

# Ketone drink could help diabetics by lowering blood sugar

February 14 2018

---

For the first time it has been shown that drinking a ketone supplement can lower blood sugar levels, presenting a potential future method to control spikes in blood sugar experienced by diabetics.

Type 2 diabetes and obesity have reached epidemic proportions in the past few decades. These conditions are associated with high [blood sugar](#), which can damage the vessels that supply [blood](#) to vital organs and can also increase the risk of heart disease and stroke.

Although previous studies have shown that infusing ketones into the bloodstream can reduce [blood sugar levels](#), this study, published in the *Journal of Physiology*, has shown that a ketone ester supplement can also lower blood sugar levels. Researchers at the University of British Columbia and University of Oxford have demonstrated that a single drink of ketone ester enables better control of blood sugar by reducing spikes in sugar levels.

Twenty healthy individuals participated in the study and on two occasions consumed the ketone monoester supplement or a placebo after a 10-hour fast. Thirty minutes later they consumed a drink containing 75 grams of sugar (i.e., a standard oral glucose tolerance test). Blood samples were collected every 15-30 minutes throughout the entire 2.5 hours protocol for analyses of glucose, lipids, and hormones. Compared to the placebo, the blood [sugar](#) spike was reduced on the day that the individuals had consumed the ketone drink.

It should be noted that this study was conducted with healthy young individuals, to reduce the confounding influence of insulin resistance, beta-cell dysfunction, and medications, so more research is required to know whether it will apply to people with prediabetes, type 2 diabetes and obesity. The physiological mechanisms that underpin the improved [blood sugar control](#) also need to be understood.

Professor Jonathan Little, from the University of British Columbia's Okanagan Campus, was part of the research team and said:

"Our study was done in healthy young participants but if the same responses were seen in people with, or at risk for, type 2 diabetes then it is possible that a ketone monoester supplement could be used to lower glucose levels and improve metabolic health. We are working on these studies at the moment.

"The ketone supplements do not taste very good and, in order to blind the participants, we had to make a control drink that also tasted distinctly bad. It made for interesting mornings seeing how the participants would respond to the taste of their drinks!"

**More information:** Prior Ingestion of Exogenous Ketone Monoester Attenuates the Glycemic Response to an Oral Glucose Tolerance Test in Healthy Young Individuals, *Journal of Physiology* (2018). [DOI: 10.1113/JP275709](https://doi.org/10.1113/JP275709)

Provided by The Physiological Society

Citation: Ketone drink could help diabetics by lowering blood sugar (2018, February 14) retrieved 5 February 2024 from <https://medicalxpress.com/news/2018-02-ketone-diabetics-lowering-blood-sugar.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.