

## Fat, carbohydrate quality impact postprandial blood glucose

12 February 2016



after EVOO versus low-fat or butter in the context of HGI meals, with a marked difference seen in the zero- to three-hour glucose incremental area under the curve between EVOO and low-fat or butter (P

"An optimal prandial insulin administration would require considering, in addition to the quantity of carbohydrates, the quality of both carbohydrate and fat," the authors write.

More information: Abstract

Full Text (subscription or payment may be required)

Copyright © 2016 HealthDay. All rights reserved.

(HealthDay)—For patients with type 1 diabetes, fat quality influences postprandial blood glucose (PPG) response in the context of meals with high-glycemic index (HGI), according to a study published online Feb. 9 in *Diabetes Care*.

Lutgarda Bozzetto, M.D., Ph.D., from Federico II University in Naples, Italy, and colleagues conducted a randomized crossover design study involving 13 patients with diabetes on insulin pump. Participants consumed two series of meals with the same carbohydrate quantity (HGI or low glycemic index [LGI]) and different quality fats: low in fat; high in saturated fat (butter); or high in monounsaturated fat (extra-virgin olive oil [EVOO]). Continuous glucose monitoring was performed and six-hour postprandial blood glucose was examined.

The researchers found that PPG differed significantly for HGI and LGI meals, and was significantly higher during the first three hours after the HGI meals, with a tendency toward the opposite pattern later. PPG was significantly lower



APA citation: Fat, carbohydrate quality impact postprandial blood glucose (2016, February 12) retrieved 12 October 2022 from

https://medicalxpress.com/news/2016-02-fat-carbohydrate-quality-impact-postprandial.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.