



Elham Bazshahi

Kurdistan University of Medical Sciences
Iran

Adherence to plant-based diet during pregnancy and risk of gestational diabetes: A prospective birth cohort study

Abstract:

Studies have shown that plant-based foods have a protective effect against gestational diabetes (GDM). We examined the association between plant-based dietary patterns and the risk of GDM in a sample of Iranian adults. We enrolled 635 pregnant women for the present study. Dietary intakes were evaluated by using a 90-item food frequency questionnaire during the first trimester of pregnancy. Three plant-based dietary indices including plant-based (PDI), unhealthy (uPDI) and healthy (hPDI) PDI dietary indexes were calculated. Cox proportional hazard model were fitted to estimate hazard ratio (HR) and 95% confidence interval (CI) of GDM across categories of the plant-based dietary indices, while controlling for age, educational level, physical activity, family income, prepregnancy body mass index, gestational weight gain, and total energy intake. A total of 635 mothers were included, of whom 79 participants were diagnosed with GDM. Those in the third tertile of the PDI (HR: 0.55, 95% CI: 0.30, 0.98) and hPDI (HR: 0.43, 95% CI: 0.24, 0.78) had a lower risk of developing GDM during their current pregnancy as compared to the first tertile. There was no association between uPDI and risk of GDM. We found that higher adherence to a plant-based diet during early pregnancy may be associated with a lower GDM risk among Iranian women. Confirmation of this finding is necessary in larger cohort studies, taking into account other pregnancy outcomes such as birth weight.

Biography

Bazshahi Elham received the B.Sc. in food science and technology, from the Bu-Ali Sina University, Bu Ali College of Food Industry Bahar Branch, Hamedan, Iran (2016) and the M.Sc. degree in nutritional sciences from the Teheran University of Medical Sciences, School of Nutritional Sciences and Dietetics, Tehran, Iran (2020). She is presently the dietitian of department of community nutrition, Kurdistan University of Medical Sciences, Sanandaj, Iran. She is the author or coauthor of more than 15 papers in reputed journals and has been involved in international conferences. She is the reviewer of research articles in international journals.