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Consider a finer grain approach to lower salt intake

Research institutes, industry and individual all have a part to play

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It was announced recently that the Health Promotion Board (HPB) will embark on a series of strategies to reduce Singaporeans' salt intake and promote healthy living.

This is a welcome move, as our salt consumption has been increasing over the years. Based on the National Nutrition Survey 2010, our daily salt intake was 8.3g per day. That rose to 9g per day in 2018, the latest year for which figures were available. Salt comprises one part sodium and one part chloride. So 9g of salt, for example, equals around 3.6g of sodium.

While the increase in intake may seem small, it is cause for concern and the groundwork is being laid to prepare for the phase of tackling high sodium intake. Healthier Choice Symbols have been created for Lower In Sodium and No Added Sodium categories, with more than 200 products falling into this category. Local companies have also developed products with lower sodium content, paving the way for future research and development in this area.

HPB's initiatives cover three main areas: Working with salt suppliers and the food service sector to encourage the substitution of regular salt with lower-sodium alternatives; intensifying existing efforts to spur industry reformulation of lower-sodium salt, sauces and seasonings; and starting a nationwide campaign to encourage Singaporeans to consume less salt.

While these initiatives are useful, other key areas should also be considered as part of a holistic approach to reduce salt intake.

TARGETS TO CUT SALT INTAKE

The World Health Organisation (WHO) recommends that adults reduce their salt intake to less than 5g – just under one teaspoon – per day, with the principal benefit being lowering high blood pressure and risk of cardiovascular disease, stroke and coronary heart attack. As it is difficult to cut salt intake by such a significant amount within a short period, it is important to establish clear, progressive and achievable targets, especially in terms of daily salt intake.

In addition, it would be useful to estimate how much impact the new initiatives will have on the overall reduction in salt intake. For example, salt substitutes may contain 30 per cent less sodium, but this does not necessarily translate to an overall 30 per cent less sodium intake.

By clearly expressing the expected impact from each initiative, it would be easier for various stakeholders to link their efforts to the common benefits. The numbers may also reveal if there are any other areas that need to be focused on to complement existing efforts.

VOLUNTARY V COMMITTED SALT REDUCTION

Some countries have established voluntary salt targets in the reformulation of products by food producers. While this is often a good first step to encourage participation from key stakeholders, it may not always make a significant impact. Food producers are often reluctant to reduce the salt content of their products for fear of losing consumers to competitors who have not done so. Recognisable commitment documents from food producers could be required.

A further step would be to set mandatory limits of sodium content for a few key products. For example, Argentina initiated voluntary agreements with food companies, bakeries and restaurants in 2011, and thereafter established a sodium reduction law in 2013. Between 2011 and 2015, average daily salt intake reportedly fell by 2g per day.

DEVELOPMENT OF TECHNOLOGICAL SOLUTIONS

Reducing salt is technologically difficult. In terms of flavour, salt plays a major and relatively inexpensive role in adding taste and flavour to food. Salt also contributes to food structuring and preservation.

A low hanging fruit is to either reduce salt by a small amount or to reformulate using salt substitutes. In fact, studies often show that salt can be reduced by about 10 per cent at a time without any significant effect on food acceptability.

There is a limit, however, to the extent to which salt substitutes can be used. Salt substitutes tend to have off-tastes such as bitterness, sourness, and a "metallic" flavour. Potassium chloride, for instance, can taste like "salty paracetamol".

To proceed beyond a simple reduction or limited substitute of salts, other technological solutions need to be developed. Thematic research and development programmes – similar to those on alternative proteins or food security – should be established.

Particular emphasis should be placed on forming consortia between institutes of higher learning, research institutes and industries to develop technologies and solutions that can be applied to categories of food.

Examples of technological research and development results include processing methods that can retain flavours of foods or maintain microbial safety, thereby reducing the need for additional salt content.

Some examples of product R&D results are optimising the size and shape of salt particles so that they dissolve faster in the mouth, and there is more sodium to trigger the taste buds; and partitioning salt to trigger a saltier taste.

Partitioning means putting salt in different parts of the food. For example, in soups with chicken pieces, a higher overall salty taste is obtained if the salt is concentrated in the pieces rather than in the liquid.

INDIVIDUAL ACTION

It is important that we have greater awareness of the sodium content in our food. Regularly eating food with high salt content is likely to condition our taste preferences to a higher salt level. In contrast, if our taste buds are used to lower salt levels, we would find food with low salt content more acceptable.

A first step to take is consciously choosing food with lower salt content, and requesting no or less salt when given an option.

When cooking, we can partition salt content between different components of the food – so if we know that some components of the food, such as sauce, already contain salt, we can avoid adding salt to other components – while enhancing the flavour of those that are less salty with herbs or spices, or by including more flavourful ingredients.

Some cooking methods, such as using less water, can also accentuate the natural flavours of the food and reduce the need to use salt. Perhaps the sugar options of "kosong" (zero) and "siu dai" (less sweet) will eventually be adopted for salt, too.

By reducing our salt consumption bit by bit, we will eventually be able to attain significant reductions in our salt consumption and better manage our risks of developing cardiovascular diseases.

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