

## American Ginseng – Can It Lower Your Blood Sugar?

*Study reveals the potential benefits of American Ginseng in preventing and managing Type 2 Diabetes.*

Within the booming supplement industry today, ginseng capsules occupy prime shelf space at the market due to its various advertised health benefits. Now, there is increasing evidence of its role in the prevention and management of Type 2 Diabetes.

In health food stores, ginseng is purported to boost energy and mood, improve exercise performance, reduce cancer risk, help with the management of diabetes and have aphrodisiac qualities. While there is evidence to support some of these claims, clinical research on different species of ginseng is still very limited in the United States.

Asian ginseng has been used medicinally in China, Japan, and Korea for over 2,500 years and hundreds of recent studies have been done on ginseng in Asia. However, very few are translated to English and are therefore difficult to interpret. American ginseng is of the same family as Asian ginseng but grows in North America and has certain properties that differ from Asian or Siberian ginseng varieties. Because of the growing interest in alternative therapies and increasing popularity of Eastern medicine in America, researchers are beginning to test the effects of herbal medicines like ginseng.

### **Ginseng and Type 2 Diabetes?**

In one of the most rigorous clinical trials assessing alternative therapies to-date, researchers from the University of Toronto recently demonstrated a potential use for American Ginseng (*Panax quinquefolius L*) in helping to prevent or manage Type 2 Diabetes Mellitus - a disease that affects over 16 million Americans today.

Researcher Vladimir Vuksan and colleagues recruited 10 nondiabetic and 9 diabetic subjects to test the effect of American ginseng on blood sugar levels consumed *before* or *along with* a 100-calorie carbohydrate snack. Each participant came to the University on 4 different occasions to receive a 3 gram ginseng capsule 40 minutes before the snack, a 3 gram placebo capsule 40 minutes before the snack, a 3 gram ginseng capsule along with the snack, and finally a 3 gram placebo capsule along with the snack. Researchers measured the blood glucose (sugar) levels just prior and then 5-6 additional times after consuming the ginseng or placebo and the snack.

### **What They Found.**

The researchers found that when ginseng was consumed 40 minutes *before* the carbohydrate snack, there was a significant lowering in blood glucose observed in both the diabetic and non-diabetic individuals as compared to the placebo.

When the participants consumed the ginseng *along with* the carbohydrate snack, blood glucose was significantly lowered in the diabetic individuals, but not in the non-diabetics.

### **What Does This Mean?**

While the exact way that American ginseng works to lower blood glucose is still unknown, these findings do suggest that ginseng may have a role in helping to improve control of blood sugar in individuals – both with diabetes and those who are at risk of developing diabetes.

Diabetes, in the most simplified terms, results from the body's inability to maintain normal blood glucose levels. The development of Type 2 Diabetes occurs over a period of time where the body becomes either unable to secrete enough insulin to help push the blood glucose into the cells for energy or the cells themselves become resistant and won't allow the glucose into the cell. This results in elevated blood glucose levels that can lead to physical complications like tingling, numbness, vision problems and much more serious problems if the diabetes is not managed through consistent monitoring the diet and blood glucose.

The researchers at the University of Toronto suggest that while it is still too early to say that American ginseng can help prevent the development of diabetes, the herb does seem to have an effect on lowering blood glucose toward normal levels in non-diabetics when taken prior to consuming carbohydrate. The ginseng also helped lower the blood glucose in diabetics when consumed prior *and* along with the snack, but the researchers cautioned that diabetics, in particular, should avoid consuming ginseng alone to avoid a potential hypoglycemic (low blood sugar) reaction.

### **New Use for an Old Herb?**

The researchers indicate that it is tempting to suggest that there may be a potential use for ginseng in preventing Type 2 diabetes in healthy people by helping to maintain normal blood sugar levels. There may also be a potential use for ginseng as an adjunct therapy in individuals who already have Type 2 diabetes. However, further research needs to be done to confirm these findings.

Individuals who consider adding ginseng to their diet as a regular supplement should consult their health care provider for possible contraindications or drug-herb interactions. For information on possible drug-herb interactions, see American Specialty Health Network's *Micromedix* database or consult your health care provider.

With the booming market for herbal therapies that has increased over 380% in just the 1990s alone, this kind of research is essential to determine the effectiveness of common medicinal herbs like American ginseng in helping to prevent or manage chronic diseases - like Type 2 diabetes - that affect millions of American.

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