

Effect of different types of nuts on glycemic control in patients with type 2 diabetes mellitus

Yan Zou, LiLi Wang and Xiao Hua Wang
Soochow University, China

Objective: To explore the effects of different types of nuts on blood glucose, blood lipids, body mass index (BMI) and inflammation in patients with type 2 diabetes mellitus (T2DM).

Methods: This study was a prospective, single blind and randomized controlled trial. Convenient sampling method was adopted. According to the inclusion and exclusion criteria, T2DM patients were recruited from the First Affiliated Hospital of Soochow University and the diabetes clubs in Suzhou from December 2015 to August 2016. Patients were randomly assigned to peanut group (N=15) and almond group (N=17). In peanut group, male and female patients consumed peanut 60g/d and 50g/d, respectively; in almond group, male and female patients consumed almond 55g/d and 45g/d, respectively, for three months. Before the intervention, 1 week was washout period. All patients received scheduled telephone visits (once/week). When patients were recruited, two groups received the education of low carbohydrate diet by one-to-one. Blood glucose, glycosylated hemoglobin (HbA1c), and IL-6 were collected and compared at baseline as well as 3-month.

Results: 1. Effect nuts on fasting plasma glucose (FPG) FPG between first week and third week decreased significantly in almond group and then fluctuated in the level of glucose of third week 2. Effect nuts on postprandial blood glucose During the intervention, the postprandial 2h blood glucose fluctuated in the two groups, and the fluctuation of postprandial 2h blood glucose in peanut group was higher than that of almond group.

Discussion: Two different types of nuts can improve FPG. and consuming almonds can be conducive to stability of long-term blood glucose and improve BMI of T2DM patients. Therefore, it is recommended that obese patients with unstable blood glucose can moderately consume almonds. Peanuts are good for the patients with the poor FPG and high expression of inflammatory factors. These can be used as adjuvant therapy for T2DM patients

Biography

Yan Zou is currently a PhD student in Nursing School of Soochow University, China.

zouyan_01@163.com

Notes: