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### Dietary nutrition status among Japanese women with gestational diabetes mellitus at the time of diagnosis

**Introduction & Aim:** The diagnosis rate of gestational diabetes mellitus (GDM) is estimated to increase four-fold in Japan according to revised criteria put out in 2010. Women with a high pre-pregnancy body mass index (BMI) and inadequate nutritional status are more likely to be at a greater risk for the development of GDM. The purpose of the study was to evaluate the nutritional status of GDM women at the time of diagnosis.

**Methodology:** A cross-sectional study was conducted in 2012 in Japan of 44 GDM women and 169 non-GDM women in the second trimester. Dietary habits during the last month of gestation were assessed with a self-administered dietary history questionnaire. GDM was diagnosed by a 75-g oral glucose tolerance test, which was performed around gestational week 24. The diagnostic criteria of the GDM test followed the guidelines set forth by the International Association of Diabetes and Pregnancy Study Groups.

**Findings:** The prevalence of pre-pregnancy BMI was significantly higher in the GDM women than in the non-GDM women ( $p < 0.001$ ). The median total energy intake was significantly lower in the GDM women compared to that of the non-GDM women ( $p < 0.001$ ). However, the percentage of energy from total fat was significantly higher ( $p < 0.01$ ) and the percentage of energy from total carbohydrates was significantly lower ( $p < 0.05$ ) in the GDM women than in the non-GDM women. The amounts of fiber were significantly lower ( $p < 0.05$ ) in the GDM women than in the non-GDM women.

**Conclusion:** Dietary fat intake may be causally related to the incidence of GDM in reproductive-age women. They should be encouraged to eat a well-balanced diet both before and during pregnancy.

### Biography

Hiroko Watanabe has her expertise in evaluation and passion in improving the women's health and wellbeing. She has experience of working as a Midwife for 8 years at University Hospital in Tokyo, Japan. Her areas of research interest are nutritional education among reproductive-age women and weight and nutritional management during pregnancy.

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