



# Regulating Blood Sugar

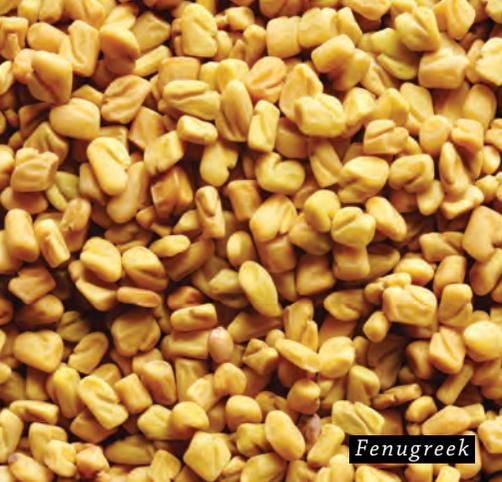
THESE NUTRIENTS AND HERBS HELP KEEP GLUCOSE  
IN THE HEART-HEALTHY RANGE.

**W**hen it comes to diabetes, there's actually some good news. According to the Centers for Disease Control, the number of people newly diagnosed with diabetes decreased by roughly 1.4 million between 2009 and 2014.

The bad news? That still leaves 22 million Americans living with diabetes, a major cause of cardiovascular disease and numerous other difficulties besides. What's more, the CDC count doesn't include many people who have diabetes but don't know it yet.

Type 2 diabetes makes up the vast majority of cases. It often occurs in stages. In *insulin resistance* the body becomes unable to use *insulin*, the hormone that shepherds glucose into cells. That can progress to *prediabetes*, when glucose rises above the fasting level of 100 mg/dL considered to be normal; levels of 126 and above are considered outright diabetes.

Diet and exercise form the first line of defense against diabetes. In addition, the natural remedies on the next page may help (discuss their usage with your practitioner).



Fenugreek



Seaweed



Ginseng

NAME	WHAT IT IS
<b>Chromium</b>	Trace mineral found in small amounts in most foods; good sources include brewer's yeast, broccoli and tomatoes
<b>Cinnamon</b>	<i>Cinnamomum zeylanicum</i> , from the inner bark of a tree native to Sri Lanka and parts of southern India
<b>Coenzyme Q10</b>	A substance found in most of the body's cells; also known as ubiquinol; meat and fish are among the richest sources
<b>Fenugreek</b>	<i>Trigonella foenum-graecum</i> , the leaves and seeds of which have long been used in Indian and Middle Eastern cooking
<b>Garlic</b>	<i>Allium sativum</i> L., used in cultures around the world as a culinary and medicinal herb
<b>Ginseng*</b>	<i>Panax ginseng</i> , long used in Traditional Chinese Medicine as a restorative tonic
<b>Guggul</b>	<i>Commiphora mukul</i> , a small tree native to northern India; guggul is a resin taken from the bark
<b>Inulin</b>	A type of dietary fiber called an <i>oligosaccharide</i> , found in many plants; most supplements use chicory inulin
<b>Lipoic Acid</b>	An antioxidant that occurs in two forms, alpha and racemic lipoic acid; found in yeast, liver and other foods
<b>Rhemannia*</b>	<i>Rhemannia glutinosa</i> , an herb native to China, where it is a staple remedy in TCM
<b>Seaweed Extract*</b>	Extracts taken from two species, <i>Ascophyllum nodosum</i> and <i>Fucus vesiculosus</i>
<b>Vitamin D</b>	A fat-soluble nutrient created in skin that is exposed to sunshine; food sources include fish and egg yolks

\*Generally available only in supplement form in the US.

For more blood sugar regulators, see [energytimes.com](http://energytimes.com).



Cinnamon



Garlic



Rhemannia

## WHAT IT DOES

Needed to create a molecule, LMWCr, that helps insulin drive glucose into the body's cells; low levels have been linked to high blood sugar levels

Contains compounds that increase insulin sensitivity and promote cellular uptake of glucose; inhibits breakdown of starch to sugar in the intestines; has reduced glucose levels in people with diabetes

Crucial for conversion of glucose into energy within the cell and helps fight oxidative stress, both important factors in diabetes; supplementation in diabetics has shown various benefits

Has shown an ability to balance glucose levels; has inhibited progression from prediabetes to diabetes and prevented diabetic nerve damage in studies

Helps lower glucose levels and fights oxidation and inflammation; also supports overall cardiovascular health, a major concern in people with diabetes

An analysis of 16 clinical trials found ginseng to "modestly yet significantly" improve fasting glucose levels; studies have linked the herb's glucose-lowering ability to improved mental functioning

Has shown an ability to help reduce glucose levels; also helps to counteract unhealthy cholesterol conditions, which often occur in people with diabetes

Has helped lower glucose levels in studies; may promote greater appetite regulation and reduce food intake, key factors in weight loss (maintaining a healthy weight helps prevent diabetes)

Not only fights free radicals itself but also helps recharge other antioxidants; has reduce insulin resistance in studies; helps protect nerves against damage caused by high glucose levels

Has reduced glucose levels and inflammation markers in studies; used by traditional healers to treat inflammation of the kidneys, which are often damaged by high blood sugar levels

Helps to block the conversion of starch into sugar within the intestines, blunting post-meal glucose spikes; may promote weight control

Plays a role in promoting healthy insulin production; low vitamin D levels have been linked to both type 1 and type 2 diabetes

**NOTE:** Always consult with your healthcare practitioner for help in designing a supplementation program, especially if you have a pre-existing condition.