The problem with salt and fat

The evidence that over-consumption of foods high in salt and saturated and trans-fats can adversely affect our health and contribute to the development of noncommunicable diseases (NCDs), such as cardiovascular disease, type 2 diabetes, hypertension and certain cancers, is indisputable. Nonetheless with changing of food consumption patterns, and a shift from traditional foods to fast and processed food high in fat, sugar and salt, more people around the world, including in the WHO Eastern Mediterranean Region (EMR), are consuming more such foods, which is contributing to the growing burden of NCDs.

Responding to the problem

Recognizing the urgency to address the situation, the World Health Assembly in 2004 adopted the Global Strategy on Diet, Physical Activity and Health1. This calls on governments, WHO, international partners, the private sector and civil society to take action at all levels to support healthy diets and physical activity. In 2011 through the Political Declaration of the High-level Meeting of the United Nations General Assembly on the Prevention and Control of Non-communicable Diseases2, world leaders committed to reducing people’s exposure to unhealthy diets. Following up on this, the World Health Assembly in 2013 agreed 9 global voluntary targets for the prevention and control of NCDs3, which include a 30% relative reduction in the intake of salt by 2025. The Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–20204 gives guidance and policy options for Member States, WHO and other UN agencies to achieve the targets.

In the EMR, WHO Regional Office for the Eastern Mediterranean has been working with Member States in the Region to implement the Global Strategy. In 2010, the Regional Office produced the Framework for the implementation of the Global Strategy on Diet, Physical Activity and Health in the Eastern Mediterranean Region5 as a tool for countries of the Region to adapt and implement the Global Strategy at the national level taking into account the public health priorities, the target populations and the burden of NCDs. In addition, the Regional Office has held meetings and published other guidance6 on improving nutrition and promoting a healthy diet and lifestyle to support countries tackle the problem of NCDs.

Following up on progress

To monitor progress in lowering salt and fat intake in the Region, the Regional Office held a consultation on salt and fat reduction strategies in the Eastern Mediterranean Region in Tunis, Tunisia, on 30–31 March 2015. Regional experts and country representatives participated from Bahrain, the Islamic Republic of Iran, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Tunisia and the United Arab Emirates.

The objectives of the consultation were to:

1. Provide an update on the progress achieved by Member States in their salt and fat reduction strategies and measures already taken.
2. Review impediments to progress, how to overcome these and what new challenges are emerging.
3. Develop recommendations for Member States, key partners and WHO regarding the implementation of the current salt and fat reduction roadmap.

Progress made

A series of multi stakeholder technical meetings on population salt and fat reduction strategies convened by WHO/EMRO had resulted in the following actions:

a) Development of policy guidance to lower national salt and fat consumption through: 1. 

1 Global Strategy on Diet, Physical Activity and Health (http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf?ua=1).


3 NCD targets (http://www.who.int/nmh/global_monitoring_framework/gmff_large.jpg?ua=1).


5 Framework for the implementation of the Global Strategy on Diet, Physical Activity and Health in the Eastern Mediterranean Region (http://applications.emro.who.int/dsat/emropub_1273_2010.pdf?ua=1).

6 WHO Regional Office for the Eastern Mediterranean. Nutrition publication (http://www.emro.who.int/nutrition/publications/).
salt intake and death rates from high blood pressure and stroke; b) Development of a policy statement for reducing fat intake and lowering heart attack rates; c) Establishment of a regional monitoring mechanism to monitor progress and maintain accountability for results at the national and regional levels; d) Development and publication of the regional protocol on 24-hour urinary sodium and iodine measurements, as a guide to aid research efforts in the Region; e) Support of a network of regional research institutions – in Bahrain, Egypt, Islamic Republic of Iran, Jordan, Lebanon, Morocco, Tunisia and United Arab Emirates – in conducting the 24-hour urinary sodium excretion, the gold standard for assessing a person’s dietary sodium intake, and in assessing trans and saturated fatty acids intake and their levels in highly consumed food in those countries. The data based on these results can provide a baseline for the Region.

Salt reduction is progressing in many countries of the Region. Kuwait, Qatar and Oman are gradually reducing the salt content of bread by 30%, 20% and 10% respectively through the public bread suppliers who provide the majority of the market bread supplies. The Islamic Republic of Iran is reducing the salt in bread from 2.3 to 1.8 g/100 g flour; in addition, the country has adopted legislative approaches towards salt reduction in a number of products including reducing the maximum levels of salt in highly consumed canned foods, such as tomato paste, popcorn and cereal based snacks, tuna, ketchup and cheese, by more than 10%. Morocco conducted an awareness campaign for bakers (involving 300 bakeries) in the region of Grand Casablanca in 2014: 70% of these bakers committed to implementing a programme of salt reduction in bread. In Tunisia, a programme of salt reduction has started in Bizerte city with the 22 bakers: salt in bread is on average 1.6 g/100 g so the programme aims to progressively reduce the salt content of bread by 20% in the first 6 months and, over 18 months, to extend the reduction further. In Lebanon, the National Taskforce on Salt Reduction was formed in 2012. In United Arab Emirates, a health initiative has been started by the Abu-Dhabi Health Authority through an initiative called wegayeh, which requires healthy food served in restaurants to be labelled as low in salt, fat and sugar. Moreover, other countries, such as Egypt, Jordan and Saudi Arabia, have established multisectoral committees to implement salt and fat reduction strategies.

As regards fats, the High Council of Health and Food Security in the Islamic Republic of Iran has issued a decree to reduce the level of trans-fat to less than 2% in food oil industry products, while the Ministry of Trade reduced palm oil imports to 30% of the total food oil imports in 2014 and will further reduce it to 15% in 2015. The Gulf Cooperation Council has approved food labelling standards stipulating the levels of trans-fat and saturated fatty acids in all food produced or imported. Kuwait and Qatar are in the process of subsidizing healthy oils in order to reduce demand for unhealthy oils. Iraq and Egypt are reviewing their food subsidies, including on unhealthy products, which will lead to reducing consumption unhealthy oil.

Despite the significant progress in implementing the regional initiative in many countries, several challenges facing the countries of the Region in reducing salt and fat intakes in their populations were identified which include: lack of data, complexity of existing food systems (from production to consumption) and the influence of trade and industry; food subsidies for certain high fat/salt products; lack of knowledge among the public of the benefits of healthy food; shift from traditional foods to fast foods high in sugar, oil and salt; poverty and food insecurity which affects the accessibility and use of healthy food.

With regard to the 24-hour urinary sodium excretion, some challenges were identified in carrying out these measurements which emphasised the importance of establishing a small team in each country to continue this work and the importance of rejecting doubtful collections the use of which could underestimate of the true salt intake.

Bread, which is much consumed in the Region, varies considerably in salt content with big variations not only between countries but also between different bakeries within a country. Establishing a format for monitoring the salt content of breads in a standard manner as a means of monitoring the comprehensiveness of the salt reduction plans is therefore important.

The way forward

Despite progress made, there is still a need to monitor compliance by Member States with the agreed set of interventions, which often need to be scaled up with measures of their impact at both national and regional levels. The sharing of evidence on what really works in our Region is proving valuable and should continue. There is also a need to revisit the policy statements and action plans in each country and consider whether there is now the need to revise them.

Arising from the discussions of the consultation, a set of recommendations and interventions for Member States and WHO were proposed to move salt and fat reduction forward in the Region (Box 1).
Box 1 Recommendations on salt and dietary fat reduction

Key recommended interventions on salt reduction for immediate actions by Member States

1. Establish a national taskforce on salt reduction representing key stakeholders and partners.
2. Achieve a 10% reduction of salt/sodium in staple bread within 3–4 months. This will reduce salt intake at least by 0.25 g per day in the whole population; this can be progressively increased if bread salt is brought down by 30-40% as a minimum.
3. Establish salt standards for compliance by all bakers. Several major bakers in the Region are now reducing salt but all bakers need to comply to ensure that bakers with a higher bread salt content do not hinder the population’s taste adaptation and thereby gain commercial advantage.
4. Promote compliance with standard salt levels by linking government flour/bread subsidies and other incentives to bakers’ compliance with the new standards.
5. Mandate the use of iodized salt in local and imported food to ensure adequate maintenance of the population’s iodine status.
6. The top five other food contributors to salt/sodium other than bread in the national diet, e.g. cheese and processed meat, need to be identified with the aim of developing national plans for their reformulation with less salt (and fats).
7. Review and progressively revise national food standards for bread to reflect the recommended minimum levels of salt/sodium content in bread, i.e. to achieve a 30% reduction in salt/sodium in bread from current levels over an 18-month period.
8. Establish national groups to obtain simple suitable population-based food intake data, a laboratory group for measuring the salt content of specified foods and a national group for monitoring salt intake using 24 h urine measurements.

Key recommended interventions to Member States to expedite the reduction of dietary fat

1. Introduce legislation to ban the sale, and therefore local production and importation, of products containing artificially produced trans-fatty acids (TFA) in shops and catering outlets. Legislation is needed to establish the maximum content of all TFA in products (2 g/100 g of oil).
2. Identify processed foods rich in artificial TFA and determine the average population intake of these foods.
3. Require food importers to have all imported foods certified as free of artificially produced TFA, and monitor compliance with national food standards and establish measures for non-compliance.
4. Develop national standards to limit the use of palm and coconut oil in the food industry.
5. Develop national standards to ensure lower saturated fatty acids (SFA) content of dairy products.
6. Reconsider social support policies (e.g. subsidies for the poor allowing purchase of foods with only modest amounts of total fat and low saturated fat content).
7. Establish mandatory labelling schemes for SFA content that are easily understandable for most consumers and/or consider the establishment of a “low SFA” label.

General recommendations

To the countries

1. Enforce the implementation of the policy statements and action plans in the countries which can be commended for their salt and fat reduction policies; and provide technical support to the other countries to help implement their policy statements.
2. Expand salt reduction to cheese and other food product formulations.
3. Scale up reduction in fat intake through targeting dairy products and palm oil imports.
4. Consider adding taxes to salt, sugar, ghee and palm oil and use the funds generated to support the poor or the health system.

To the Regional Office

5. Finalize the regional report on salt and fat intake at the population level.
6. Work with the Gulf Cooperation Council to finalize the implementation of measures to ban TFAs.
7. Conduct a regional study on the economic implication of salt, fat and sugar intake and organize a technical consultation on food supply chain measures to discuss the study findings.
8. Develop communications and advocacy tools on salt and fat reduction.
9. Review the food subsidy system in the Region, especially for unhealthy food components, (fat, oil and sugar) with more focus on some countries, e.g. Tunisia and Egypt where there is new thinking on helping the poor through means other than food subsidies.