Supplements to help manage Blood Sugar Health

Guar Gum

COMMON NAME: Guar Gum
SCIENTIFIC NAME: *Cyamopsis tetragonoloba*

NOT RECOMMENDED - EVIDENCE

LEVELS OF EVIDENCE

1

Recommended:
Several well-designed studies in humans have shown positive benefit. Our team is confident about its therapeutic potential.

2

Recommended with Caution:
Preliminary studies suggest some benefit. Future trials are needed before we can make a stronger recommendation.

3

Not Recommended - Evidence:
Our team does not recommend this product because clinical trials to date suggest little or no benefit.

4

Not Recommended – High Risk:
Our team recommends against using this product because clinical trials to date suggest substantial risk greater than the benefit.

Evaluated Benefits
No evidence of efficacy or not indicated

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Source
Guar gum is an extract of the guar bean (Cyamopsis tetragonoloba). The plant is primarily grown in Pakistan and parts of India. Raw guar gum is a highly viscous, gel-forming fiber, widely used as a food-thickening agent. It is also found in nutritional supplements as a nonviscous, partially hydrolyzed version that lacks the health effects ofh the highly viscous raw guar gum.

Indications/Population
Raw guar gum lowers blood sugar in patients with diabetes and metabolic syndrome. There is no clinical evidence that the partially hydrolyzed version sold in the U.S. has this effect.

Mechanism of Action
Raw guar gum is soluble, viscous/gel forming, and readily fermented. The increased chyme viscosity improves glycemic control by slowing carbohydrate degradation and glucose absorption. There is no reason to believe that the partially hydrolyzed versions sold in the U.S. provide this health effect.

Raw guar gum also reduces the accessibility of a-amylase to its substrates, and decreases pancreatic enzyme activities. These effects can blunt the postprandial increase in glucose and insulin, resulting in HbA1c decrease.

Attenuating the reuptake of bile has been shown to be a viscosity-dependent phenomenon (Wolever, et al., 2010), where low-viscosity fibers have no effect. It is therefore misleading to suggest that partially hydrolyzed guar gum has a benefit when it lacks the mechanism, and clinical evidence, that it has a cholesterol-lowering effect.

Side Effects
Abdominal cramps, abdominal distress, diarrhea, flatulence, and heartburn

Dosing
5–6 grams of raw guar gum 3 times a day

Drug Interactions/Cautions
May interfere with medication absorption.

Notes
The nonviscous form, as is typically marketed in the U.S. today, is partially hydrolyzed guar gum, which has no clinical evidence of a blood sugar effect.

Guar gum has “Generally Recognized as Safe” (GRAS) status in the U.S.

References

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