Chromium is an essential micronutrient required for proper insulin function, healthy blood-sugar levels, and carbohydrate, fat, and protein metabolism. However, many North Americans are deficient because of poor diets, that is, over-consumption of simple carbohydrates and refined sugars that are lacking in chromium.

A chromium deficiency may be an underlying contributing factor to the tremendous number of North Americans that suffer from obesity, type 2 diabetes, hypoglycemia, and metabolic syndrome.

**Chromium for diabetes**

The rise in obesity (over 60 percent of the Canadian population is overweight) has led to a higher incidence of type 2 diabetes. In Canada, diabetes affects 1.5 million people; type 2 diabetes accounts for 90 percent of all diabetic cases. Type 2 diabetes develops when the pancreas does not produce enough insulin—the hormone that makes blood sugar available to the cells as our basic fuel—or when the body does not effectively use the insulin provided (insulin resistance).

Treatment for type 2 diabetes must focus on tight blood-sugar control, achieved through dietary and lifestyle changes. There are numerous herbal and nutritional supplements on the market that can help increase the production of insulin from the pancreas and make the cells more sensitive to insulin so the body can use it appropriately.

Chromium picolinate is the most popular form of supplemental chromium. Picolinate, a byproduct of the amino acid tryptophan, is paired with chromium in supplements because it may help the body absorb chromium more efficiently. Chromium is important in the breakdown of carbohydrates and fats, and it helps cells respond properly to insulin; however, the exact mechanisms by which chromium improves this insulin efficiency are currently unclear.

"Supplementing with chromium has been shown to produce improvements in glucose control."

Some research has shown that without chromium, insulin's actions may be blocked and glucose levels elevated. Many people suffering from type 2 diabetes also have elevated cholesterol and triglyceride levels, which chromium has shown to be effective at lowering.

**Chromium for weight loss**

The most common usage for chromium picolinate is as a weight loss aid; claims that this supplement can melt fat and increase metabolism are common and account for the
“Good food sources of chromium include carrots and potatoes.”

popularity of chromium picolinate in our diet-obsessed culture. However, scientific research has not always been conclusively supportive of the appealing claims made about chromium picolinate’s ability to significantly aid weight loss. On a more positive note, chromium has been shown to be an effective supplement to help reduce sugar cravings and suppress appetite—important elements in weight loss.

**Chromium in your diet**

Good food sources of chromium include carrots, potatoes, broccoli, whole-grain products, and molasses. Supplemening with chromium has been shown to produce improvements in glucose control. Between 200 and 400 mcg of chromium picolinate is recommended for those with type 2 diabetes, insulin resistance, or metabolic syndrome.

Chromium is a logical choice for those health-conscious consumers who are trying to maintain healthy insulin function. Normal insulin function is key to healthy blood-sugar levels, and both are important to achieving optimum physical and mental health.

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