

## Key challenges in reducing salt intake: An international study

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Researchers from Europe and Asia have joined forces to undertake an international project regarding salt reduction among the general population. By means of a cross-sectional study, perceptions, attitudes and behaviours related to salt intake were investigated in eight developed and developing countries around the world. The study revealed that participants largely underestimated their individual salt intake and they also showed difficulties in identifying the main dietary sources of salt. Respondents further contradicted themselves as they showed low interest in salt reduction while, at the same time, such behaviour (i.e. salt reduction) was perceived as healthy and important. Based on these findings, the group of researchers offers advice in developing global intervention programmes for salt reduction, including nationally tailored strategies to engage and interest consumers.

Salt intake is an established risk factor for hypertension and related cardiovascular diseases. However, research so far has shown that people fail to meet the official recommendations for salt intake. As such, the present study has analysed people's perceptions, knowledge, attitudes and (self-reported) behaviour in order to develop a research-based policy for worldwide application.

Eight different country cohorts took part in this study (Germany, Austria, USA, Hungary, India, China, Brazil, and South Africa) with an overall sample of 6,987 respondents, aged 18-65 years. People were recruited from an international panel and were asked to fill in an online questionnaire. Only respondents without major health problems were included in order to avoid distortion of results due to special dietary behaviour. The questionnaire assessed perceived and estimated salt intake, main sources of salt in one's diet, knowledge, beliefs and attitudes about salt recommendations and 'who' respondents thought was responsible for reducing salt intake. Additionally, preferred methods of communication were explored. A standard questionnaire was developed and then adapted to local needs and culture.

Across all countries, average salt intake was shown to exceed national recommendations. Using a food-frequency questionnaire specifically developed for this study, the authors could show that, on average, and for the majority of the countries, the biggest proportion of salt intake comes from 'home foods' (i.e., salt containing food groups, salt added during food preparation, and salt added at the table), rather than 'out-of-home foods' (i.e. restaurant food, take away, and street food). Almost half of all participants expressed the belief that the main source of salt is the one added during cooking. Calculating dietary sources of salt based on their food-frequency questionnaire, however, the researchers could show that this was incorrect as the salt containing foods were the major contributors to respondents' salt intake (51%). With regards to people's motivation to reduce salt intake, large country differences were observed in the study. Respondents from China and Brazil showed the highest interest in salt reduction (83% and 81% respectively), while the German and Austrian sample reported the lowest intention in making any changes over the next 6 months: over half of respondents were not planning on reducing their salt intake.

Generally, the majority of participants were not aware of national recommendations for salt intake, despite the fact that salt reduction was recognised as a healthy and important behaviour. However, those

respondents who knew about the effects of salt consumption on health displayed a more positive attitude towards salt reduction. When asked whose responsibility it is to reduce salt intake, across all countries participants rated themselves as being mainly responsible, followed by food manufacturers, restaurants and supermarkets. With regards to information search behaviour, medical staff (e.g. doctors or dietitians) but also labels on food packages were reported as the preferred sources of information on salt reduction, while TV, social websites and newspapers were rated the preferred media channels.

The researchers conclude that future interventions should focus on educating people about the main sources of salt in one's diet and how to better estimate their own salt intake. Raising awareness of and interest in this topic is seen as crucial, given the general lack of motivation of participants to change their dietary behaviour (i.e. reducing salt intake). According to the authors, future policies not only need to take into account the role of the individual in changing one's behaviour but also the importance of external influences which can either encourage or inhibit people to adopt salt reduction practices. With regards to the best communication methods, the most accessible channels (TV and internet) should be used in reaching the population, taking into account local specificities and characteristics of the consumer.

For further information, please see:

[Newson R.S, Elmadfa I, Biro Gy, et al. \(2013\). Barriers for progress in salt reduction in the general population. An international study. \*Appetite\* 23:71C:22-31. DOI: 10.1016/j.appet.2013.07.003.](#)