



Letter to the Editor

Letter to the Editor in response to: Intra-individual and inter-individual variations in iodine intake and excretion in adult women: implications for sampling

We appreciate the opportunity to respond to the letter recently published by Ma⁽¹⁾ regarding our paper in the *British Journal of Nutrition*⁽²⁾. We believe that Ma⁽¹⁾ makes some points that deserve a clarifying response. First, concern was expressed that we did not discuss the 24-h urinary iodine concentration (UIC) variation for iodine-deficient and iodine-sufficient individuals. In this study, the study objects are college students, according to the WHO to determine the iodine nutritional status of the range of urinary iodine⁽³⁾, the population is generally at the appropriate level of iodine. In the future, our work will also explore the variation of 24-h UIC in people with iodine deficiency and iodine excess. At the same time, we think that the scope of application is wider than the determination results of iodine-adequate people.

Ma⁽¹⁾ also expressed to consider if the adjustment of UIC by creatinine excretion (iodine:creatinine ratio) could be used to decrease or increase intra- and inter-individual variation of urinary iodine and how this could further influence UIC distribution spread. We think this is a good suggestion, and we have tried to use urinary creatinine as a separate indicator to evaluate children's iodine nutrition^(4,5), but it is not involved in this survey. Our next work will try to use more evaluation indicators to evaluate the iodine nutrition status of different populations.

We appreciate Ma's interest in our work and the opportunity to conduct alternative analyses to address the stated concerns.

Wen Chen¹, Shu Gao¹, Wenxing Guo¹, Long Tan¹, Ziyun Pan¹, Shuyao Dong¹, Ya Jin¹, Ying Zhang¹, Wanqi Zhang¹ and Jun Shen²

¹Department of Nutrition and Food Hygiene, School of Public Health, Tianjin Medical University, Tianjin 300070, People's Republic of China

²Department of Sanitary Chemistry, School of Public Health, Tianjin Medical University, Tianjin 300070, People's Republic of China

email shenjun12250@163.com

doi:[10.1017/S0007114520000872](https://doi.org/10.1017/S0007114520000872)

References

1. Ma ZF (2020) Letter to the Editor: Intra-individual and inter-individual variations in iodine intake and excretion in adult women: implications for sampling. *Br J Nutr* **123**, 1078.
2. Chen W, Gao S, Guo W, et al. (2020) Intra-individual and inter-individual variations in iodine intake and excretion in adult women: implications for sampling. *Br J Nutr* **123**, 987–993.
3. World Health Organization/International Council for Control of Iodine Deficiency Disorders/United Nations International Children's Emergency Fund (2007) *Assessment of Iodine Deficiency Disorders and Monitoring their Elimination: A Guide for Programme Managers*, 3rd ed. Geneva: WHO.
4. Chen W, Li X, Guo X, et al. (2017) Urinary iodine excretion (UIE) estimated by iodine/creatinine ratio from spot urine in Chinese school-age children. *Clin Endocrinol (Oxf)* **86**, 628–633.
5. Wang W, Du C, Lin L, et al. (2018) Anthropometry-based 24-h urinary creatinine excretion reference for Chinese children. *PLOS ONE* **13**, e0197672.