balsam Fir Gum

Our production methods meet the requirements and quality standards of Health Canada's Good Manufacturing Practices (GMP).

We produce a wide range of natural health and skincare products, which are available through our website as well as most natural health stores and some pharmacies.

Our mission: to offer high quality natural health and skincare products to help you take care of your health in a natural way.

#### REFERENCES

<sup>1</sup>Blumenthal, M. **The Complete German Commission E Monographs - Therapeutic Guide to Herbal Medicines.** American Botanical Council, Austin, TX. 1998

<sup>2</sup>Chambers, B., Camire, M. **Can cranberry supplementation benefit adults with type 2 diabetes?** *Diabetes Care.* (26):2695-2696. 2003

<sup>3</sup>Martineau LC, Couture A, et al. **Anti-Diabetic Properties of the Canadian Lowbush Blueberry *Vaccinium angustifolium* Ait.** *Phytomed.* 13:612-623. 2006

<sup>4</sup>Haddad PS, Depot M, Settaf A, Chabli A, Cherrah Y. **Comparative study on the medicinal plants most recommended by traditional practitioners in Morocco and Canada.** *J Herbs Spices Med Plants* 10:25-45. 2003

<sup>5</sup>Cefalu WT, Rood J, et al. **Characterization of the metabolic and physiologic response to chromium supplementation in subjects with type 2 diabetes mellitus.** *Metabolism.* 59(5):755-62. 2010

<sup>6</sup>Aghdassi E, Arendt BM, Salit IE. **In patients with HIV-infection, chromium supplementation improves insulin resistance and other metabolic abnormalities: a randomized, double-blind, placebo controlled trial.** *Curr HIV Res.* 8(2):113-20. 2010

<sup>7</sup>Kim CW, Kim BT, et al. **Effects of short-term chromium supplementation on insulin sensitivity and body composition in overweight children: randomized, double-blind, placebo-controlled study.** *J Nutr Biochem.* 2011

