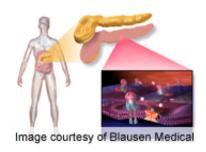


## Bile acid sequestrant reduces glucose concentration in T2DM

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For patients with type 2 diabetes taking metformin monotherapy, the bile acid sequestrant colesevelam reduces fasting and postprandial glucose concentrations without any effects on insulin concentration, secretion, or action, according to research published online Dec. 18 in *Diabetes*.

(HealthDay)—For patients with type 2 diabetes taking metformin monotherapy, the bile acid sequestrant colesevelam reduces fasting and postprandial glucose concentrations without any effects on insulin concentration, secretion, or action, according to research published online Dec. 18 in *Diabetes*.

Galina Smushkin, M.D., of the Mayo Clinic College of Medicine in Rochester, Minn., and colleagues conducted a double-blind, placebo-controlled, parallel-group study of the effect of bile acid sequestration with colesevelam on <u>glucose metabolism</u> in 38 patients with type 2 diabetes who were taking metformin monotherapy. To measure the rate of meal appearance, endogenous glucose production, and glucose



disappearance, participants underwent testing before and after 12 weeks of colesevelam or placebo using a labeled triple-tracer mixed meal.

The researchers found that colesevelam treatment correlated with significantly lower fasting and postprandial <u>glucose concentrations</u>, without any change in insulin concentration, secretion, or action. colesevelam treatment was not associated with changes in postprandial concentrations of glucagon-like peptide-1 (GLP-1). colesevelam was associated with no change in endogenous <u>glucose production</u> and glucose disappearance but was linked to a decrease in the rate of meal appearance.

"In this experiment, we demonstrate an effect of colesevelam on both fasting and postprandial glucose concentrations," the authors write. "Measurement of <u>insulin secretion</u> and action using the oral labeled and unlabeled minimal model failed to show a significant effect on insulin secretion and action. Moreover, there was no evidence that glucose lowering is produced by alterations in GLP-1 concentrations."

Daiichi-Sankyo provided grant support for the study; one author disclosed <u>financial ties</u> to pharmaceutical companies, including Daiichi-Sankyo, which markets colesevelam.

**More information:** Abstract

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