"Salt intake is too high in 181 of 187 countries around the world"
The Washington Post (1)

"Salt: the single most harmful substance in food"
The Sydney Morning Herald (2)

"Salt reduction lowers cardiovascular risk"
The Lancet (3)

"Menos sal, mas vida" (Less salt, more life)
El Litoral (4)

AN ASSALT ON PUBLIC HEALTH: THE HIDDEN COST OF SALT

These are just a handful of the headlines from the past 18 months when global media have tried again and again to draw attention to the health dangers of eating too much salt. People worldwide consume significantly more salt than they should. Excessive salt consumption is linked to a number of health risks which cause millions of premature deaths annually, such as high blood pressure which accounts for an estimated 9.4 million deaths each year (5). Controlling the threat that salt poses to public health is a challenge facing developed and developing countries alike. The easiest and most cost-effective way of addressing the threat is simple: reduce the amount of salt people eat. Lowering salt consumption is a practical action which can save lives, prevent related diseases and reduce health-care costs for governments and individuals (6-8).

Yet the battle against salt has shown that this is easier said than done. The World Health Organization (WHO) recommends a level of salt intake that is less than 5g per day for adults and even less for children (9). Figure 1 shows that salt intake is estimated to be well above the recommended level in almost every country (10).
The overall global target is a 30% reduction by 2025 in global average population salt consumption. This is the only nutrition-specific target and a core component of the Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020, which aims to achieve a 25% reduction in premature mortality from avoidable noncommunicable diseases (NCDs) by 2025 (6). Despite strong evidence of the health benefits of salt reduction, policy-makers face many difficulties when translating this evidence into effective public policy. The role of WHO is to bridge this gap, yet a recent article in The Lancet highlighted the organization’s failure to help countries to implement the guidelines it produces (11).

In response to this, WHO has reviewed examples of successful salt reduction policies from around the world and has identified a common set of best practices. Successes in countries such as Argentina, Kuwait and the United Kingdom have shown what works, and WHO has collected a range of technical models and interventions from different settings. This evidence base was used to create the SHAKE package.
“Governments will have the tools to start reducing the amount of salt consumed by their citizens”

The SHAKE package is a set of common-sense, evidence-backed policy options and examples which support governments to lower population salt consumption. The options have been chosen because there is evidence that they work as a complete package, are inexpensive as a public health investment, and because WHO has experience in helping countries implement them to the highest standards.

Figure 1: Mean sodium intake in persons aged 20 years and over, comparable estimates, 2010
Mean sodium intake in persons (g/day)

- <2.75
- 2.75 - 3.49
- 3.5 - 4.24
- ≥4.25
- Data not available
- Not applicable

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If the **SHAKE** package was implemented in every country as a comprehensive package, research indicates that it could save millions of lives per year and dramatically reduce the burden of NCDs on health systems (12). Few countries are fully embracing all of these salt reduction policies and many have taken no action at all to reduce population salt consumption (13). It is hoped that, with these policies and the accompanying resources, governments will have the tools to start reducing the amount of salt consumed by their citizens and to prevent some of the millions of premature deaths caused by cardiovascular diseases.
“LOWERING SALT CONSUMPTION IS A PRACTICAL ACTION WHICH CAN SAVE LIVES”
The SHAKE package contains a general framework for the overarching elements needed to create a successful salt reduction strategy: political commitment, programme leadership, partnerships and advocacy (see Annex 1). SHAKE looks at the role of each of these within the main activity areas of a successful national salt reduction strategy, based on the SHAKE acronym:
SURVEILLANCE
MEASURE AND MONITOR SALT USE

HARNESS INDUSTRY
PROMOTE REFORMULATION OF FOODS AND MEALS TO CONTAIN LESS SALT

ADOPT STANDARDS FOR LABELLING AND MARKETING
IMPLEMENT STANDARDS FOR EFFECTIVE AND ACCURATE LABELLING AND MARKETING OF FOOD

KNOWLEDGE
EDUCATE AND COMMUNICATE TO EMPOWER INDIVIDUALS TO EAT LESS SALT

ENVIRONMENT
SUPPORT SETTINGS TO PROMOTE HEALTHY EATING
SURVEILLANCE
MEASURE AND MONITOR SALT USE

Why it matters

Data from monitoring are necessary to ensure the success of salt reduction interventions. It is important to measure how much salt the population is consuming. This information can be used to show leaders of government and civil society why salt reduction is important and can help them to allocate resources where they will be most effective. It is also essential to identify the dietary sources of salt and to collect information on consumer behaviour so that effective interventions can be designed, implemented and evaluated.

What needs to be done

There are three key stages in monitoring a salt reduction programme:

1. Measure and monitor population salt consumption patterns.
2. Measure and monitor the sodium content of food.
3. Monitor and evaluate the impact of the salt reduction programme.
Within the **SHAKE** package, WHO offers a variety of tools for monitoring and evaluating salt reduction interventions, including various methods for qualitative and quantitative assessment of a policy, as well as its cost-effectiveness.

In order to maximize the quality of monitoring, a range of stakeholders need to be involved. Governments must play a leading role in monitoring and evaluating policies aimed at reducing salt intake at the population level, as well as in allocating funds to support these activities. Nongovernmental organizations, civil society, academia and health-care professionals have significant roles to play in monitoring the implementation of any new policies. The private sector should also be involved in monitoring and publicizing the salt content of foods and meals in national and global markets.
HARNESS INDUSTRY
PROMOTE REFORMULATION OF
FOODS AND MEALS TO CONTAIN
LESS SALT

Why it matters

In most developed countries, and in a growing number of developing ones, the bulk of the dietary salt (70–80%) comes from processed foods or foods eaten outside the home in restaurants and take-away outlet (14). Promoting the reformulation of food so that it contains less salt is essential to reduce population salt intake and should be one of the first actions considered. In order to achieve this, close collaboration with industry is important. Working closely with the food industry to reformulate food products was key to the success of salt reduction programmes in the United Kingdom (15), and significant progress was made when Argentina (16) and Kuwait (17) worked with industry to reduce the salt added to bread. All Member States of the United Nations, through the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, have recognized the need to reformulate food to produce more options that are consistent with a healthy diet (Figure 2) (18).
What needs to be done

Promoting the reformulation of food products involves developing a clear set of criteria or targets for salt levels in foods in order to provide a benchmark for the food industry to achieve. These targets can be met through either voluntary or legislative approaches. The key steps are selecting the target foods, engaging with industry, defining the target sodium levels, setting timelines for meeting the target salt levels, and deciding on the mechanisms of implementation. Monitoring changes in salt content across the food supply maintains pressure on the food industry and shows whether voluntary targets are working and whether mandatory targets need to be enforced. The SHAKE package contains guidance and practical case studies to help countries carry out these key steps. The package also contains examples of additional strategies countries could adopt – such as taxes on high-salt foods, and labelling and communication strategies which can encourage the food industry to reformulate.

‘(b) Consider producing and promoting more food products consistent with a healthy diet, including by reformulating products to provide healthier options’
ADOPT STANDARDS FOR LABELING AND MARKETING
IMPLEMENT STANDARDS FOR EFFECTIVE AND ACCURATE LABELLING AND MARKETING OF FOOD

Why it matters

Nutrition labelling refers to the disclosure of the main nutrients such as salt, fat, sugar and energy content on the label of a food product. Labelling can also give a rating of whether a food has high or low content of a particular nutrient or set of nutrients, and can warn consumers about foods that are high in an unhealthy nutrient (e.g. sodium). Clear labelling systems that enable consumers to understand the salt content of foods quickly and easily are key to enabling consumers to make properly informed healthy choices when purchasing foods in stores and restaurants. Additionally, standards should be implemented to prevent marketing and labelling that misrepresents salty foods as healthy options because they contain beneficial amounts of other nutrients. Clear and non-misleading labelling has its greatest impact when applied alongside a comprehensive education, communication and marketing campaign to inform and educate consumers.
What needs to be done

A number of labelling strategies can be used to support salt reduction. Different countries have used different strategies depending on the level of existing labelling, cultural norms and consumer preferences. SHAKE has collected sample strategies that countries have successfully used to improve consumer awareness of, and labelling clarity on, salt content. The strategies range from salt warning labels and front-of-pack colour-coded labelling systems (Figure 3) to measures aimed at ensuring that labelling and marketing is accurate and non-misleading. SHAKE provides guidance on how to adapt these labelling strategies from one context to another, and on how to integrate them into existing nutrition labelling systems in use in a country.

**Figure 3**
Example of interpretive front-of-pack "colour code" labelling system
KNOWLEDGE
EDUCATE AND COMMUNICATE TO EMPOWER INDIVIDUALS TO EAT LESS SALT

Why it matters

Consumer awareness is essential to changing consumer behaviour. Generally, the public do not associate the use of salt with high blood pressure and stroke, unlike the common understanding of the link between sugar and diabetes. Consumers are also often not aware of the major sources of sodium in their diet because the high sodium levels in some foods are mostly hidden. Raising awareness of the health impact of high salt consumption and the major sources of sodium in diets will influence consumer behaviour and increase demand for lower-salt food products – a key objective of a sustainable reduction in salt consumption.
What needs to be done

Strategic health education and communication for diet has been identified as a “best buy” because of its demonstrated cost-effectiveness (19). Successful education and communication strategies can lead to changes in social norms related to salt in foods, increased demand for healthier and lower-salt products and, subsequently, improvements in overall health for individuals and communities. The development of communication strategies to influence behaviour should be informed by research, strategically planned to ensure maximum impact, and should include education, social marketing and the use of innovative platforms such as mobile telephones to deliver the messages.

Once again, SHAKE is able to help by providing an evidence base of effective education and communication strategies and designs which can be used as models for countries to create their own. The examples vary hugely in size and scope, from a campaign for 95 million people in China to small-scale targeted campaigns run by NGOs. Thus the SHAKE package can support the needs of any country. SHAKE also provides advice and working examples of how governments can collaborate with stakeholders — including the food industry and other partners who can influence the broader food environment — in order to maximize the impact of a campaign.
ENVIRONMENT
SUPPORT SETTINGS TO PROMOTE
HEALTHY EATING

Why it matters

Settings are defined as places where people live, work and play. A number of approaches have been successful in reducing the levels of salt in food served in schools, workplaces and other institutional settings. As with children in schools, most adults now spend the vast majority of their time in the workplace. Therefore protecting and promoting health in these settings, including lowering salt intake, is critical (20).

What needs to be done

SHAKE offers practical approaches to reducing the levels of salt in food served in workplaces and other institutional settings. It provides initial mapping support to help countries identify the key settings where evidence shows that strategies will have the greatest impact – such as schools, workplaces, hospitals and food outlets. It then offers a selection of proven strategies for promoting healthy eating in these settings – such as developing standards for meals served in schools and workplaces – and for behaviour change interventions in community settings.
SHAKE also includes cross-sectoral guidance, such as regulatory changes which can be made to reduce salt in public catering, and shows how several countries have created and enforced standards on the maximum levels of salt allowed in foods sold in schools and hospitals. Finally, SHAKE incorporates elements from other related WHO guidance such as recommendations on the marketing of foods and beverages to children. Restricting the marketing of high-salt foods to school children will create a supportive environment for healthy eating from an early age and will produce longer-term positive health behaviours in future generations (21).

By bringing all these factors together, the SHAKE package provides a full set of policy tools based on existing practices from around the world. When used in conjunction with strong political commitment, good programme management, a network of partnerships and effective advocacy, SHAKE can help any country create a robust strategy to reduce salt consumption – helping the global population shake its salt habit.
ANNEX 1: ELEMENTS OF A SUCCESSFUL SALT REDUCTION PROGRAM

While each part of the SHAKE package is important, there are several core elements which bridge them and which will affect success. These cross-cutting areas are political commitment, programme leadership, partnerships, integration with iodine deficiency elimination programmes, and advocacy.

Political commitment

Political commitment is critical to initiating and sustaining a population-wide salt reduction programme over many years and is also necessary to provide a clear mandate and ensure the availability of adequate resources. Professional groups, nongovernmental organizations (NGOs), academia and consumer groups can lobby government and policy leaders to increase awareness of the importance and feasibility of salt reduction in the public health agenda.
Programme leadership and governance

One of the most important decisions to make when developing a salt reduction programme is the decision as to who will be responsible for ensuring it is implemented effectively. Salt reduction programmes are most likely to be successful if led from a senior level within government. Ideally the programme should be led by a ministerial-level appointee with a specific interest in the issue and with sufficient support staff and budget to manage the day-to-day operations of the programme. This is especially important for promoting industry compliance when setting targets for the salt content of foods. An effective government leadership team should also be able to garner the support of other stakeholder groups within both civil society and industry. If government leadership is not possible, an NGO or civil society group could lead the work with government support.

Advocacy

Advocacy denotes activities designed to place salt reduction high on the political and development agendas, to foster political will and to increase financial and other resources for programme development to ensure that implementation is sustainable. Advocacy groups can hold authorities and industry organizations accountable for ensuring that pledges are fulfilled and results achieved. While anyone can
advocate for salt reduction, collective action is more likely to be effective than isolated efforts. A broad-based coalition of interrelated and complementary stakeholders can generate dialogue, negotiation and consensus, thus raising awareness and strengthening action for salt reduction. The leadership team should seek to engage the support of stakeholders and the advisory group in whatever capacity possible.

**Partnerships**

A multisectoral and multi-stakeholder approach – coupled with strong networking between policy leaders, other government departments, NGOs, consumer groups, the medical community, academia and the food industry – can provide a strong level of support for the salt reduction agenda. An advisory group can support the programme throughout development, implementation and evaluation. The advisory group provides the opportunity to engage with, and use the expertise and interests of, diverse stakeholders that are not directly involved in the programme leadership. It is important that the members of the advisory group have good knowledge of the food industry and good working relationships with a critical mass of key industry representatives and other stakeholders.
Integration with iodine deficiency elimination programmes

A coordinated approach with those responsible for policies to eliminate iodine deficiency is required to ensure policy coherence and maintain political support for salt reduction. A credible, broad-based advisory group can provide guidance and support for government leaders, bringing together stakeholders from the areas of both salt reduction and iodine deficiency elimination to ensure that a reduction in population salt consumption levels does not adversely affect iodine deficiency elimination programmes and that the promotion of iodized salt does not derail salt reduction efforts. Key areas for integration of the two initiatives include policy development, communication and advocacy, monitoring, and surveillance and research.
REFERENCES


