



## Letter to the Editor

# Relationship of household cooking salt and eating out on iodine status of Chinese pregnant women in environmental iodine-deficient coastal areas

This letter is regarding the recent publication of 'Relationship of household cooking salt and eating out on iodine status of pregnant women in environmental iodine-deficient coastal areas of China' by Wang *et al.* (2020)<sup>(1)</sup>. The findings by the authors have provided an important research contribution to the body of observational evidence related to the relationship between the use of iodised salt at home and eating out on iodine status of pregnant women. In addition, the findings by the authors have highlighted the importance of using iodine supplements by pregnant women in order to ensure adequate maternal iodine status. Future studies should consider assessing other biomarkers of iodine status, including thyroid-stimulating hormone, free triiodothyronine (FT3), free thyroxine (FT4) and thyroglobulin (Tg) of pregnant women in their study. This would be valuable information regarding thyroid status of pregnant women and allow for a more comprehensive assessment of iodine status in pregnant women.

In China, the eating behaviours and dietary patterns have changed significantly due to the rapid economic development, especially in Shanghai. Although eating out has been associated with higher total energy and macronutrient intakes including fat, it is unclear if it may increase the consumption of iodine intake. This is because it depends on several factors including the frequency of eating out, the amount of iodised salt added during cooking and at the table.

In Shanghai, the usage rates of iodised salt and qualified-iodised salt reported by the authors indicated a low coverage of iodised salt (< 90%)<sup>(1-3)</sup>. In addition, only a small percentage of pregnant women (11.3%) reported the use of iodine supplements<sup>(1)</sup>. Therefore, these results had provided evidence to support the emergence of mild-to-moderate iodine deficiency in Chinese pregnant women<sup>(4,5)</sup>. Future studies should investigate the possible barriers regarding the use of iodised salt and/or supplements among pregnant women which were not discussed by the authors<sup>(1)</sup>. These possible barriers could be due to a mixture of several factors including low iodine knowledge, and the perception of using iodised salt and/or supplements might put them feeling that they are at risk of getting excess iodine<sup>(3)</sup>. In addition,

pregnant women living near to coastal areas might think that they have consumed sufficient iodine from seafood and fish products<sup>(3)</sup>. Therefore, if not corrected, this will put pregnant women and their infants at risk of the consequences of iodine deficiency including increased risk of pregnancy loss and infant mental retardation<sup>(2)</sup>.

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