

Editorial

# Reducing population salt intake in the Eastern Mediterranean Region – time for urgent action

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Dietary salt raises blood pressure, and raised blood pressure is the single biggest cause of cardiovascular death and disability, accounting for 9.4 million deaths per year worldwide (1). The evidence for the health benefits of population-wide reduction in salt intake is strong. Indeed, salt reduction is one of the most cost-effective measures to prevent cardiovascular disease (CVD) in both developed and developing countries (2).

Noncommunicable diseases (NCDs), such as heart attacks and strokes, cancers, diabetes and chronic respiratory disease, account for over 63% of deaths in the world today. Every year, NCDs kill 9 million people under 60 years. The socioeconomic impact is staggering. Such is the problem that in 2011, the United Nations and the World Health Organization (WHO) jointly convened a high level meeting to tackle the growing burden of these “lifestyles diseases”. Salt reduction was recommended as one of the top three priority actions to reduce premature mortality from NCDs by 25% by 2025 (3,4). WHO now recommends a 30% reduction in salt intake by 2025 with an eventual target of 5 g per day for all adults worldwide and lower levels for children based on calorie intake (5). This target was formally adopted by Member States at the 66th World Health Assembly as part of an omnibus resolution to tackle NCDs (6).

So, the question is how to reduce salt intake in the population to meet

the target? World Action on Salt and Health (WASH), a non-profit charitable organization with a mission to reduce salt intake globally, has been working with many countries around the world to help establish effective salt reduction programmes to suit the needs of that particular country to reduce salt intakes<sup>1</sup> (7). For example, it is well established that in developed countries, most of the salt that we eat comes from the food that we buy (75–80%). Therefore the most effective means to reduce salt consumption in these countries is to reduce the salt content of manufactured and catered foods, supplied by the food industry. In developing countries, where most of the salt is added by consumers, a public health campaign plays a major role (8).

Further to this, as diets are becoming more westernized, processed foods are becoming more popular in developing countries, and the food industry is continuing to develop its market in these areas. Therefore, these countries need a combined policy of getting the public to use less salt at home and getting the food industry to reduce the amount of salt added to foods and to adopt a clear labelling system such as the signpost labelling system (9).

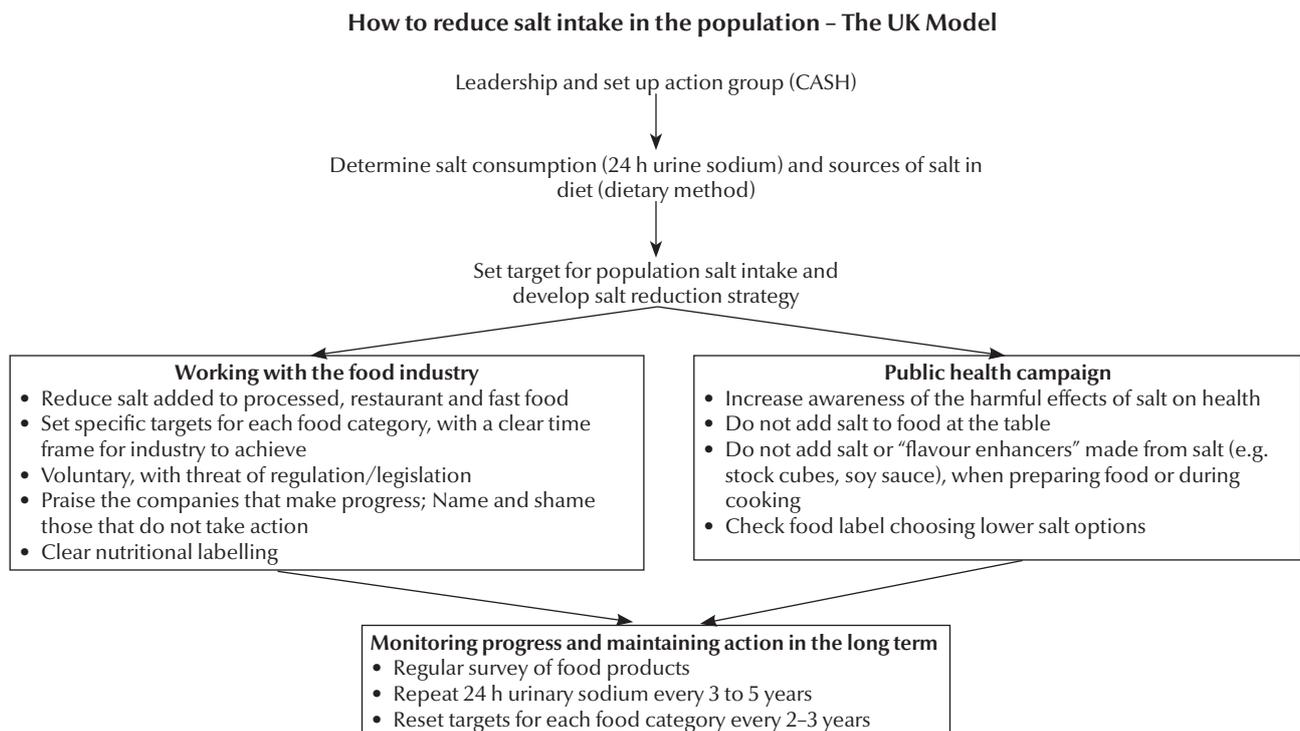
<sup>1</sup> WASH is encouraging action groups to be formed in each country. To join, please email WASH ([wash@qmul.ac.uk](mailto:wash@qmul.ac.uk)) or visit the WASH website for more information – [www.worldactiononsalt.com](http://www.worldactiononsalt.com).

In the Eastern Mediterranean Region (EMR) current salt intakes are very high, with an average intake of > 12 g per person per day in most countries; more than double the amount recommended by WHO.

The disease burden resulting from salt and high blood pressure is very high in the EMR (10). Indeed, it has been identified as a hotspot for cardiovascular and coronary heart diseases. It is estimated that, overall, 47% of the Region’s burden of disease is due to NCDs, and by 2020 it is expected to rise to 60% unless efficient health and nutrition measures are implemented (11).

Currently there are no comprehensive policies to reduce population salt intake in the Eastern Mediterranean countries; however many countries are now starting to take action to formulate salt reduction action plans. Sources of salt in the diet come from both processed foods and salt added during the preparation of food at home. A two-pronged approach, of reformulation and a public awareness campaign would be required to reduce salt intakes.

The United Kingdom (UK) has successfully implemented a salt reduction programme (Figure 1). As a result, salt intake has fallen by over 15% over the past 7–8 years, accompanied by a significant fall in population blood pressure and cardiovascular diseases (Figure 2). The UK’s salt reduction model could be adapted by the EMR with appropriate local modifications. A



**Figure 1** An action framework for reducing salt intake in the population – The United Kingdom Model. CASH (Consensus Action on Salt and Health) is a non-profit charitable organization focused on salt reduction in the United Kingdom. [He F], Brinsden HC, MacGregor GA. Salt reduction in the United Kingdom: a successful experiment in public health. *J Hum Hypertens*. 2014 Jun;28(6):345-52. doi: 10.1038/jhh.2013.105. Epub 2013 Oct 31. PMID:24172290]

key element of the success of the UK salt reduction programme is the rigorous setting of progressively lower salt targets for over 80 categories of foods, with a clear timeframe and independent monitoring programme. For example, in the UK, salt levels in bread have come down by an average of 20% since the setting of salt targets (12). Bread is an important part of many diets around the world. Reducing salt in bread would have a big impact on salt intakes, and many countries around the world are already focusing their attention on reducing the salt contents of bread.

This example demonstrates how a salt reduction strategy, based on targets in key food categories, can ensure that salt levels are reduced without loss of sales and with no consumer reaction. Governments around the world now need to follow the UK's lead and set targets on the biggest contributors of salt to the diet so as to prevent thousands of deaths every year; the United

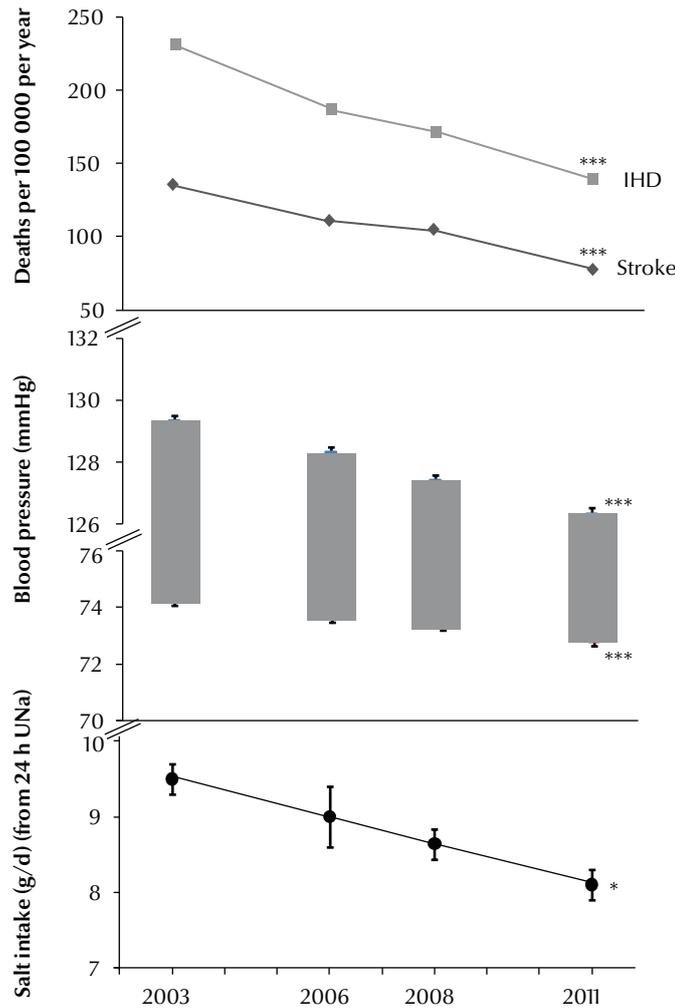
States, Canada and Australia are already following the UK's lead and setting their own voluntary targets.

The UK salt reduction programme has been carried out on a voluntary basis, but this has been underpinned by sustained media pressure, direct pressure on the government and ministers, particularly the public health ministers, so that they would maintain a strong stance with the food industry. Regulatory/legislative approaches are likely to be more effective than voluntary approaches. However, in many countries, the process of legislation is very complicated and this may lead to severe delays in action, as demonstrated by the pace of tobacco legislation (e.g. taxation and banning smoking in all workplaces) coming into force (13).

Countries within the EMR would need to consider their own political processes to determine whether a regulatory/legislative or voluntary approach

is more appropriate. Recently, South Africa has started a similar programme based on the UK model, but the salt targets are regulated and the global food companies there preferred a regulatory system rather than a voluntary system as it gave them a level playing field (14). For many other countries, the best way to proceed is to start with a voluntary salt reduction policy with the threat of regulation/legislation and, at the same time, enact the legislation process.

Many organizations concerned with the effects of salt on health and blood pressure are working together to develop “toolkits” to implement salt reduction programmes, which can be used as a guide for countries to follow. It is imperative that all countries adopt a coherent and workable strategy to reduce salt intake in line with their own landscape. In view of the enormous benefits of salt reduction on public health, it would be negligent for any government not to take action now.



**Figure 2** Changes in salt intake as measured by 24-hour urinary sodium (UNa) excretion, blood pressure (BP), stroke and ischemic heart disease (IHD) mortality in England from 2003 to 2011 (\* $P < 0.05$  and \*\*\* $P < 0.001$  for trend) [He FJ, Pombo-Rodrigues S, MacGregor GA. Salt Reduction in England from 2003 to 2011: its relationship to blood pressure, stroke and ischaemic heart disease mortality. *BMJ Open*. 2014 Apr 14;4(4):e004549. doi: 10.1136/bmjopen-2013-004549. PMID:24732242]

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