

Notes for submission: 'Comments on the World Health Organization Draft Guideline on Reduced Sodium Salt Substitutes'

Umami Information Center

<https://www.umamiinfo.com/>

Vice Managing Director

Professor

Toshihide Nisimura, Ph.D.

COMMENTARY

Commentary on the appropriateness of the methods for the development of the World Health Organization Draft Guideline on Reduced Sodium Salt Substitutes

We appreciate that the WHO has conducted a scoping review to summarize the available studies assessing the association between low-sodium salt substitutes (LSSS) intake and health outcomes through the review and evaluation of recent systematic reviews. However, we are concerned that the scoping review covers literature up to September 2021, which may exclude valuable scientific papers published afterwards. Notable papers published after 2021 include:

Papers on health outcomes of LSSS:

- Yin X et al. Effects of salt substitutes on clinical outcomes: a systematic review and meta-analysis. *Heart*. 2022 Sep 26;108(20):1608-1615.
- Yuan Y, et al. Salt substitution and salt-supply restriction for lowering blood pressure in elderly care facilities: a cluster randomised trial. *Nature Medicine*. 2023 April 14; NCT03290716.

Papers on new perspectives of LSSS:

- Umami: An Alternative Japanese Approach to Reducing Sodium While Enhancing Taste Desirability
Shuhei Nomura, Aya Ishizuka, Shiori Tanaka, Daisuke Yoneoka, Hisayuki Uneyama,

Kenji Shibuya. *Health* 2021; 13: 629-636 DOI: 10.4236/health.2021.136047

- Reducing salt intake with umami: A secondary analysis of data in the UK National Diet and Nutrition Survey. Haruyo Nakamura, Takayuki Kawashima, Lisa Yamasaki, Kaung Suu Lwin, Akifumi Eguchi, Hitomi Hayabuchi, Yuta Tanoë, Shiori Tanaka, Daisuke Yoneoka, Cyrus Ghaznavi, Hisayuki Uneyama, Kenji Shibuya, Shuhei Nomura *Food Scie Nutri.*, 2022 12(2):872-882. doi: 10.1002/fsn3.3121.

- Salt intake reduction using umami substance-incorporated food: a secondary analysis of NHANES 2017-2018 data.

Nomura S, Tanaka S, Eguchi A, Kawashima T, Nakamura H, Lwin KS, Yamasaki L, Yoneoka D, Tanoë Y, Adachi M, Hayabuchi H, Koganemaru S, Nishimura T, Sigel B, Uneyama H, Shibuya K.

Public Health Nutr. 2022; 1:1-8. doi: 10.1017/S136898002200249X. Online ahead of print.

PMID: 36453137

- Modelling of salt intake reduction by incorporation of umami substances into Japanese foods: a cross-sectional study

Shiori Tanaka, Daisuke Yoneoka, Aya Ishizuka, Megumi Adachi, Hitomi Hayabuchi, Toshihide Nishimura, Yukari Takemi, Hisayuki Uneyama, Haruyo Nakamura, Kaung Suu Lwin, Kenji Shibuya, Shuhei Nomura. *BMC Public Health* 23(1):516. doi: 10.1186/s12889-023-15322-6.

Considering these post-2021 scientific papers, we hope that the WHO will review and consider these analysis results in addition to the commissioned Cochrane review. In particular, the development of reduced-sodium products without sacrificing taste is currently being pursued worldwide, with the core technologies being the validity of using KCl as an LSSS and taste compensation techniques when using KCl for salt reduction. It is necessary for general consumers to properly understand that there is no impact on cardiovascular toxicity of KCl at regular intake levels. Without this correct understanding, the global salt reduction efforts, which have not progressed for more than 30 years, may continue to stagnate. We sincerely hope for appropriate judgment and information provision in this LSSS guideline.