WHO-EM/NUT/260/E

Report on the

Consultation on developing strategic directions for salt and fat reduction in the Eastern Mediterranean Region

Cairo, Egypt
28–29 November 2012

World Health Organization
Regional Office for the Eastern Mediterranean

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1. INTRODUCTION

A technical consultation on developing strategic directions for salt and fat reduction was organized by the WHO Regional Office for the Eastern Mediterranean in Cairo during the period of 28–29 November 2012. The purpose of the consultation was to develop a roadmap and action plans for countries of the WHO Eastern Mediterranean Region to implement "best buys" related to health and dietary changes through reducing salt intake and replacing trans fatty acids with polyunsaturated fatty acids.

The meeting was attended by international and regional experts in nutrition and noncommunicable disease prevention, in addition to WHO staff from headquarters and the Regional Office. Its specific objectives were to:

- review the regional evidence on salt and trans fat reduction;
- set up strategic directions on salt and trans fat reduction in the Region; and
- develop an action plan for implementation and identify the technical support needed in the Region to enable the implementation of the action plan.

The consultation was opened by Dr Ala Alwan, WHO Regional Director for the Eastern Mediterranean, who formed a task force comprising all the participants of the consultation who were assigned the tasks of following up the development and implementation of national action plans on salt and trans fatty acids/saturated fatty acids reduction strategies. The task force is chaired by the Regional Director and facilitated by Dr Ayoub Al Jawaldeh, Regional Adviser, Nutrition.

The consultation was structured in two parts. Part one involved presentations by the experts on the international and WHO recommendations on salt reduction and replacement of trans fatty acids by polyunsaturated fatty acids, successful approaches and experiences from different countries supported by scientific evidence for population-based interventions. The second part included the development of regional roadmaps on reduction of salt and saturated fatty acid/trans fatty acid intake in the Region through working group discussions. The consultation concluded with a set of next steps to enable the Region to implement the roadmaps.

The programme and list of participants are included as Annexes 1 and 2. The roadmaps for reducing salt intake and saturated and trans fatty acid intake among populations in the Region are included as Annexes 3 and 4, respectively.

2. TECHNICAL PRESENTATIONS

2.1 Regional trend in intake of salt and trans and saturated fatty acids

Dr Haifa Madi, WHO Regional Office for the Eastern Mediterranean

Dietary patterns in the Eastern Mediterranean Region have shifted towards a higher and unhealthy consumption of saturated fats, salt and sugars. Such dietary changes are contributing

to increasing obesity rates and to greater risks of noncommunicable diseases. There are so far no regional or national surveys that measure the 24-hour urinary sodium excretion, which is the ideal method for assessing population salt intake. However, estimates of salt/sodium intake can be derived from food consumption surveys and household expenditure data, although they could underestimate the true intakes. Current estimates indicate that the amount of salt/sodium in the diet of most countries in the Region is higher than the recommended level of <5 g/person/day; ranging from 7.2 in Lebanon to 19 grams/person/day in Jordan. In all countries, bread alone contributes to around 20% of dietary salt intake.

Limited evidence exists on saturated fatty acids and trans fatty acids in terms of food consumption and trends. The result of trend analysis of fats using FAO's online food balance sheets (2009) indicated that the Region has experienced an upward trend in the availability of fat consumption in the food supply during the last 50 years. Nearly half of these countries (Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Libya, Syrian Arab Republic, Tunisia and United Arab Emirates) have intakes at or above the reported world average (81.8 gm/person/day). The analyses further supported the assumption that an increase in population fat intake does occur with increasing fat supply trends. The regional challenges in salt and fat reduction intake are: the current limited policies on salt reduction measures; the pervasive presence of salt in traditional food items and culinary preparations; the increased market supply and availability of salt containing processed food which encourages higher consumption trends of salt; lack of data to assess and monitor salt/sodium intake; a gap in the awareness and knowledge among policy-makers and consumers on the impact of salt on health and prevailing sources of salt in the Region's staple diets; and the high media exposure for foods which adversely influence eating habits and convey conflicting health messages.

The Islamic Republic of Iran is the only country in the Region that has developed regulatory measures to reduce salt intake through a revision of food standards and specifications, and to reduce industrialized trans fatty acids in oil and margarines. Some countries, including Egypt, Lebanon and Oman have responded by taking measures to reduce salt intake by developing national food-based dietary guidelines. The Islamic Republic of Iran, Palestine and Qatar are now taking similar measures. The United Arab Emirates is currently working on nutrient profiling which includes the salt content of food items. Developing strategic directions to eliminate salt and trans fat intake will benefit from international experience. Adopting a standardized methodology on fat and salt intake measurement and establishing a national nutrition surveillance system to include salt and trans fat consumption will help as will the adoption of national salt and trans fat reduction targets; promoting operational research to monitor the implementation of interventions and their impact; and engaging academia and scientific institutions to include salt and trans-fat related issues in their academic research.

2.2 WHO strategic directions for reducing saturated and trans fatty acid intake in the Region

Dr Francesco Branca, WHO headquarters

The main sources of saturated fatty acids and TRANS fat are mainly meat and meat products, fat spreads, milk and dairy products, baked products. WHO recommends limiting the

energy intake from total fats to 30% of the total energy intake, shifting fat consumption from saturated fats to unsaturated fats and eliminating trans-fatty acids. Governments are encouraged to adopt policies that support healthy diets at school and limit the availability of products high in salt, sugar and fats. Food manufacturers should be led to limit the levels of saturated fats, free sugars and salt in existing products and to eliminate trans-fatty acids, as well as to practice responsible marketing. Reduction in serum cholesterol has been documented in Finland where the intake of total fat has decreased from about 38% of energy (E%) to 31–32 E% the proportion of saturated fatty acids has decreased from about 20 E% to 12–13 E% (recommendation about 10 E%), and polyunsaturated fatty acids increased from 3 E% to 5–6 E% (recommendation 5–10 E%). Changes in cooking oil composition in Mauritius (from 75 g palm oil and 25 g soya bean oil in 1972 to 99 g soya bean oil, 0.6 g ghee and 0.4 g margarine in 1992) led to a 15% decrease of serum cholesterol concentration.

Another success story comes from New York City. As a result of mayoral decree all New York City restaurants (both chain and non-chain restaurants) are restricted from using, storing or serving food that contains partially hydrogenated vegetable oil and contains more than 0.5g trans fatty acids per serving. Trans fatty acids include both manufactured and ruminant sources.

Trans fats have also been banned in Denmark as per the modified Act No. 471 dated 1998. Since 2003 the content of trans fatty acids should not exceed 2 grams per 100 grams of oil or fat; in products that are claimed to be free from trans fatty acids the finished product should be less than 1 gram per 100 grams of fat.

Australia established a Food and Health Dialogue to achieve the overall objective of reducing sodium and saturated fat in processed meats, reducing the sodium content of bacon and ham/cured meat products to 1090 mg per 100g, reducing the sodium content of nominated emulsified luncheon meats to 830 mg per 100g, reducing by 10% the saturated fat content of nominated cooked/smoked sausages and emulsified luncheon meats that have in excess of 6.5g of saturated fat per 100g. The time-frame for action is between 1 January 2010 and 31 December 2013. The products targeted and the amount of sodium and saturated fat to be removed from products each year will be determined by the individual companies involved.

In the United Kingdom there has been considerable action from food manufacturers to voluntarily remove trans fatty acids from their products. Fat and oil suppliers have reduced trans fatty acids by 1% of energy. The Food Standards Agency stated that voluntary measures to reduce trans fatty acids in food had resulted in safe levels of intake.

The FAO/WHO recommended nutrient intake is detailed in Table 1. WHO's proposed approach to eliminating trans fatty acids/saturated fatty acids is through product reformulation, labelling, pricing policies, menu changes in public institutions, public awareness and education campaigns.

Table 1. Ranges of population nutrient intake goals (FAO/WHO, 2003)

Dietary factor	Goal (% of total energy, unless otherwise stated)
Total fat	15–30
Saturated fatty acids	<10
Polyunsaturated fatty acids	6–10
n-6 Polyunsaturated fatty acids)	5–8
n-3 Polyunsaturated fatty acids)	1–2
Trans fatty acids	<1%
Monounsaturated fatty acids	By difference[a]
Total carbohydrate	55–75[b]
Free sugars[c]	<10
Protein	10–15[d]
Cholesterol	<300 mg per day
Sodium chloride (sodium)[e]	<5 g per day (<2 g per day)
Fruits and vegetables	5400 g per day

[a] This is calculated as: total fat -- (saturated fatty acids + polyunsaturated fatty acids + trans fatty acids).
[b] The percentage of total energy available after taking into account that consumed as protein and fat, hence the wide range.
[c] The term ''free sugars'' refers to all monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups and fruit juices.
[d] The suggested range should be seen in the light of the Joint WHO/FAO/UNU Expert Consultation on Protein and Amino Acid Requirements in Human Nutrition, held in Geneva from 9 to 16 April 2002.
[e] Salt should be iodized appropriately. The need to adjust salt iodization, depending on observed sodium intake and surveillance of iodine status of the population, should be recognized.

2.3 Global response to salt reduction strategies

Dr Godfrey C Xuereb, WHO headquarters

The most cost-effective, population-wide health-care interventions to address risk factors are known as public health "best buys". The widespread implementation of these, along with primary health care measures to treat those who have contracted or are at high risk of contracting such diseases, require only modest investment and can lead to quick gains in counteracting the effects of noncommunicable diseases.

The best buys for population-wide interventions include: tobacco-control measures, such as raising taxes and bans on advertising and smoking in public places; raising taxes on alcohol and enforcing bans on alcohol advertising; reducing salt intake; replacing trans-fats in foods with polyunsaturated fats; promoting public awareness about diet and physical activity; and delivering hepatitis B vaccinations. Primary health care interventions include counselling, multidrug therapy and screening and early treatment for cervical and breast cancers. WHO recommends a reduction of salt intake to less than 2 grams per day (5g/day salt) in adults. Noncommunicable diseases account for a considerable proportion all deaths in the Region: 79% in Bahrain, 76% in Kuwait, 71% in Saudi Arabia, 82% in Egypt, 72% in the Islamic Republic of Iran, 45% in Yemen, 29% in Afghanistan and 27% in Somalia.

There is strong evidence for the link between salt and health. Many populations now have average consumptions of between 100 and 200 mmols (6–12g/d). Reductions in salt intake will reduce blood pressure, and reductions in blood pressure will reduce cardiovascular disease, i.e.

a 5mmHg lower systolic blood pressure level will decrease stroke rates by 20%–25%, a 5mmHg lower systolic blood pressure level will decrease chronic heart disease by 15%–20% and also benefits heart failure and renal disease. A universal reduction in dietary intake of sodium by 50mmol/d (2.9g/d) leads to: a) 50% reduction in number of people requiring antihypertensive treatment; b) 22% reduction in number of deaths resulting from strokes and c) 16% reduction in the number of deaths from chronic heart disease.

The impact of population salt reduction and the expected health benefits as a cost effective "best buy" have been reported in many countries. In the United Kingdom, work is in two main areas: re-formulation through working with all sectors of the food industry and an ongoing public awareness campaign. The United Kingdom now has the lowest salt intake of any developed country in the world. In 2012 salt intakes had fallen in adults from 9.5 g to 8.1 g per day since 2005, i.e. approximately 1.5 g per person per day, saving approximately 8500 lives every year. The success of the British salt reduction programme is thanks to the rigorous setting of voluntary salt targets to be achieved by the food industry.

In Finland, the 'highly salted' labelling requirements have acted as a powerful incentive for the food industry to reformulate their products and to develop alternatives that are lower in salt. As a result of the legislation on salt labelling, many products disappeared from the market. The average levels of salt intake reduced significantly between 1977 and 2007, to less than 9 g/day/person for men and to less than 7 g/day/person for women.

WHO recommendations about the various means to reduce dietary sodium intake may be summarized into three groups of actions:

(i) Actions at the government level such as special initiatives and regulatory or legislative options, supported by laws, standards and specifications for food items locally produced or imported. An efficient monitoring and evaluation system is essential to show progress.
(ii) Actions by food manufacturers such as new product development and food reformulation, which seems to be effective in countries where the major part of salt consumed by the population comes from processed foods.
(iii) Actions by public health professionals and consumer educators to increase the population awareness of sodium in food and the impact on health, through consumer awareness and social marketing campaigns for selected targeted groups.

Several initiatives have taken place in other regions, e.g. by the European Salt Action Network established as a network of countries within the European Region. These countries are committed to salt reduction, to building coordinated international action on salt reduction and to providing opportunities for exchange of information on the implementation of salt reduction strategies and how best to achieve this. American initiatives are to explore the current epidemiological situation regarding cardiovascular disease and its link to excessive salt consumption in the Americas; through reviewing existing policies, interventions and programmes aimed at reducing dietary salt. They then plan to issue evidence-based recommendations for salt reduction in the Region; review, discuss and agree with relevant partners adjustments necessary for use of salt as a vehicle for micronutrient fortification. The

Regional Office for the Americas prepared a policy statement which provides countries with a roadmap for concerted action by governments, nongovernmental organizations and the food industry. A consultation in the African Region recommended that policy formulation, monitoring and evaluation should be the responsibility of governments, and the health sector should take the lead in moving the national agenda on population salt reduction. It is important to link the salt reduction strategy with the national iodization processes.

2.4 Iranian national programme to reduce salt, sugar and fat intake

Dr A. Djazayery, WHO Temporary Adviser

The main goal of the Iranian national programme is to promote healthy diets through reducing oil, salt and simple sugar contents in processed foods and to induce low fat diets through health promotion and increasing the awareness of the population and food producers and to have food labeling. This programme is sponsored by the High Council of Health and Food Security and was established through decree. The Council of Ministers issued accordingly a decree in June 2011, assigning the Ministry of Health and Medical Education the responsibility for developing the relevant standards and strategies.

The major activities undertaken by the Ministry of Health and Population include: revising national standards for levels of salt in processed and ready-to-eat food; encouraging food processors to produce low-fat, low-sugar and low-salt foods; expanding/strengthening nutritional labelling laws and regulations; alerting consumers of salty food through food labelling of salty foods; sensitizing food processors, technical personnel, health and agriculture personnel, schoolteachers; providing the public with nutrition education through radio, television, press and the health service delivery system.

The following key activities are part of the national programme: conducting surveys to determine salt, sugar and oil consumption patterns; collaboration with the National Standards Organization in developing relevant food standards; expanding nutritional labelling through working with food industry as real partner for implementing the programme and conducting capacity-building for health workers and technical staff in provinces.

Food legislation/standards will be legally formulated and endorsed as per national laws which include at this phase: a) limiting the trans fat content to be less than 10% of total oil and fat of corn, palm, and mixed liquid oils, as well as frying oil.; and b) reducing the salt content of food products by at least 33%. The regulations were accompanied by an advocacy package for salt consumption reduction at the population level and for special high risk groups.

2.5 Canadian experience on trans fatty acid reduction

Professor Dr Mary R. L'Abbé, WHO Temporary Adviser

There are two main sources of trans fatty acids. One form, natural trans fats, can be found at low levels in ruminant meats (beef, lamb, deer, caribou) and dairy products. The other form is industrially produced trans fats, which are formed during partial hydrogenation of liquid vegetable oils to harden them and prolong their shelf life. Most of the trans fats in our diets comes from industrially produced trans fats. Health effects are well known: trans fatty acids

raise LDL cholesterol ("bad" cholesterol) and lower HDL cholesterol ("good" cholesterol). Coronary heart disease is a leading cause of premature death in Canada. By the mid 1990s, researchers estimated that Canadians had one of the highest intakes of trans fatty acids in the world (8.4 g/day/person) due to widespread use of partially hydrogenated canola and soybean oils.

Canada was the first country in the world to introduce mandatory labelling of trans fatty acids in 2005: nutrient content regulations defined "trans free" as < 0.2 g trans fatty acids per serving and low in saturated fat (< 2 g saturated fats + trans fatty acids and saturated fats + trans fatty acids < 15% E). In 2004, the Parliament of Canada passed a motion "to enact regulation, or if necessary present legislation that effectively eliminates processed trans fats, by limiting the processed trans fat content of any food product sold in Canada to the lowest level possible". The motion called on Health Canada and the Heart and Stroke Foundation of Canada to co-chair a multi-stakeholder task force, including participants from health associations, academia, food processing and food service industry, and government. The progress can be summarized in three phases.

In 2006: The Trans Fat Task Force recommended regulating trans fatty acids to less than 2% of total fat in fats, oils and margarines, and to less than 5% of total fat in manufactured foods. This included retail, food service and restaurant foods prepared on-site

2007: The Minister of Health announced that Health Canada is adopting the Trans Fat Task Force's recommended limits for trans fat in Canadian foods and giving the industry two years to reduce trans fat to the levels recommended by the Task Force. If significant progress has not been made over the next two years, he commits to regulate to ensure the levels are met and commits to publish the results of Health Canada monitoring programme.

2007: Health Canada published the first set of data from its trans fat monitoring programme from food samples that were collected in 2005, 2006, and spring 2007 from major grocery stores, restaurant and fast-food establishments. The Trans Fat Monitoring Program showed that the analysed foods that are, or were, significant sources of trans fats (as indicated by earlier survey data) were foods containing high levels of trans fats (e.g. cookies, crackers, and fried foods such as potatoes) and foods with lower levels of trans fats that were consumed in large quantities by a large number of consumers (e.g. bread). Work was conducted in three Health Canada laboratories in Ottawa, Toronto and Winnipeg. The results were released in 2008, 2009 and posted on Health Canada with 50 pages of data, including manufacturer name and product identification

In conclusion, the percentage of restaurants and fast food chains with fried potatoes meeting the 5% trans fats of total fat limit indicated that overall 76%–78% of foods met the trans fatty acid recommended limits: without an increase in saturated fatty acids; nationally saturated fatty acids remained constant (10.2% versus 10.3%). The trans fatty acid intakes were still at 1.4% of E but Health Canada has now disbanded its monitoring programme.

2.6 Findings of the MedCHAMPS project

Professor Habiba Ben Romdhane, WHO Temporary Adviser

MedCHAMPS (Mediterranean Studies of Cardiovascular disease and Hyperglycaemia: Analytical Modelling of Population Socio-economic transitions) is a European Commission research project involving institutions from six different countries in Europe, North Africa and the Middle East. It aims to make recommendations about policy initiatives, both within and outside the health sector, likely to be the most effective and cost-effective in reducing the burden of cardio vascular diseases (heart disease and stroke) and diabetes in the Middle East and Africa. The project has six work packages: 1) development of project framework and methodological approaches; 2) data collection, secondary analyses, and critical appraisal; 3) model development, iteration, and analyses; 4) data entry, model analysis and validation; 5) national situation analysis of current policy and health system contexts; and 6) developing and evaluating policy options.

The method used for the evaluation was the IMPACT method, which is the most widely published coronary heart disease policy model. This model is a cell-based deterministic model which includes all patient groups, all standard treatments and all major risk factors. Potential policies for evaluation are: 1) a nationwide health promotion campaign which would encourage people to reduce their salt intake, 2) labelling of food products stating the salt content of the product to encourage people to opt for lower salt content products, 3) mandatory reformulation requiring manufacturers of food products to lower the salt content of their products. Given that these policies could also be implemented in combination as well as individually, six permutations were considered for evaluation.

For the outcome, the cumulative population health effects were quantified in terms of life years gained over a 10 year time frame. The total cost of each policy option was calculated as the sum of the cost of introducing the policy and the total coronary heart disease event related health care costs over the 10 years. For the health promotion campaign, it was assumed that the campaign would be repeated each year. For the labelling and reformulation policies it was assumed that there would be an initial set-up cost in the first year but in the subsequent years the only cost would be for monitoring to ensure that the standards were being maintained. Discounted costs and effectiveness of interventions over 10-year period were calculated.

This study provides the first detailed evaluation of salt reduction policies in four middle-income Eastern Mediterranean countries. This results support the conclusions of previous studies in high-income countries evaluating the cost effectiveness of salt reduction policies. Reducing dietary salt intake could generate significant health benefits in terms of life years gained and substantial cost savings. The cost effectiveness data produced provide an important input into the decision-making process. Implementation of a salt reduction policy will be influenced by both the particular industrial environment as well as the preferences of policy-makers. Policies which involve health promotion and labelling of food products are likely to receive highest support as they are seen as the easiest to implement

2.7 Challenges of reducing salt intakes in the Region

Dr Philip T. James, WHO Temporary Adviser

Findings of a study conducted in 1992 (In Coronary Heart Disease Epidemiology eds Marmot M, Elliott P. Oxford Medical publications. 1992 pp 166-178) indicated the range of salt intakes estimated from the 24hr urine sodium excretion in the INTERSALT study. Most countries are far above the target. None of 32 countries studied were in the Eastern Mediterranean Region, but separate SalTurkey studies show intakes of 18g/d in Turkey which has a more or less similar diet to that of many countries in the Region.

Identifying sources of salt is important and this is helped by taking account of the information from and public health implications of the iodization of salt programmes. In countries in nutritional transition one has to recognize that there may be local sources of salt generated from salt lakes and drying techniques as used classically in India. This often leads to local traders in salt who are difficult to access and monitor. A major feature of the Middle East is the millennia old salt routes across the Sahara and involving the Silk Route to and from China as well as locally mined salt. So it is important to establish in each country the local sources of salt. It is important to establish how many salt sources a country has and the validity of the iodization of salt programme's supposed coverage. Street foods are also usually neglected as a source of salt and this may lead to a grossly underestimated intake if reliance is placed on food intake surveys; Places where work placed food is served applies to major industrial/government catering systems. The Chinese experience reveals how salt reduction in the canteen together with advice form the factory not to use so much salt at home can lead to a profound reduction in strokes and heart disease. Processed foods can be a major problem with imported foods as well as especially extra salt used traditionally in regional foods. Caribbean experience has shown the difficulties when there are multiple catering establishments on the roadside and therefore there may be a major problem stimulating change in multiple small companies. On the basis lithium tracer techniques applied to salt source surveys, processed food salt dominates in richer countries but not during nutritional transition, which probably affects many countries in the Region.

Salt sources in an industrialized country diet are: natural (18%), added salt (59%), non salt but sodium-containing additives (7%), cooking salt (8%), and table salt (7%). Total salt intakes in Italy are similar to the United Kingdom: 11.1g in men; 9.3.g in women and 7.7g/d in children in 1987, but the proportion of domestically used salt was much higher with 30%–40% being derived from household use in Italy. Other detailed global studies using the gold standard lithium tracer technique had shown in low-income countries that the domestic use of salt could be as much as 80% of all salt intake so a primary focus on salt use in food processed products was not appropriate in many low income countries.

The following approaches can reduce salt intake: establishing main routes of intake and considering increased use of refrigeration as this usually reduces the demand for using salt as a preservative; implementing individual and caterer campaigns; implementing school-based initiatives, such as in Finland; promoting clinical demand for dietary change before drug prescription, as in Finland; promoting work-based canteen reduction in salt use, as in China (this depends on company size and provision of company food and the presence of

occupational medical teams in big companies); and establishing government catering standards, including all central and local government departments, military, police, schools, colleges, universities, i.e. any organization which receives government support. Specified requirements for serving only low-salt products in government-supported institutions could be a big economic driver, as in Finland, France and Chile, where school standards were set. Catering is crucial in nutrition transition countries. Novel approaches are needed for the progressive reduction in salt purchases by caterers – not vague injunctions to reduce salt. Controllers of key foods have a role in steadily reducing the salt in their products, e.g. bakers, as in a Portuguese study showing resulting reductions in community blood pressures, so suitable routes need to be identified in each country. High food import countries are helped by regional approaches, which are crucial for economic leverage, e.g. as in the Caribbean. Trade agreements have special rules excluding selective trade barriers unless rules also apply to products within countries. In this regard, trans fat reduction was easier than salt reduction in Europe. With regard to food reformulation, voluntary action can work, as in the United Kingdom, but depends on key operators, e.g. supermarkets. Legal approaches include mandatory standards, claims, taxation and trade, and food chain grants. It is important to bring iodizaation groups on board with re-formulated salt/iodine concentrations and policies re salt sources etc.

WHO should tackle the determinants of population food intake by establishing key features relating to the changes: product composition, i.e. reformulation; price, bearing in mind that caterers use salt as a taste enhancer when they have poor quality products, poor refrigeration or traditional dishes; place, i.e. controlling the availability of food in different domains e.g. nurseries, hospitals workplaces; and promotion, which includes labelling and marketing. Consideration should be given to restricting any marketing of high salt products.

Regulatory rather than voluntary measures are recommended, as these were favoured by all cost–effectiveness analyses. However, this poses political challenges from the prevailing political free market approach and industrial fears regarding regulation. A regional approach should dominate. Selectively national programmes may fail if there is substantial food trade: highlight trade issues to specify regional not nationally selective taxes or national nutrient profiles.

2.8 Perspectives on reducing salt and improving the quality of fats/oils, carbohydrates, and foods: population strategies

Dr Dariush Mozaffarian, WHO Temporary Adviser

Lifestyle-related risk factors and their health consequences on cardiovascular disease are shown in Figure 1. Dietary and policy recommendations frequently focus on reducing saturated fatty acid consumption for improving cardiometabolic health, based largely on ecological and animal studies. Recent advances in nutritional science now allow assessment of critical questions about health effects of saturated fatty acids. Based on consistent evidence from human studies, replacing saturated fatty acids with polyunsaturated fat modestly lowers coronary heart disease risk, with ~ 10% risk reduction for a 5% energy substitution, whereas replacing saturated fatty acids with carbohydrates has no benefit and replacing saturated fatty acids with monounsaturated fat has uncertain effects.

Recommendations for a healthy diet include fish and seafood, whole grains, fruits, vegetables, nuts, vegetable oils and moderate dairy. Limitations should be put on starches, refined grains, sugars, processed meats, sweetened drinks, industrial trans fatty acids and salt.

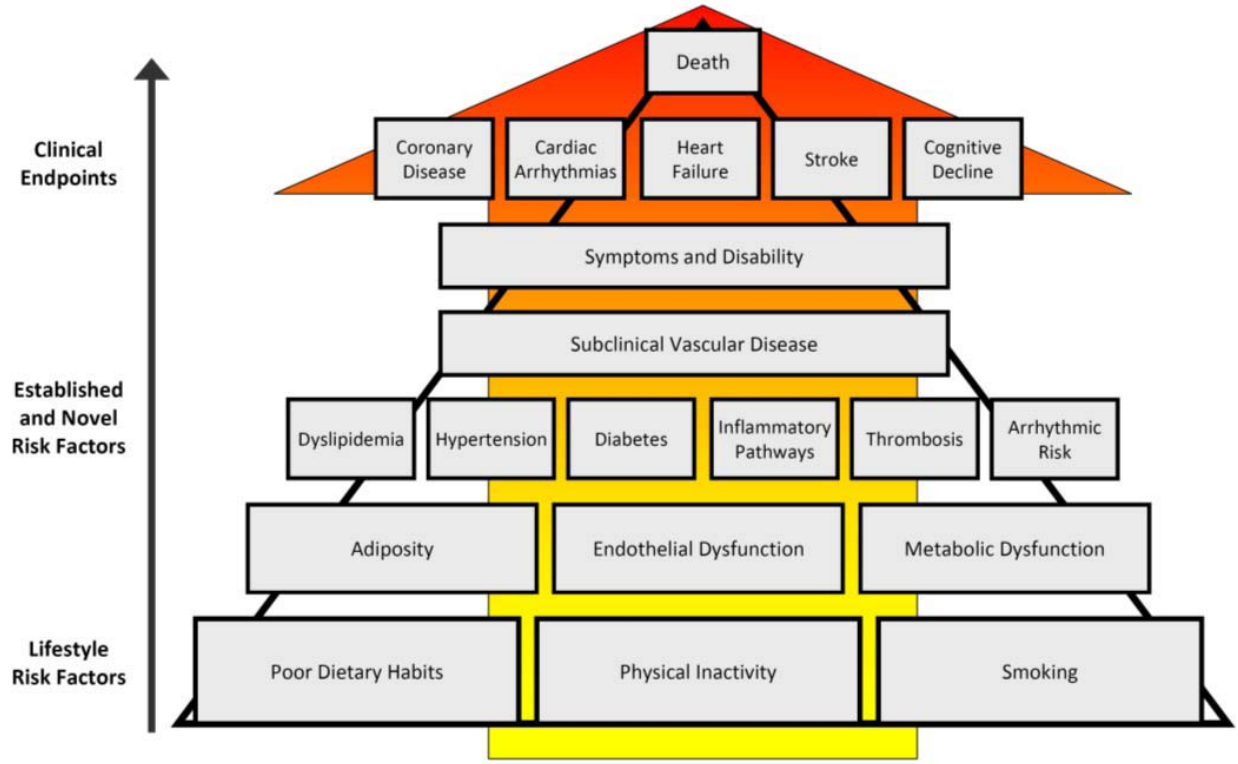

Figure 1. Cardiovascular risk factors

A systematic review took place by the American Heart Association (AHA) on the evidence for effectiveness of population approaches to change dietary habits, physical activity or tobacco use and related health outcomes. Six broad domains were evaluated: 1) media/education; 2) labelling/consumer information; 3) school/workplace approaches; 4) local/built environment; 5) taxation, subsidies and economic incentives; and 6) direct restrictions/mandates. The review recommended the following evidence-based population strategies to improve diet.

- Media and education: Sustained, focused media campaigns, especially with other multicomponent strategies, focused on specific foods or drinks, and on-site supermarket/grocery store educational programmes.
- Labelling information: Mandated nutrition facts, front-of-pack icons, or menu labelling to influence industry behaviour and product formulations.
- Schools: Multicomponent interventions focused on both diet and activity, including education, trained teachers, supportive policies, environmental changes, family components, school garden programmes, fresh fruit and vegetable programmes to provide fruit and vegetables during the school day.

- Workplaces: Comprehensive worksite wellness programmes for diet, activity and tobacco. Increased availability of healthier options and/or strong nutrition standards, combined with on-site prompts, labels or icons.
- Environment: Increased availability of supermarkets near homes.
- Economic incentives: Subsidy strategies to lower prices of more healthful foods and beverages. Tax strategies to increase prices of less healthful foods and beverages. Long-term changes in agricultural and related policies to create infrastructure to facilitate production, transportation, and marketing of healthier foods.
- Bans and mandates: Restrictions on television ads for less healthy foods/drinks targeting children. Restrictions on ads/marketing of less healthy foods/drinks near schools and public places frequented by children. General nutrition standards for foods/drinks marketed and advertised to children, including on-package promotion. Regulatory policies on specific nutrients (e.g. trans fatty acids, salt).

Examples of strategies with less evidence include the following.

a) Media and education. Shorter-term, community-based media/education efforts to target multiple cardiovascular disease behaviours and risk factors simultaneously. (IIb B);
b) Labelling information. Detailed nutrition facts panels on packaged foods/drinks. (III B), Schools: School-based education alone, without other components. (IIb A), Restricted accessibility (times, locations) to vending machines. (IIb B), Promotion of water use alone. (IIb B) Workplaces: Worksite cafeteria or vending machine
c) Environment. Increased availability of grocery stores near homes. (IIb B), Reduced availability of convenience stores near homes. (IIb B), Reduced availability of fast food restaurants near homes (IIb B) or schools (IIb B), Increased availability of local farmers' markets (IIb B) or community gardens. (IIb C)
d) Economic incentives. Changes in agricultural subsidies alone to either encourage crops or reduce crops as a means to alter consumption. (IIb C), Sustained individual financial disincentives for adiposity or poor diets (e.g., higher insurance premiums) or other individual financial incentives to lose weight or improve diet. (IIb C), Nonsustained individual financial disincentives or incentives related to obesity or diet. (IIb A).
e) Bans and mandates. Mandates to support production of healthier foods. (IIa C).

Successful regional/national experiences show the impact of salt and saturated/trans fatty acid reduction strategies:

Tianjin, China: Education and environment intervention to reduce salt. Reduced sodium intake by 22 and 11 mmol/d in men and women, versus increases of 18 and 4 mmol/day in control neighbourhoods. Population systolic blood pressure declined by 6 mmHg in 2 years, versus control.

North Karelia, Finland: Media/education intervention to improve diet, reduced intakes of butter, whole-fat dairy, nonlean meats and salt, and increased intakes of vegetable oils, low-fat dairy, lean meats, vegetables and fruit. Population blood pressure and cholesterol levels markedly improved.

Finnish national intervention: North Karelia project extended nationally, including voluntary industry agreements, food subsidies and taxation, and government programmes to increase fruit and vegetable production and intake. Population blood pressure and cholesterol levels markedly improved.

Singapore national intervention: A sustained multi-component intervention, with media/education, school, workplace, and environment strategies, and collaboration with industry to produce healthier foods choices. Over 6 years, marked declines in hypertension, high cholesterol, diabetes.

Mauritius national intervention: A multi-component intervention, including regulation for cooking oil to limit palm oil and replace it with soybean oil. Over 5 years, saturated fatty acid intake fell by 3.5 %E, polyunsaturated fatty acid intake increased by 5.5 %E. Population total cholesterol fell by 31 mg/dl, with half attributable to changes in the cooking oil.

Eastern Europe natural experience across 11 countries: During 1990–2002, economic and market transformations variably altered subsidies for animal products. Diverse replacements, including various vegetable oils, fruits and vegetables. Over 12 years, diverse changes in coronary heart disease mortality only correlated with changes in alpha linolenic acid (r=-0.84) and fruit (r=-0.55) consumption.

Barriers include lack of knowledge on optimal dietary targets, effective evidence-based policies, and cost effectiveness or cost savings of these strategies, In addition, lack of political will or interest, opposition by the food industry, and the public, and diversion of resources and attention by drug-based “high risk” health care system model, driven by well-meaning policy-makers and the for-profit drug industry.

Poor lifestyle is the leading cause of preventable diseases in nearly all nations. Resultant morbidity and mortality, adverse impacts on disparities and economic costs are staggering. Population-based strategies are crucial for improving diet and have potential for broad and sustained impact. Several specific interventions achieved AHA Class I or IIa recommendation with Level of Evidence A or B, providing a set of specific evidence-based strategies for prioritization. For several interventions, concordant evidence is seen in high-income non-industrialized and middle-income or low-income regions. There are effective interventions in every domain, increasing flexibility to implement diverse interventions at different stages.

2.9 Approaches to reducing salt intake

Professor Graham MacGregor, WHO Temporary Adviser

Approaches to reducing salt intake have benefitted from the experience of the United Kingdom.

1. Iodization of salt is important for public health. Current national iodization policies, implementation strategies and degree of successful coverage need to be reviewed. The Global Micronutrient Initiative will probably have substantial knowledge of salt sources and deficiencies in iodization coverage. In the Middle East and North Africa, iodization of salt is of

major public health importance. Therefore consideration should be given to analyses made for identifying the sources of salt a) in each country b) in the region as a whole.

2. Salt reduction strategies are based on consumer level or source level changes. Food reformulation strategies apply to foods either produced in the country or imported. Here it should be noted that GCC countries have a very high percentage of all food imported. Key importers are crucial. Determinations should be made regarding certain issues, i.e. whether, as in the Caribbean experience, special foods formulated as high in salt and sugar are produced on mistaken grounds of special needs in hot climates etc. The potential role of trade agreements should also be analysed, e.g. GCC country imports, as economists have identified major opportunities to alter food formulation through common purchases. This is particularly important for countries with small populations; trade blocks have huge and unused economic power applicable to other nutrients. Consideration could be given to imposing import criteria on health grounds – see trans fat discussions – and adding salt, invoking SPS criteria of World Trade Organization regulations even though salt not yet classified as harmful by Codex. Trans fat is more readily accepted as toxic. Home consumption strategies include novel approaches to message distribution and labelling of food ± salt. With regard to workplace food, strategies depend on the size and nature of businesses: for big business, the experience of China provides a number of good lessons.

3. Sources of salt are an important consideration for ensuring iodization policies and level of iodization. Considerations include production methods for national sources (e.g. mined locally or produced, as in India, with sea/river water salt lakes), number of sources, number of businesses dealing with salt, sources and types of imported salt, number of importers and access mechanisms to these businesses.

4. Pricing policies can also be considered for salt, rather than high salted foods. Price elasticity is crucial.

2.10 The FOOD(S) package

Dr Francesco Branca, WHO headquarters

WHO has proposed a package to assist in the country-level implementation of effective interventions to improve population dietary patterns for the reduction of nutrition-related noncommunicable diseases. The package, called FOOD(S), comprises a set of policies and action to improve the supply and demand of healthy food. The FOOD(S) package includes a set of measures, each corresponding to a letter in the word ‘FOODS’, for use in country planning and implementation of nutrition interventions: (F) Farm and manufacture healthy food; (O) Offer healthy food at affordable prices; (O) Orient consumers to demand healthy foods and meals; (D) Discourage marketing of unhealthy food options; (S) Surveillance of risk and responses. Extensive discussions took place on how this document can serve Member States, and all agree the document is a live one, to be supported by a training package to Member States.

3. GROUP WORK TO DEVELOP GUIDANCE ON SALT AND FAT REDUCTION FOR THE EASTERN MEDITERRANEAN REGION

The second part of the meeting was focused on developing two roadmaps on salt and fat reduction. These sessions were facilitated by Dr Alwan, Dr James, Dr Branca and Dr Xuereb.

The roadmap for implementing a population salt reduction strategy (Annex 3) includes elements required to identify population salt/sodium consumption levels and sources of sodium in the diet. Surveillance gaps, actions to set targets for salt reduction, the challenge of salt iodization, proposed salt reduction strategies (population awareness, reformulations, legislation/regulations) issues on monitoring and evaluation and research.

The second road map, for the reduction of trans fatty acids and saturated fatty acids in food (Annex 4), contains specific activities in the area of evidence generation, reformulation of food products, food procurement and availability in public institutions, pricing policies, import policies, food product labelling, public awareness and education, marketing of food products and advocacy.

4. SUMMARY OF DISCUSSIONS

Extensive discussion took place after each presentation including situation analysis, challenges facing the Region, suggested interventions, cultural and economic barriers and lessons learnt from other regional and international expediencies. The following were highlighted and discussed.

4.1 Salt intake reduction strategy

4.1.1 Population salt/sodium consumption levels and sources of sodium in the diet

- Although data on average salt intake in the Region are limited to a few countries, the consumption pattern of salt intake in the Region is considered to be the highest in the world, reaching a level of 17 g/d/person in some countries. Bread contributes to about 20% of salt intake in most countries, in addition to the significant intakes from table salt added during food cooking and serving. Other traditional products such as cheese and pickles are also considered one of the major sources for salt intake in the Region.
- Food consumption data (household income and expenditure databases): secondary analysis needs to be done later. There needs to be a system of proper assessment put in place rapidly on a parallel track to actual changes in salt provision and use.

4.1.2 Surveillance gaps

- None of the countries in the Region conduct a 24-hour urinary study to identify the sodium intake which is the gold standard method; therefore, developing a protocol for monitoring salt/sodium intake is needed. However, secondary data analysis on food consumption needs to be done in a systematic way in order to build a reliable database on potential food sources of salt.

- Most countries do not have reliable data on salt consumption and sources. Total diet study training has been done in the Region (Tunisia has completed a survey). Data are insufficient to identify if there is a contribution of non-salt sodium
- Food consumption surveys exist in the Region; they will give a crude baseline of intake and sources. Early morning spot urine may add confirmation of intake.
- Secondary analysis of "non-health" data are needed as well, including how many manufacturers are involved, such as how many bakers are in the national and industrial sources of salt in each country.

4.1.3 Iodization of salt

- Salt production and the proportion being used for different sectors including human use, food industry, feeding for livestock and the percentage of salt iodized are essential data that will assist to expand salt iodization and help work more with key partners who are needed for strategic interventions related to understanding salt iodization coverage.
- Achieving regional universal salt iodization (to include all kinds of salt not just table salt) is a priority intervention. The current messages delivered to consumers encourage them to increase iodized salt intake. We have to ensure all related campaigns are strengthened and the correct messages conveyed including the harmful of extra salt intake but to ensure a wide coverage of salt iodization.
- Working with the food industry has been discussed and set as priority, especially working with the quick food service industry such as fast food, take away, etc. Dialogue with a multi-national on applying product reformulation is a good vehicle to ensure sustainability and to reduce sodium intake. Working with salt producers would enhance coverage of salt iodization to include salt used in the food industry and feeding livestock, supported by government legislation.

4.1.4 Target for salt reduction

- A target for national salt consumption in Member States has been set at a relative reduction by 30% by 2025. The indicator is the average adult consumption of salt as measured nationally. WHO recommends a reduction in sodium intake to reduce blood pressure and risk of cardiovascular disease, stroke and coronary heart disease in adults (strong recommendation). WHO recommends a reduction to less than 2g/day (5g/day salt) in adults (strong recommendation) as the long term goal.
- WHO recommends a reduction in sodium intake to control blood pressure in children (strong recommendation). The recommended maximum level of intake of 2g/day in adults should be adjusted downward based on the relative energy requirements of children, who until late adolescence are consuming less energy than adults.
- Bread may be the main source of salt in most countries in the Region (in GCC countries, quick service industry foods may be the main contributor).
- A Codex benchmark for complementary foods already exists (these foods should have zero salt) and should be implemented.

4.1.5 Population awareness

- Population awareness on salt iodization is a key element as long as this is part of a package of interventions for salt reduction, context mapping is needed to determine who are the drivers of salt iodization; these need to be involved in the salt reduction action plan.
- Health literacy campaigns, using most effective regional media to ensure the message that salt leads to noncommunicable disease, are needed together with advocacy for consumers on how to reduce salt (home-added and manufactured). The campaigns should be sustained over a long period of time.
- Creating a lobby and societal pressure group to develop and implement legislation to reduce salt are essential; these should include health professionals and should use schools (parents, children and caterers) as one vehicle for campaigns.
- Implementation of recommendations on marketing of foods to children is a good approach to follow and to expand in the Region.
- Collation of experiences and lessons learnt from countries with implementation experience should involve consumer societies/associations and civil society.

4.1.6 Reformulation

- Bread and cheese are two of the most common sources of sodium intake in the Region; their reformulation is a priority intervention. Another sector for reformulation may be the quick food service industry (fast food, take-aways, etc).
- Dialogue with multinationals, companies and restaurants chains on applying reformulated products to the Region is required following other successful experiences in developed countries.
- Other products may be identified through the food consumption surveys as contributing substantially to the total sodium intake.

4.1.7 Legislation/regulation

- Implementation of the recommendations on marketing of foods to children through legislation should be considered by all Member States, all schools and government controlled workplaces should only be allowed to sell/have foods which are low in salt, including government/military led institutions.
- All Member States have national Codex committees on food and food products including salt and fat content. There is a need to work with the Bureau of Standards and Specifications to implement the Codex rules relating to salt content.
- Include levels of salt content in the nutrition facts section of food labelling with advocacy messages using international experience, e.g. “traffic light” approach.

4.1.8 Monitoring and evaluation

Setting up an efficient monitoring system is essential and was emphasized by the meeting.

- Monitoring national targets for reformulation specified after consultation with the private sector is recommended, without involving them in policy-making.
- Regular monitoring of salt content should be considered by the national Codex committee to monitor actions, including monitoring salt consumption levels in population.
- Population knowledge and behaviour on salt in their diet needs to be monitored and evaluated.

4.2 Saturated fatty acid/trans fatty acid reduction strategies

The task force discussed the strategy target to include reduction of saturated fatty acids in addition to the replacement of trans fatty acids with polyunsaturated fatty acids.

4.2.1 Evidence generation

- Data from FAO food balance sheets indicate that the Region has a very high consumption of oil, exceeding the average world average total oil intake. Data on trans fatty acids are scarce, with only two countries having published studies: the Islamic Republic of Iran and Jordan. These studies indicate very high content of trans fatty acids, especially in traditional food including locally made sweets, margarine and some oils. In addition the food served in fast food chains in urban areas is a significant problem in relation to saturated and trans fats
- The meeting recognized that Member States should be encouraged to establish dietary sources of saturated fatty acids and trans fatty acids. Measurement of dietary intake of saturated fatty acids and trans fatty acids should be explored at regional levels through certified laboratories.
- Consequently, regional and national food composition tables should be updated to include trans fatty acids especially for traditional and local food products, as none of the current tables includes trans fatty acids contents. This would be achieved through close cooperation with research centres and academia; supported by a well-established monitoring and evaluation system on fat and salt intake reduction as part of the WHO global monitoring framework.

4.2.2 Reformulation of food products

The meeting discussed the best means to reduce saturated fatty acid intake as well as to replace trans fatty acids with polyunsaturated fatty acids in the Region through product reformulation. The following actions were reviewed based on the international experiences and success stories in other developed countries.

- Developing regulatory tools for trans fatty acids elimination from food stocked and sold in retail outlets, stores and canteens following international experience, i.e. New York, Australia, Canada.

- Conducting a study of the fat value chain in three countries, including a high-income, middle-income and low-income country, and establishing benchmarks/goals for saturated fatty acid reduction by categories of food product; and conducting a study on composition of alternative fat sources (also n-3 versus n-6).
- Establishing discussion platforms with food manufacturers and catering establishments, and with food procurement providers in public institutions (also private service providers).
- Implementing restrictions (saturated fatty acids) or bans (trans fatty acids) on the purchase of products not complying with food category benchmarks, including school canteens, school vending machines and commercial outlets, hospitals, workplace canteens, military. This can be facilitated through providing lists of products containing lower amounts of trans fatty acids to the procuring entities to help them select healthy choices.
- Reviewing social support schemes (including food subsidies), especially in low-income and middle-income countries, to remove oil or margarine rich in trans fatty acids.

4.2.3 Pricing policies

The meeting also discussed in detail how to improve the affordability of products complying with food category benchmarks, which can be achieved through the following actions.

- Revising subsidy policies for fats and oils to favour products with reduced trans fatty acid and saturated fatty acid content.
- Developing pricing policies to improve affordability of products with reduced trans fatty acid and saturated fatty acid content (including differential taxation).
- Studying costs of a healthy food basket and affordability for different population groups in different sub-regions and countries.
- Implementing import tariffs on products with saturated fatty acid content exceeding product category benchmarks through opening a dialogue with World Trade Organization focal points and SPS/WTO secretariat. It may be important to ensure the same criteria apply to local products to simplify legal problems on import restrictions.

4.2.4 Import

Restricting imports of products not complying with food category benchmarks is considered one of the most important interventions. It includes establishing restrictions on the import of products not complying with domestic regulations (bans, import quotas, product registration, labelling), supported by a study to map the international flows of trade for fat sources in the Region using nutritional risk assessment methodology and establishing measures to facilitate the import of alternative fat sources through enforcing the Codex Alimentarius.

4.2.5 Labelling

Implementing easy-to-understand labelling of trans fatty acid and saturated fatty acid content in foods is considered important for educating consumers and keeping them informed.

Many imported food products in the Region are rich in trans and saturated fatty acids which could be regulated through mandatory standards and specifications as well as food labelling. These require working very closely with the National Bureaus of Standards and Specifications (Codex). Mandatory labelling of saturated fatty acids and trans fatty acids is strongly recommended in the Region, following consumer-friendly labelling schemes.

In addition, health claims ('trans fatty acid free' or 'reduced levels of saturated fatty acids' or similar) should be included in the legislation to control the market and avoid misleading messages. Food-based dietary guidelines and nutrition profiling are very good tools developed by WHO for scoring healthy diets.

4.2.6 Public awareness and education campaigns

The meeting also discussed advocacy and considered the following activities crucial for creating consensus on policies aimed at reducing trans fatty acids and saturated fatty acids.

- Implementing a strong mass media campaign with professional communicators and social marketing of reformulated products using e-health and m-health techniques.
- Increasing the awareness of people through school education and expanding nutrition-friendly school initiatives.
- Increasing consumer demand through using WHO tools such as food-based dietary guidelines and nutrition profiling to develop national policies and through facilitating dietary counselling at health care services.

4.2.7 Marketing

Restricting marketing of products containing trans fatty acids and high in saturated fatty acids was also discussed. In this respect, developing regulations for marketing of food and beverages to children/adolescents (including across borders) using WHO recommendations on marketing of food and non-alcoholic beverages to children is essential.

Other important actions to enhance implementation of the planned roadmap for fat intake reduction at regional and national levels include the development of regulations/agreements on marketing of products containing trans fatty acids/saturated fatty acids, including sponsoring of sports events; reviewing existing media messages on products containing trans fatty acids/saturated fatty acids and establishing dialogue with media and government authorities responsible for information; and establishing discussion platforms with food retailers for the promotion of products complying with food category benchmarks at the point of sale.

5. NEXT STEPS

Participants identified a number of action points for WHO in following up the roadmap.

1. Organize a technical consultation for countries and help them to produce an outline of concrete guidance on developing a national plan for reduction of salt and trans/saturated fatty acid intake, to be held in March/April 2013.

2. Work with countries that have the potential and readiness to implement the action plan and provide potential data on salt and trans fatty acid/saturated fatty acid as detailed in the roadmaps, including secondary data analysis on food consumption.
3. Work with countries and key partners to achieve regional universal salt iodization (to include all kinds of salt not just table salt) and ensure all related campaigns are strengthened and the correct messages conveyed including “eat less salt but iodized” in addition to include a statement on the harmful of excess salt intake (more than 5 g/d/person).
4. Meet with regional representatives of Bureaus of Standards and Specifications, to present the regional roadmap for salt and trans fatty acid/saturated fatty acid reduction strategies and strengthen cooperation and partnership.
5. Develop a regional monitoring protocol on determining population-level sodium intake in 24-hour urine samples, benefiting from the international experience.
6. Negotiate with WFP, UNHCR, UNRWA and some nongovernmental organizations to consider salt and trans/saturated fatty acid reduction strategies in their food aid programmes.
7. Update regional food composition tables to include trans fatty acids, especially for traditional and local food products, as none of the current tables include trans fatty acid content. This can be achieved through collaboration with research and academia and specialized food agencies.
8. Work with academia and research centres in conducting studies on cost effectiveness of salt reduction and trans fatty acid/saturated fatty acid reduction policies.
9. Work with countries to revise subsidy policies for fats and oils to favour products with reduced trans fatty acids and saturated fatty acids content.
10. Encourage countries to work with the food industry, catering, bakeries and food services chain in salt and fat intake reduction.
11. Develop media and communication campaigns to ensure wide dissemination of regional salt and fat intake reduction strategies, benefitting from tobacco initiative.

Annex 1

PROGRAMME

Wednesday, 28 November 2012

08:30 – 09:00	**Registration**
09:00 – 09:10	Opening remarks: objectives of the consultation and expected outcomes. *Dr Ala Alwan, Regional Director, WHO EMRO*
09:10 – 09:20	WHO global response to fat reduction strategies *Dr Francesco Branca, WHO HQ*
09:20 – 09:30	WHO global response to salt reduction strategies *Dr Godfrey Xuereb WHO HQ*
09:30 – 09:40	WHO regional initiatives on salt and fat reduction *Dr Haifa Madi, WHO EMRO*
09:40 – 09:50	Findings from MEDCHAMPS: evaluating salt reduction strategies in the partner countries: Palestine, Syria, Tunisia and Turkey *Dr Habiba Ben Romdhane, WHO Temporary Adviser*
09:50 – 10:00	National salt and fat reduction strategies: experience of Islamic Republic of Iran by videoconference. *Dr A. Djezairy, WHO Temporary Adviser* by videoconference
10:30–10:45	Impact of a national salt reduction policy and strategy: the United Kingdom experience. *Professor Graham MacGregor, WHO Temporary Adviser*
10:45–11:00	Experience in trans fatty acid reduction strategies: the Canadian experience *Dr Mary L'Abbe, WHO Temporary Adviser*
11:00–11:15	Experience elsewhere and implications for the Middle East *Professor Philip James, WHO Temporary Adviser*
11:15–12:30	Open discussion
13:00–15:00	Working group session to develop guidance on salt reduction for the Eastern Mediterranean Region *A checklist will be provided*
15:00–15:20	Working group presentation on salt reduction: an outline of way forward for Ministers of Health
15:30–16:00	Perspectives on salt and fat reduction strategies from the United States. *Professor Dariush Mozaffarian, WHO Temporary Adviser by videoconference*
16:00–16:30	Open discussion
16:30–17:00	Wrap up and closing

Thursday, 29 November 2012

08:30–08:45	Day one brief *Rapporteur*
08:45–10:45	Working group session to develop guidance on fat reduction for the Eastern Mediterranean Region *A checklist will be provided*
11:00–11:30	Working group presentation on fat reduction: an outline on way forward for Ministers of Health
11:30–12:30	Open discussion
13:00–13:30	WHO FOOD(S) package: strategies to assist in the country-level implementation of effective interventions to improve population dietary patterns for the reduction of nutrition-related noncommunicable diseases *Dr Francesco Branca WHO HQ*
13:20–14:00	Open discussion
14:00–15:00	Closing panel discussion: Conclusions and next steps *Moderator: Dr Ala Alwan WHO EMRO* *Panelists: Dr Francesco Branca; Dr Godfrey Xuereb and Professor Philip James*

Annex 2

LIST OF PARTICIPANTS

WHO TEMPORARY ADVISERS

Professor Graham MacGregor
World Action on Salt and Health
Wolfson Institute of Preventive Medicine,
London
UNITED KINGDOM

Professor Philip James
London School of Hygiene and Tropical Medicine
President, International Association for the Study of Obesity
London
UNITED KINGDOM

Dr Mary R. L'Abbe
Professor and Chair
Department of Nutrition Sciences
Faculty of Medicine
University of Toronto
Toronto
CANADA

Dr Nawal Al-Hamad
Ministry of Health
Kuwait
KUWAIT

Dr Majid M. Alkhalaf
Senior Dietitian
Food Sector
Saudi Food and Drug Authority
Riyadh
SAUDI ARABIA

Professor Habiba Ben Romdhane
President and General Director
National Board of Family and Population
Tunis
TUNISIA

Ms Deena Alasfoor
Director
Department of Nutrition
Ministry of Health
Muscat
OMAN

Dr Seyed Abolghassem Djazayery (Teleconference)
Professor of Nutrition
Department of Nutrition and Biochemistry
School of Public Health
Tehran University of Medical Sciences
Tehran
ISLAMIC REPUBLIC OF IRAN

Dr Dariush Mozaffarian (Teleconference)
Co-Director, Program in Cardiovascular Epidemiology
Associate Professor of Medicine and Epidemiology
Division of Cardiovascular Medicine
Brigham and Women's Hospital and Harvard Medical School
Department of Epidemiology, Harvard School of Public Health
Boston
UNITED STATES OF AMERICA

WHO SECRETARIAT

Dr Ala Alwan, Regional Director, WHO EMRO
Dr Samir Ben Yahmed, Deputy Regional Director, WHO EMRO
Dr Haifa Madi, Director, Health Protection and Promotion, WHO EMRO
Dr Francesco Branca, Director, Nutrition for Health and Development, WHO HQ
Dr Godfrey Xuereb, Team Leader, Population-based Prevention, WHO HQ
Dr Ayoub Aljawaldeh, Regional Adviser Nutrition, WHO EMRO
Dr Mohamed Elmi, Regional Adviser Food and Chemical Safety, WHO EMRO
Dr Ibtihal Fadhil, Regional Adviser Noncommunicable Diseases, WHO EMRO
Dr Faten Ben Abdelaziz, Regional Adviser Health Education, WHO EMRO
Prof. Salim M. Adib, Medical Officer, Noncommunicable Disease Division, WHO EMRO
Dr Khalid Saeed, Regional Adviser, Mental Health and Substance Abuse, WHO EMRO
Ms Tatyana El-Kour, Technical Officer, Office of the Regional Director, WHO EMRO

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Annex 3

ROADMAP FOR IMPLEMENTING A POPULATION SALT REDUCTION STRATEGY

Strategy phase	**Potential resources available**
1. Population salt/sodium consumption levels and sources of sodium in the diet • There are enough data from the Region in relation to high consumption of salt (although there are wide ranges) to start action • Food consumption data (household income and expenditure databases) – secondary analysis needs to be done	Global status report on noncommunicable disease 2010 Food consumption surveys and national expenditure data

2. Surveillance gaps
• Most countries don't have reliable data on salt consumption and sources
• Total diet study training has been done in the Region (Tunisia has completed survey)
• Need to do regular salt consumption studies:
  Gold standard – 24 hour urine
  Food consumption survey will give you a crude baseline of intake and sources. An early morning spot urine may add confirmation of intake.
• Not enough data to identify if there is a contribution of non-salt sodium
• Need to get data on 'how many' manufacturers are involved e.g. how many bakers are in the country
• Industry sourced major sources of salt
	WHO
	WHO/PAHO framework
	Oman and other food composition database for the Region
	(Study on sources of salt in the Region)
	Analyse import licenses
	National databases on manufacturers and trade organizations
	Import and trade licences

3. Set target for salt reduction • National salt consumption relative reduction by 30% by 2025 • Indicator is adult consumption of salt as measured nationally • WHO recommends a reduction in sodium intake to reduce blood pressure and risk of cardiovascular disease, stroke and coronary heart disease in adults (strong recommendation). WHO recommends a reduction to less than 2g/day (5g/day salt) in adults (strong recommendation).	World Health Assembly resolution Political Declaration of the High-level Meeting of the United Nations General Assembly on Prevention and Control of Noncommunicable Disease WHO guidelines for sodium and potassium CODEX

Strategy phase	Potential resources available
• WHO recommends a reduction in sodium intake to control blood pressure in children (strong recommendation). The recommended maximum level of intake of 2g/day in adults should be adjusted downward based on the relative energy requirements of children when consuming less energy than adults. • Codex benchmark for complimentary foods already exists (zero salt) and just needs to be implemented	
4. Iodization of salt • Ensure that the iodization campaigns are strengthened and the correct messages conveyed • Achieve regional universal salt iodization (to include all kinds of salt not just table salt)	WHO/UNICEF material CODEX
5. Salt reduction strategies 5a.Population awareness These are key as long as this is part of a package of interventions for salt reduction. They also need to be sustained over a long period of time. • Context mapping to determine who are the drivers • Health literacy campaign using most effective regional media □ Link between salt and noncommunicable diseases □ How to reduce salt (home-added and manufactured) • Create lobby and pressure to develop and implement legislation to reduce salt • Health professionals (including institutions) continuing development on salt reduction and media literacy • Use schools (parents, children and caterers) as one vehicle for campaigns • Implementation of recommendations on marketing of foods to children • Collation of experiences and lessons learnt from countries who have already implemented • Consumers societies/associations and civil society involvement	WHO global and regional frameworks Continuing professional development modules from the Region or adapt from other regions Pre-qualification training curricula Regional, United Kingdom and Canada experiences WHO framework WHO documents on salt reduction Consumers International WASH and CASH

Strategy phase	Potential resources available
5b. Reformulation • Bread may be the most common source of sodium intake in the region • Cheese is another important source in the region • Another sector for reformulation may be the quick food service industry (fast foods, takeaways etc.) • Dialogue with multinationals on applying reformulated products to the Region • Other products may be identified through the food consumption surveys which contribute substantially to the total sodium intake • Encourage private sector to develop innovative low salt formulations to be used at home 5c. Legislation/regulations • All schools and workplaces should only be allowed to sell/have foods which are low in salt • Government/army led institutions should implement low salt menus • Food labelling laws/regulations to include salt • Implementation of the recommendations on marketing of foods to children through legislation • Implement the CODEX rules relating to salt content • Dialogue with World Food programme on salt content of the food basket	United Kingdom experience Switzerland experience United Kingdom/New York City/Canada experiences WHO experience/Salt framework on dialogue Finland experience International Food and Beverage Alliance and trade organizations at national level United Kingdom/Canada and Australia experiences Canada experience/CODEX WHO framework CODEX
6. Monitoring and evaluation • Monitor national targets for reformulation targets agreed with private sector • Consider national CODEX committee to monitor actions • Monitor salt consumption levels in population • Monitor and evaluate population knowledge and behavior on salt in their diet • Consider current regional resources (Arab League)	United Kingdom/Finland experiences CODEX WHO/PAHO methodology on 24-hour urine WHO/PAHO tools
7. Research • Economic modelling • Academia to focus research on salt reduction and impacts	MEDCHAMPS (Mediterranean Studies of Cardiovascular disease and Hyperglycaemia: Analytical Modelling of Population Socio-economic transitions)

Annex 4

ROADMAP FOR THE REDUCTION OF TRANS FATTY ACIDS AND SATURATED FATTY ACIDS IN FOOD

Policy area/objective	**Recommended actions**	**Existing resources**	**Actions to take in the short term**
Evidence generation	Establishing dietary sources of saturated fatty acids and trans fatty acids Measurement of dietary intake of saturated fatty acids and trans fatty acids Measurement of trans fatty acids content in food Cost effectiveness of trans fatty acids and saturated fatty acids reduction policies Monitoring and evaluation of policy implementation	Household budget surveys National food consumption surveys Data on the main fat sources Data from total dietary study Data from manufacturers Data on trade of fat products Specific surveys (Islamic Republic of Iran) Food composition tables (international and national) WHO Global status report on noncommunicable disease 2010 Disease control priorities WHO global monitoring framework Noncommunicable disease capacity survey Global Nutrition Policy Review International Network for Food and Obesity/Noncommunicable Diseases Research, Monitoring and Action Support (INFORMAS)	Analysis of consumption patterns in existing dietary surveys – protocol? Review available data on the composition of key fat sources Cost effectiveness analysis in disease control priorities Availability of technical capabilities for analysis of trans fatty acids in food
Reformulation of food products Replacement of trans fatty	Development of regulatory tools for trans fatty acids elimination from food stocked and sold in retail	International experience (Denmark, New York, Australia, Canada)	Sectoral study of fat value chain in three countries Composition of alternative

Policy area/objective	Recommended actions	Existing resources	Actions to take in the short term
acids with polyunsaturated fatty acids Reduction of saturated fatty acids and replacement with polyunsaturated fatty acids	outlets, stores and canteens Establishment of benchmarks/goals for saturated fatty acids reduction by categories of food products Establishment of discussion platforms with: a) food manufacturers; b) catering establishments Incentives to local production of alternative fat sources Animal feeding practices		fat sources (also n-3 vs. n-6)
Food procurement and availability in public institutions (also private service providers) Restrictions (saturated fatty acids) or bans (trans fatty acids) on the purchase of products not complying with food category benchmarks	School canteens, school vending machines and commercial outlets Hospitals, workplace canteens, army Social support schemes (including food subsidies)	International experience (United States, Canada) Model regulations for canteens and caterers	List of products containing lower amounts of trans fatty acids
Pricing policies Improvement of affordability of products complying with food category benchmarks	Revision of the subsidy policies for fats and oils to privilege products with reduced trans fatty acids and saturated fatty acids content Pricing policies to improve affordability of products with reduced trans fatty acids and saturated fatty acids content (including differential taxation)	International experience (Denmark, Hungary)	Analysis of the current subsidy policies on fat in countries Modelling price elasticity of demand for original and reformulated products Cost of a healthy food basket and affordability for different population groups

Policy area/objective	Recommended actions	Existing resources	Actions to take in the short term
	Import tariffs on products with saturated fatty acids content exceeding product category benchmark		Dialogue with WTO focal points and SPS/WTO secretariat
Import Restriction on imports of products not complying with food category benchmarks	Establishment of restrictions on the import of products not complying with domestic regulations Establishment of measures to facilitate the import of alternative fat sources Trans fatty acids in Codex Alimentarius	Nutritional risk assessment methodology	Mapping international flows of trade for fat sources in the Region Mapping international flows of trade for animal products in the Region (dairy, meats)
Labelling Easy to understand labelling of trans fatty acids and saturated fatty acids content in foods	Mandatory labelling of saturated fatty acids and trans fatty acids (definition, methods, language) Consumer friendly labelling schemes Definition of nutrient claims ('trans fatty acids free' or 'at reduced level of saturated fatty acids' or similar)	Existing legislation – e.g. Saudi Arabia, Canada (include in document) WHO manual for the development of nutrient profiling	Review of existing labelling schemes Development of blueprint for labelling of saturated fatty acids and trans fatty acids Nutrient profiling
Public awareness and education campaigns Advocate and create consensus on policies aimed at reducing trans/ saturated fatty acids	Mass media campaigns with professional communicators Social marketing of reformulated products (using e-health, m-health) School education Dietary counselling in health care services	International experience Nutrition Friendly School Initiative What works School policy framework	Revision and modernization of national food-based dietary guidelines Consumer analysis
Marketing Restrict marketing of products containing trans	Regulations of marketing food and beverages to children/adolescents (including cross-border)	WHO set of recommendations on marketing food and non- alcoholic beverages to children	Study on existing media messages on products containing trans fatty

Policy area/objective	Recommended actions	Existing resources	Actions to take in the short term
fatty acids and high in saturated fatty acids	Regulations/agreements on marketing of products containing trans fatty acids/saturated fatty acids, including sponsoring of sport events Establishment of discussion platforms with food retailers for the promotion of products complying with food category benchmarks at the point of sale		acids/saturated fatty acids Establish dialogue with media and government authorities responsible for information
Advocacy	Dissemination of the scientific basis for trans fatty acids and saturated fatty acids reduction to policy makers Networking with consumer organizations	WHO scientific update on trans fatty acids WHO eLENA WHO GINA	Policy mapping and stakeholder analysis

World Health Organization
Regional Office for the Eastern Mediterranean
P.O. Box 7608, Nasr City 11371
Cairo, Egypt
www.emro.who.int