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Effect of acute stevia consumption on blood glucose response in healthy malay young adults (Article)

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Abstract

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Previously, researchers had initiated investigation to find an alternative drug that can treat diabetes mellitus without dragging patients into more complicated health problems. After many studies, they found a new and high potential plant-based drug named stevia that is able to reduce diabetic patients' blood glucose. This study aimed to determine the effect of stevia on blood glucose of healthy subjects. The study was carried out by comparing the glycemic response between sucrose and stevia (500 and 1000 mg) among 32 subjects aged between 18 and 23 years old. Subjects were required to fast 8 to 10 h prior to each test which was done on different days. Finger prick test were done on 0, 30, 60, 90 and 120 min to construct a blood sugar response curve for 2 h period. There is a significant difference between the glycemic response of sucrose and stevia 500 mg. Sucrose significantly increased the post prandial blood glucose while stevia 500 mg reduced blood glucose after 30 min of consumption. Sucrose also produced higher glycemic response at min-30 when compared with stevia 1000 mg. There is no significant difference between the glycemic response of stevia of different dose, 500 and 1000 mg. No dose-dependent effect was observed in this study. In conclusion, stevia does not raise blood glucose significantly when consumed in short period. Stevia is effective to be used by healthy people to maintain blood glucose even when consumed in short length of time.

Author keywords

Glycemic response [Natural sweetener](#) [Stevia rebaudiana](#)

Indexed keywords

GEOBASE Subject Index:

[blood](#) [consumption behavior](#) [glucose](#) [health impact](#) [health risk](#) [sucrose](#) [sugar](#)

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Bonnema, A.L., Altschwager, D.K., Thomas, W.

(2016) *International Journal of Food Sciences and Nutrition*

Molecular evidence of insulinomimetic property exhibited by steviol and

Chinnamma, M.

(2015) *Phytomedicine*

Effect of the natural sweetener, steviol glycoside, on cardiovascular risk factors: A systematic review and meta-analysis of randomised clinical trials

Onakpoya, I.J., Heneghan, C.J.

(2015) *European Journal of Preventive Cardiology*[View all 3 citing documents](#)

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