



# Health risks associated with dietary cadmium exposure

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**Keyword** Cadmium · Dietary body burden · Health risk · Kidney

Dear Editor,

Satarug et al. (2023) described the upper limit of tolerable cadmium (Cd) intake from dietary materials, which is about 58.1 µg/day for subjects with 70 kg body weight. Kidney is a critical organ of Cd body burden, and the limitation was set by β<sub>2</sub>-microglobulin (β<sub>2</sub>MG) excretion in urine under 300 µg/g creatinine. If the period of survival is set as 80 years, a total amount of Cd intake from dietary materials is about 1.7 g in this subjects. The same author summarized dietary Cd intake with special reference to kidney damage (Satarug 2018), which was based on FAO/WHO safe intake guideline (1993).

There had been a report that the total Cd intake resulting in both metallothioneinuria and beta 2-microglobulinuria was calculated to be approximately 2 g for both sexes (Nogawa et al. 1992), which was also accepted in the criteria of FAO/WHO safe intake guideline (1993). I also discussed minimum health risk by Cd body burden (Kawada 2022), and there is an ethnic difference in Cd intake and smoking should also be considered for Cd body burden. Anyway, protection or keeping function from chronic kidney disease may also be important in aging population.

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**Data availability** There are no data available in this study.

## Declarations

**Conflict of interest** No.

## References

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