Relationship between glycemic index and glycemic load and insulin resistance in adult subjects

Mendane Saka and Gökşen Kınay
Başkent University, Turkey

This study was conducted to investigate the relationship between dietary glycemic index and glycemic load and anthropometric measurements of subjects with insulin resistance. The study consisted of 64 subjects who had a new insulin resistance diagnosis and no health problems. The mean age of the subjects was 42.6±13.2 years in the insulin resistance group and 34.1±10.1 years in the control group. A questionnaire form was applied face to face to the subjects in this study, and their demographic characteristics and eating habits were determined. Anthropometric measurements and some biochemical parameters of subjects were determined. All subjects were asked to fill in the 7-days food consumption record glycemic index, glycemic load, daily energy consumption, macro and micro nutrients and diet consumed daily by subjects were determined by food consumption record. In results of the study, it was seen that subjects in the control group had more snack meals than subjects with insulin resistance (p<0.05). Weight, BMI, waist circumference, waist/hip and waist/height ratio in women with insulin resistance more higher those in the control group(p<0.05). The mean BMI of all subjects is higher in subjects with insulin resistance(p<0.05). The glycemic index and glycemic load of the diets of subjects with insulin resistance is greater than the control group, but this difference is not statistically significant(p>0.05). In conclusion, high glycemic index and glycemic load diet may be risk factors for insulin resistance through anthropometric properties. Low glycemic index and glycemic load diets may be affective in the prevention and treatment of insulin resistance.

Biography
Mendane Saka has completed PhD in 2001 from Hacettepe University, Institute of Health Science, Nutrition and Dietetics Program. She has been working at Başkent University since 2008. She has worked as a dietitian at Gülhane Medical Hospital in department of gastroenterology for 21 years. Now, she is working as a lecturer at Başkent University Health Science Faculty, Department of Nutrition and Dietetics. She has published more than 89 papers and presented more than 48 researches in national and international Scientific platforms.

saka@baskent.edu.tr