

## Strengthening national salt reduction strategies using mixed methods process evaluations – case studies from Malaysia and Mongolia

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Almost half of countries globally are implementing national strategies to lower population salt intake towards the World Health Organization's target of a 30% reduction by 2025<sup>(1)</sup>. However, most are yet to lower population salt intake<sup>(1)</sup>. We conducted process evaluations of national salt reduction strategies in Malaysia and Mongolia to understand the extent to which they were implemented and achieving their intended outcomes, using the findings to generate insights on how to strengthen strategies and accelerate population salt reduction. Mixed methods process evaluations were conducted at the mid-point of implementation of the strategies in Malaysia (2018-19) and Mongolia (2020-21)<sup>(2)</sup>. Guided by theoretical frameworks, information on the implementation, mechanism and contextual barriers and enablers of the strategies were collected through desk-based reviews of documents related to salt reduction, interviews with key stakeholders (n = 12 Malaysia, n = 10 Mongolia), and focus group discussions with health professionals in Malaysia (n = 43) and health provider surveys in Mongolia (n = 12). Both countries generated high-quality evidence about salt intake and salt levels in foods, and culturally-specific education resources in 3 and 5 years respectively. However, in Malaysia there was moderate dose delivered and low reach in terms of education and reformulation activities. Within 5 years, Mongolia implemented education among schools, health professionals and food producers on salt reduction with high reach but with moderate dose and reach among the general population. There were challenges in both countries with respect to implementing legislative interventions and both could improve the scaling up of their reformulation and education activities to have population-wide reach and impact. In the first half of Malaysia's and Mongolia's strategies, both countries generated necessary evidence and education materials, mobilised health professionals to deliver salt reduction education and achieved small-scale salt reformulation in foods. However, both faced challenges in implementing regulatory policies and the scaling up of their reformulation and education activities to have population-wide reach and impact could be strengthened. Similar process evaluations of existing salt reduction strategies are needed to strengthen intervention delivery and inform areas for adaptation, to aid achievement of the WHO's global target of a 30% reduction in population salt intake by 2025.

**Keywords:** salt reduction; process evaluation; Mongolia; Malaysia

### Ethics Declaration

Yes

### Financial Support

The individual case studies are based on work commissioned by the World Health Organization. Author funding declarations: KT was supported by an Early Career Fellowship (APP1161597) from the National Health and Medical Research Council of Australia (NHMRC) and a Postdoctoral Fellowship (Award ID 102140) from the National Heart Foundation of Australia. JW is supported in her research by a National Heart Foundation Future Leaders Fellowship Level II (#102039).

### References

1. Santos JA *et al.* (2021) *Advances in Nutrition* 12(5):1768–80.
2. Moore GF *et al.* (2015) *BMJ* 350, h1258.