



Stevia rebaudiana Bertoni: a natural alternative sweetener and its benefits on glycemic response of type 2 diabetic patients

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Abstract:

Objective: Stevia (*Stevia rebaudiana*) is a natural and healthy alternative sweetener to sugar and artificial sweeteners, which has become important for human diets and food manufactures.

Herbal sweeteners such as stevia (*Stevia rebaudiana*) are known as natural alternatives to artificial sweeteners, especially in management of insulin sensitivity and type 2 diabetes. In this study, the effects of stevia or sucralose as tea sweeteners on glycemic and lipid profile of type 2 diabetic patients were investigated.

Materials and Methods: A double-blind clinical trial was carried out in 34 type 2 diabetic patients. These patients were assigned into two groups of stevia (n=15) (received 1 cup of 2% stevia extract- sweet tea in three meals) and non-stevia (n=19) (received one tablet of sucralose sweetener) daily for eight weeks. Glycemic response and lipid profile of the participants were assessed. Furthermore, height, weight and body mass index (BMI) of the participants were measured as well as their dietary intakes at the baseline and at the end of the study.

Results: Findings showed no significant differences in fasting blood sugar (FBS) levels between the base line and after two hours, in participants. In addition, no significant differences in insulin, glycosylated hemoglobin (HbA1C) and lipid levels were found between the two groups.

Conclusion: Results of the current study showed that the highlighted doses of stevia in sweetened tea could be an



alternative to sucralose in diabetic patients with no effects on blood glucose, HbA1C, insulin and lipid levels.

Biography:

He is a Research Associate Professor. He received his PhD in the field of clinical nutrition from Kings College London in 2005. He was director of National Nutrition and Food Technology Research Institute, dean of Faculty of from 2010- 2015 and head of WHO- Collaborating Centre for Nutrition Training and Research & WHO-EMRO regional advisor (2010-2014), President, Iranian Nutrition Society and A member of National High Council for Health and Nutrition Security (2011-2015).

He has been a member of the National Board of Nutrition and academy of Medical Sciences, serving as a keynote speaker and member of organizing committee of several international congresses on Nutrition and Food Sciences over the world, Chair and Editor-in-chief, Journal of Nutrition and Food Sciences Research. Chair, and an editorial board member and reviewer of many reputed Journals. He has over 65 publications that have been cited over 1012 times.