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Maternal iodine intake and adherence to iodine supplement recommendations in a group of Chinese women: the results from the WIN cohort study

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Iodine deficiency disorder is one of the major public health problems worldwide. Adequate iodine intake is needed to prevent iodine deficiency in pregnant and lactating women who are vulnerable to iodine deficiency [(1)]. Therefore, the aim of the study was to determine dietary iodine intake and maternal adherence to recommendations for iodine supplements in Chinese women during pregnancy and lactation.

In this Women and Infant Nutrition cohort study (WIN), pregnant women from the western part of China were recruited and followed up from their 3rd trimester until 1st week of lactation. Iodine intake was assessed using a 33-item validated iodine-specific Chinese food frequency questionnaire (FFQ). Participants were asked to complete the same FFQ twice, during their 3rd trimester of pregnancy and 1st week of lactation.

A total of 200 participants (mean age of 29. 0 ± 4.2 years) completed the study. The mean iodine intake plus iodised salt in pregnant and lactating women was 232 μg/d and 237 μg/d, indicating iodine deficiency (< 250 μg/d). Only 3.5% (n = 7) of participants took supplements containing iodine, and all of them took them every day. There was no significant difference in dietary iodine intake (p = 0.762) between pregnant and lactating women.

In conclusion, iodine intake estimated from FFQ describes an iodine-deficient status for both pregnant and lactating women. Future public health strategies are required to improve the iodine status of pregnant and lactating women, particularly in developing countries.

Reference

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