



The Sugar Spike Solution

Get Dangerous After-Meal Spikes Under Control with Two Natural Extracts





The Danger of Sugar Spikes

Over time, sugar spikes — that surge of glucose in our bloodstream after a meal — can cause lasting damage throughout our bodies and lead to a huge array of dangerous health conditions. Learn about the role our diet plays in sugar spikes and the relationship between sugar, insulin, and our overall health.



Slowing Glucose Absorption with Maqui Berry

Meet the maqui berry! It's a "superfruit" that's gaining popularity for its many health benefits, but researchers have recently discovered another use for it — reducing blood glucose and insulin spikes. Read about the impressive results of a recent clinical trial and find out just how a maqui-berry extract works in your body to keep those sugar spikes under control!



Regulating Sugar Spikes with Clove Extract

Popular in natural medicine and in cooking, cloves can also play an important role in reducing sugar spikes in the body. Discover how a clove extract can prevent these spikes — and how it complements the maqui-berry extract.



#1

The Danger of Sugar Spikes



Unfortunately, based on the standard American diet, most of us are living day in and day out with high, fast sugar spikes — and that's putting our health in danger.

The Danger of Sugar Spikes

Sugar spikes, blood sugar spikes, blood glucose spikes — whatever we call them, these surges of sugar in our bodies following most meals can have a harmful impact on our overall and long-term health.

How do dangerous sugar spikes occur? All the carbohydrates that we eat break down into sugar. But it's not the breakdown itself that we need to be concerned about — it's how fast that breakdown occurs.

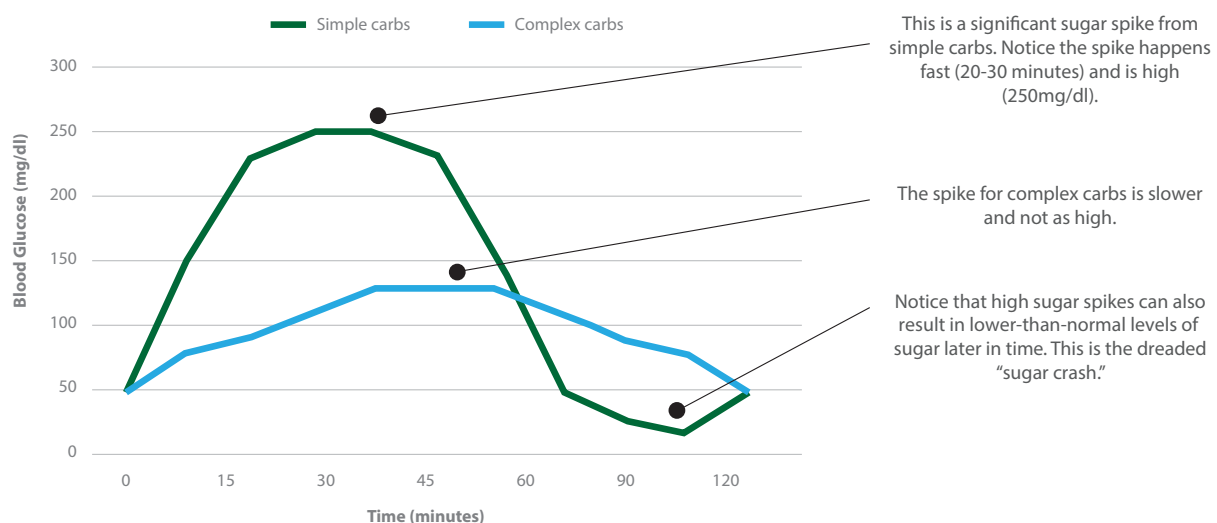
The faster carbohydrates break down into sugar, the faster glucose is pulled into your bloodstream and the higher the after-meal spike in blood sugar. And the opposite is true: the slower the breakdown, the slower and lower the sugar spike — and that's what we want.

So, low, slow sugar spikes are the goal. Unfortunately, based on the standard American diet, most of us are living day in and day out with high, fast spikes — and that's putting our health in danger.

Not All Carbs Are Equal

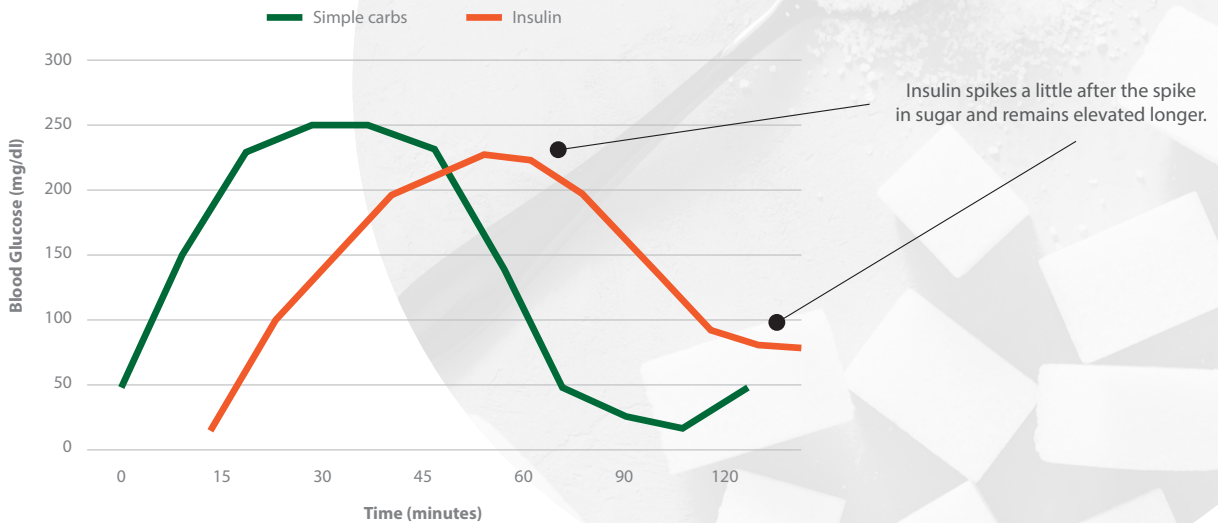
Simple carbohydrates cause a quick, steep spike of blood sugar, followed by a sugar crash. These simple carbohydrates include sugar; sweetened beverages; pastries; cakes; added sugars in just about every processed sauce; white carbs/starches like pasta, rice, and breads; and highly processed syrups, like high fructose corn syrup — in other words, foods all too frequently found in the standard American diet.

On the other hand, complex carbohydrates — such as whole grains, fibers, and vegetables — cause a slower and much-less-pronounced sugar spike with no real crash, as you can see in this graph.



The Relationship Between Sugar and Insulin

Why does the size and speed of a sugar spike matter so much? Because when sugar (glucose) enters your bloodstream, insulin is released to help transport the sugar into cells. The higher the sugar spike, the higher the insulin spike. And it's this insulin spike that should worry us.



That's because too much insulin for too long can have a wide array of harmful effects on our health, such as:

Weight Gain – Insulin is the hormone that tells the cells to store sugar as fat.

Diabetes – Cells become resistant to the effects of insulin, resulting in chronic elevation of blood sugar, and this insulin resistance is the hallmark of type 2 diabetes.

Accelerated Aging Processes – Even if you're not worried about weight gain or diabetes, after-meal glucose and insulin surges can cause lasting damage to tissues and cells, and may even accelerate the aging processes.

Fortunately, researchers recently discovered that two natural compounds can safely minimize the impact of sugar spikes on our health: maqui berry and clove.

Sugar = Glucose

You'll notice that we use the terms sugar and glucose interchangeably throughout, and they are indeed the same thing. The sugar in your blood is known as glucose — not to be confused with sucrose, the sugar in your sugar bowl!



#2

**Slowing Glucose
Absorption with
Maqui Berry**

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Maqui (pronounced mah-kee) berries come from an evergreen shrub typically found in Chile and Argentina. These berries have been getting some attention in recent years as a powerful “superfruit,” and maqui berries and their juices are indeed high in antioxidants.

While maqui berries are particularly known for helping to relieve dry eyes, people also use them for everything from weight loss to fatigue to overall health and wellness. Now scientists have found an important new use for maqui berries: controlling blood glucose and insulin spikes.

Source: WebMD

How Maqui Berries Battle Sugar Spikes

Researchers recently discovered that taking a maqui-berry extract both delayed and lowered the after-meal glucose levels and reduced insulin spikes as well.¹

Here’s how it works: A standardized extract of maqui berries contains compounds known as delphinidins, which stimulate the excretion of glucagon-like peptide-1 (aka GLP-1), a peptide that’s naturally secreted by the body. GLP-1 slows down the speed at which food moves through the stomach.

And that in turn means that the glucose from the meal reaches the absorptive tissue in the small intestine both later and in lower quantities, giving us that lower-and-slower after-meal glucose spike we’re aiming for.^{2,3}

In a promising human trial, subjects taking a standardized maqui-berry extract experienced both a lower after-meal blood glucose level and an impressively lower insulin spike after one hour.⁴

During the study, 10 volunteers were given either 200 mg of standardized maqui-berry extract or a placebo and then ate a small meal designed to produce a significant rise in their after-meal glucose levels.

The results showed that the single dose of maqui-berry extract decreased both after-meal glucose and insulin levels compared with those subjects taking the placebo. In addition, the subjects taking the extract experienced peak glucose concentrations later, which means that the maqui berry was able to safely slow down the rise in after-meal glucose. Again, low and slow — our goal!

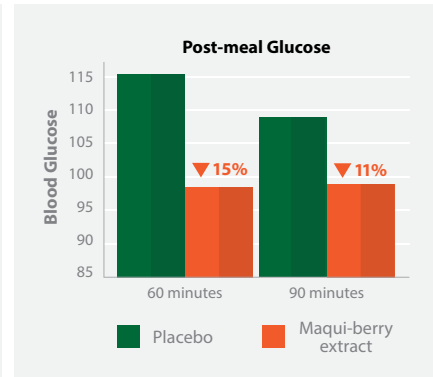
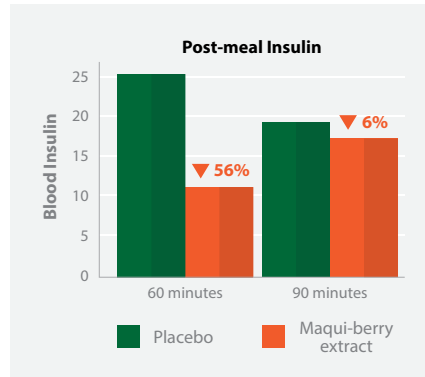
Insulin levels also rose much more slowly for those who took maqui-berry extract — an impressive 56% lower insulin spike than in the placebo group — and the insulin peak occurred later as well.



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These graphs show the percentage decrease in levels of after-meal insulin and glucose by standardized maqui-berry extract treatment (orange) vs. a placebo (green).



Getting the Most Out of Maqui

Eating maqui berries and drinking their juice can be part of a healthy diet, but you'll need to take an extract to get enough of those key compounds called delphinidins. To get the full effect of the maqui berries' power, it's important to take the supplement at the optimal dose: 200 mg once a day of a maqui-berry extract standardized to 25% delphinidins.



#3

**Regulating Sugar
Spikes with Clove
Extract**



The polyphenols (plant-based antioxidants) in cloves regulate glycogen phosphorylase, preventing excess sugar units from being released when you don't need them.

Regulating Sugar Spikes with Clove Extract

Native to Indonesia, cloves are an herb used both in cooking and in natural medicine for a variety of ailments, including upset stomach, diarrhea, gas, nausea, and toothaches. And now researchers have uncovered a vital new role cloves can play: preventing sugar spikes.

Source: WebMD

Clove's Role in Controlling Sugar Spikes

While the maqui berry works on sugar spikes caused by your diet, the clove extract works on them from a different angle — in the liver.

Your liver can actually cause sugar spikes even when you're not eating. Here's how: Sugar is stored in the liver so that it can be released when you're fasting or exercising. Individual sugar molecules are linked together into a final, bigger molecule called glycogen. When the body is low on energy, the enzyme glycogen phosphorylase will break down this glycogen, releasing the stored individual sugar units, which can now be burned for energy.

The polyphenols (plant-based antioxidants) in cloves regulate this enzyme, preventing excess sugar units from being released when you don't need them⁵ — in essence, telling the liver "not so fast" when it comes to breaking down the glycogen.

In a recent human trial, researchers divided subjects into two groups — those with a normal baseline for after-meal glucose levels and those with a high baseline. Subjects in both groups received 250 mg of a water-soluble clove extract every day for 30 days, and their blood was tested several times throughout the month.⁶

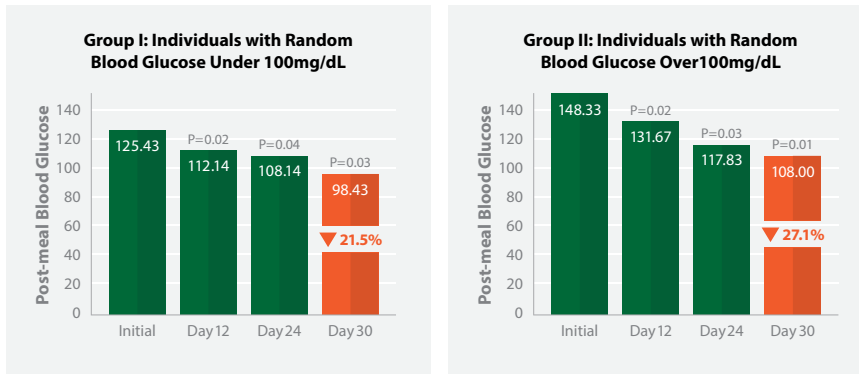
What researchers discovered was that the after-meal glucose levels of both groups fell significantly at day 12 and continued to fall throughout the month — reaching about the same level as before-meal values.⁶

What's more, the after-meal glucose decreases were greater for the subjects with the higher baseline glucose levels — meaning the clove extract has an even more powerful effect on those who are more at-risk!

As shown in these graphs, the daily intake of 250 mg of water-soluble clove extract reduced after-meal glucose levels by 21.5% in Group I (baseline is normal blood sugar) and by 27.1% in Group II (baseline is higher blood sugar).



250mg



Getting Your Daily Dose

So how much clove do you need to take to get the best results? We recommend taking the supplement at the optimal dose — 250 mg once a day of a water-soluble clove extract standardized to 30% polyphenols.

A Powerful Dual-Action Approach

Uncontrolled after-meal sugar and insulin spikes can cause a whole host of problems — from weight gain and diabetes to dementia and heart disease. In addition to diet changes, we can control these dangerous spikes through supplementation with standardized maqui-berry extracts and water-soluble clove extracts, both of which have been shown in human studies to significantly lower blood glucose. Using different — but complementary — mechanisms, these supplements can keep your after-meal glucose and insulin levels out of the danger zone — and help you maintain your metabolic health for years to come!

MAQUI-BERRY EXTRACT



CLOVE EXTRACT



References

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