

Risk factors associated with metabolic syndrome in Iranian middle aged women.

ABSTRACT

Background: Metabolic syndrome, which is linked to increased risk of diabetes and cardiovascular disease, is increasing in Iran due to rapid nutrition transition and the nature of obesity epidemic. **Objective:** The aimed of the study was to examine risk factors contributing to the development of the metabolic syndrome in urban middle-aged women, living in Babol, Mazandaran, Iran. **Methods:** The research design of the present study was a population-based cross-sectional study, and the criteria by the NCEP ATP III were used to classify subjects with the metabolic syndrome. Meanwhile, their physical activities were measured using the original International Physical Activity Questionnaires Long form. Food frequency questionnaire (FFQ) was also used in assessing individual's habitual intake. A total of 809 individuals, aged 30-50 year old from fourteen active urban Primary Healthcare Centers in Babol (Iran), were selected using a systematic random sampling method and probability sampling proportionate to size. **Results:** The odds ratios across tertiles of food group intakes showed that the highest tertile of vegetables and fruits consumption were associated both with a reduced risk of the metabolic syndrome after adjustment for age, physical activity, education level, total energy intake and total fat. The highest tertile of bread and grain especially white rice consumption was with an increased risk of the metabolic syndrome after adjustment for confounders. No significant associations were found between the metabolic syndrome and level of physical activity. **Conclusions:** It is necessary to emphasize the benefits of consumption of more vegetables and fruit in reducing the risk of the metabolic syndrome.

Keyword: Metabolic syndrome; Obesity; Diet; Physical activity.