Original Article

Pre-pregnancy Weight Status and its Relationship with Dairy Intake in Pregnant Women under the Care of Health Centers in Tehran in 2015

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Abstract:
Background: Due to importance of maternal weight during pregnancy and the possible role of dairy on weight modification, the aim of this study is determining the pre-pregnancy weight status and its relation with dairy intake in Tehran pregnant women.

Materials and methods: In this cross-sectional study 185 women of childbearing age were selected using systematic sampling in Tehran. High-fat and low-fat dairy consumption was determined with a 168 item validated semi-quantitative food frequency questionnaire. Weight and height were measured using standard methods. The relation between qualitative variables was calculated by Chi Square test, and ANOVA for qualitative-quantitative variables and multi variable regression was used for estimating odds ratio and confidence interval of 95%. Women In the second quarter of total energy intake from dairy products had significantly higher weight gain during pregnancy (P<0.05).

Results: The mean (SD) of age and difference between pre-pregnancy weight and current weight were respectively 27.7 (0.4) years and 1.4 (0.3) kg. The odds ratio for overweight and obesity as been came based on quartiles of total dairy intake, high fat and low-fat. After adjusting all confounders toward first quartile (reference), mothers in the third quartile of total dairy OR = (2.907, 95% CI: 0.175 - 48.270) and those in the last quartile of full fat dairy OR = (3.376 95% CI:0.356-31.944) had more chance to be over-weight or obese. While people who were in the highest quartile of low-fat dairy intake (quartile 3 and 4) had lower odds of developing overweight and obesity compared to the first quartile.

Conclusion: The study showed low-fat dairy products are associated with weight and obesity reduction and full fat with increasing the possibility of it. Although because of the small sample population the results were not significant. Implementing studies with greater statistical populations are recommended.

Key words: Dairy, weight, pregnant mothers, Tehran