

WHO-EM/NUT/268/E

Report on the

Technical consultation on salt and fat reduction strategies in the Eastern Mediterranean Region

Tunis, Tunisia
30–31 March 2015



World Health
Organization

Regional Office for the Eastern Mediterranean

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CONTENTS

1.	INTRODUCTION	1
2.	SUMMARY OF DISCUSSIONS	2
3.	COUNTRY PROGRESS	4
3.1	Salt reduction	4
3.2	Fat reduction	8
4.	CONCLUSIONS	10
5.	RECOMMENDATIONS	10
Annexes		
1.	PROGRAMME	12
2.	LIST OF PARTICIPANTS	14

1. INTRODUCTION

In recent years, WHO has convened a series of multi-stakeholder technical meetings focusing on population salt and fat reduction strategies. These have led to the development of policy guidance with recommended actions for countries in the Eastern Mediterranean Region to reduce national salt and fat intake, and lower heart attack rates and death rates from high blood pressure and stroke in the Region. A regional monitoring mechanism has been set up to monitor progress and maintain accountability for results at national and regional level, and a regional protocol on 24-hour urinary sodium and iodine measurements, used as a guide for research in the Region, has been developed and published. This has been combined with support for a network of regional research institutions – in Bahrain, Egypt, Islamic Republic of Iran, Jordan, Lebanon, Morocco, Tunisia and United Arab Emirates – in adopting 24-hour urinary sodium excretion as the gold standard for assessing an individual's dietary sodium intake, and assessing saturated fatty acids and trans-fatty acids intake and their levels in the foods frequently consumed in countries.

Salt reduction strategies are progressing in many countries of the Region, such as the Islamic Republic of Iran, Kuwait, Oman and Qatar, while others are in the process of preparing draft legislation on salt reduction (Bahrain) and/or are revising existing legislation to develop benchmarks for salt content of highly-consumed foods such as cheese (Jordan and Kuwait). In some countries (Egypt, Islamic Republic of Iran, Jordan, Kuwait, Oman and Qatar), multisectoral national committees have been established to plan and monitor the implementation of salt reduction activities. These multidimensional and multisectoral approaches are being adopted using a step-by-step process that follows the guidance developed by WHO in consultation with countries. However, technical support and guidance is needed for the review of policies and action plans, to monitor compliance by countries with the agreed-upon set of actions to scale-up interventions, and to measure the impact at both national and regional levels, while sharing evidence on what really works in the Region.

In this context, the WHO Regional Office for the Eastern Mediterranean held a technical consultation on salt and fat reduction strategies in the WHO Eastern Mediterranean Region on 30–31 March 2015 in Tunis, Tunisia (see Programme in Annex 1). The consultation was attended by regional experts and country representatives from Bahrain, Islamic Republic of Iran, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Tunisia and United Arab Emirates, as well as WHO staff from country and Regional Office level (see List of Participants in Annex 2). The objectives of the consultation were to:

- update on the progress achieved by Member States in their salt and fat reduction strategies and measures already taken;
- review impediments to progress, how to overcome these and what new challenges are emerging; and
- derive a set of recommendations for Member States, key partners and WHO regarding the implementation of the current salt and fat reduction roadmap.

The meeting was facilitated by Dr Ayoub Al Jawaldeh, Professor Francesco Carpaccio, Professor Philip James and Professor Graham McGregor.

2. SUMMARY OF DISCUSSIONS

The Region is facing the following challenges for salt and fat reduction: a lack of data, the complexity of existing food systems and the influence of trade and industry, food subsidies, the lack of knowledge of the benefits of healthy food in the majority of people, the shift from traditional to “fast” food that is rich in sugar, oil and salt, and poverty and food insecurity which has an impact on the accessibility and utilization of healthy food.

There is clear evidence of marked differences in salt content in the same type of bread, with big variations not only between countries but also between different bakeries within a single country. Work on this is being extended and it will become important to establish a format for monitoring the salt content of bread in a standard manner as a means of monitoring the comprehensiveness of salt reduction plans and to allow leading countries to demonstrate to other countries the practicality of salt reduction measures in bread already underway.

The assessment of salt intake using 24-hour urine collection research was reported to have been completed according to the protocol in Islamic Republic of Iran, Jordan, Lebanon, Morocco and Tunisia, but staff were unused to checking the validity of urine collections when measuring total urine output in a 24-hour period (with a rejection of collections < 500 ml) and the precise timing of the sample collection was not always satisfactorily given. Following this preliminary analysis, there is a need to check the amount of creatinine excreted in 24 hours, taking account of the expected range of values: the standard deviation for a normal group of men and women (with the sexes considered separately) in relation to their body weight as a crude index of muscle mass. Two studies were not accepted as nationally representative: Egypt, which still needs to establish a valid sampling and collection system, and the United Arab Emirates, where the study was conducted on young female university students who cannot be considered representative of the population. Other published studies (four from Islamic Republic of Iran and one from Saudi Arabia) can also be considered for analysis. The ongoing study in Bahrain was described in terms which did not match the current criteria and more technical support is needed to ensure that sampling and measurements follow the WHO protocol.

It was clear that several of the contributors had not taken full account of the WHO protocol and there may be a need to summarize on one page the key needs: times for 24-hour collections, the need for special techniques to avoid the loss of even one sample of urine, a method of checking the completeness of collections, and the appropriate analyses of urine samples with sodium, potassium and creatinine concentrations being given so that values with total urine volume and the timing of the sample can be used to derive the likely validity of collections. The provision of the individuals' body weight is needed to help establish whether the individual data can be used. It was emphasised that there is also a need for a common way of expressing the data, specifying the excretion of salt as salt not sodium and for this to be given per 24 hours, once seemingly valid data have been obtained.

Professor Francesco Cappuccio has reviewed the current data made available to him, but still needs to obtain some of the basic values to allow the validity of collections to be assessed. Once this has been done, a summary of each country's dataset will be produced. He

has also consolidated the regional data based on these results so that they can be used as a baseline for the Region.

The difficulties encountered highlight the importance of establishing a small team in each country to continue the work, using physicians with previous experience in routinely collecting samples from patients during hospital-based investigations. Some embarrassment from carrying urine bottles was expressed, but experience elsewhere demonstrates that a locally-designed zipped carrier bag for the bottle, collecting funnel and recording book, can mislead people as to its contents, while helping to simplify the process. All investigators should undertake urine collections themselves so that they have a detailed appreciation of the issues involved and the use of small devices, such as the use of safety pins in the underwear, as a reminder to collect the urine that day. Investigators need to be reassured that it is more important to reject a doubtful collection resulting in perhaps only 60%–70% of samples judged as adequate, than obtaining an average value that is an underestimate of the true salt intake.

In terms of the food supply chain, a regional economic study on the production, local supply and importation of salt, and the quantitative distribution to food companies, government establishments, caterers and retailers, needs to be done, so that population measures of salt supply can be derived as a second approach to monitoring any decline in salt use in the diet. Several of these measures, as well as the approaches to working with salt producers and refiners, may be adapted from those used in the iodination of salt to prevent iodine deficiency.

Throughout the Region there has been a policy of subsidizing major commodities eaten by the poor such as bread, vegetable oil and sugar. In some countries, such as Tunisia, a wider range of foods are subsidized, and the meeting had the benefit of hearing from the Tunisian government agency responsible for this. They consider this a major strategy for helping the poor and emphasised that it had been introduced in the early 1970s as an antipoverty strategy at a time when the Region had pandemic childhood malnutrition. However, in previous meetings, such as the Sixty-first session of the WHO Regional Committee for the Eastern Mediterranean held in Tunis in October 2014, the issue of taxing rather than subsidizing oils and fats has been raised as a major health issue. It is therefore encouraging to see so many recent changes in oil subsidy policy within the Region.

This issue had been considered in some detail by the African Development Bank in a report, entitled Food subsidies and direct social transfer: toward a better targeting of monetary poverty and deprivation in Tunisia, that highlighted that helping the poor through a general food subsidy is a very expensive means of providing support, specifically because so much of the subsidy is used by those who are not poor. A preliminary report (in French) has been followed up by a more detailed economic modelling report (in English) providing options for helping the poor including through cash vouchers and other targeted interventions which could potentially, in one scenario, immediately abolish all poverty in Tunisia by using the cost of the current subsidies in a more targeted approach by applying benefits only to the poor. This economic strategy is therefore one that all ministries of health should consider together with economic policy-makers.

Cheese manufacturers were also involved in the workshop and discussion revolved around the high salt and fat content in cheese. They are reducing the fat content in cheese and are concerned because they use imported palm oil in one of their major products.

3. COUNTRY PROGRESS

3.1 Salt reduction

Bahrain

Salt reduction is supported by ministerial decree, with a planned 20% annual reduction in traditional Arab breads from their current levels for five years until reaching the required percentage of 0.5% salt on a dry flour weight basis. Cheese is also under study for salt reduction. There is a plan to establish salt standards for bakers, and to mandate the use of iodized salt in local and imported food to ensure adequate maintenance of the population's iodine status and the avoidance of goitre and cretinism. The data are currently expressed in an unusual way, so analyses cannot be compared with standard international measures. However, the revision of data presentation is likely to allow the data to be placed in a regional context.

Islamic Republic of Iran

The average consumption of bread is 310 g/day, but intake varies markedly between the cities and rural areas, and the salt content of bread varies markedly, from 1.8%–2.3% in flour. Estimated dietary intake according to 24-hour recall measures suggest that 53.6% of salt is used in a discretionary way in the home and that bread is the biggest contributor to salt intake, providing 12% of the total. Cheese (5.3%) and yoghurt drinks (4.7%) are the next most important sources. There are 70 000 bakeries, presenting a major challenge in ensuring adequate coverage by health inspections of all bakeries to verify salt reduction measures.

A technical group has been established involving the Ministry of Health and Medical Education, Bread Association, Flour Milling Association, National Standards Office and other groups from the trade and industry sectors. The technical group has established that low quality flour is a problem and that sodium bicarbonate is being used to try to combat the poor quality. After substantial discussion, salt is being reduced in bread. A process is in place to ensure that salt in bread making will be reduced from 2.3 to 1.8 g/100 g flour, through supporting bakeries to improve the quality of the wheat and providing subsidized yeast to reduce the need to use so much sodium bicarbonate. There has been a government decision to import higher quality wheat to ease the bread making process, and the Ministry of Agriculture is initiating a higher gluten wheat-growing programme. In addition legislative approaches have been adopted for salt reduction by more than 10% in a number of products and establishing maximum levels of salt in frequently-consumed canned foods, such as tomato paste, as well as popcorn and cereal-based snacks, tuna, ketchup and cheese.

Kuwait

Kuwait is gradually reducing the salt content of bread through the public bread supplier that provides the majority of the market. Reductions of 10% every six months in 2013 reduced the salt content of bread by 20% in a year. Currently, reductions of up to a total of 30% are being made. This is an important public health achievement. Moreover, Kuwait is currently revising its salt standard for cheese and establishing national targets for the upper limit of salt content in 13 types of the most commonly-consumed cheeses.

Lebanon

Lebanon has the highest proportion of deaths from noncommunicable diseases in the Region. In response, the National Taskforce on Salt Reduction (LASH) was formed in 2012, consisting of members from government, the American University of Beirut (AUB) and AUB Hospital. The task force has been evaluating the current diet and risk factors, as well as setting new targets and developing a plan for reducing salt intake in the national diet. It has also started a national salt reduction campaign in conjunction with the Ministries of Public Health and Industry, who are updating national standards for sodium levels in bread and communicating to bakeries the potential added value of low sodium bread products. They are also asking producers of low salt bread to include nutritional labels on their products, verifying the compliance of low sodium breads to specific standards (for example, low sodium foods are those containing 120 mg of sodium per 100 gram of product). Updating national standards with respect to sodium levels in bread is a priority.

The analysis of dietary intake is based on a major nutritional 24-hour food recall survey of randomly chosen 2697 people (including 939 children). Intake assessments were done using Lebanese composition tables that are primarily based on United States Department of Agriculture compositional analyses of American foods in the 1970s, together with some updating for local Lebanese recipes. Men are estimated to ingest 8.59 g/day and women 5.95 g/day; 26% of the salt was from bread. Two-thirds of salt intake is estimated to come from processed foods: 13% from processed meat, 12% from processed meat and 10% from cheese and labneh. These foods are major targets for reformulation. However, new studies with careful 24-hour urine measures conducted by those familiar with the technique (albeit using volunteers in Beirut), found a salt intake of 12.5 g in males and 7.5 g in women, which is probably a more realistic measure of the approximate salt intake in the country. Newly-developed food frequency techniques also suggest values similar to the 24-hour urinary measures, again signifying that Lebanon has very high salt intake with salt analyses of breads showing a striking variation in salt content and some cheeses having as much as 12.5% salt content. Consumer surveys have shown that knowledge about salt is limited, although more than half of those surveyed know that the salt content in their diet should be reduced. Nevertheless, basic knowledge about the harmful effects of salt is not yet prevalent among the public.

Morocco

Morocco produces around 358 000 tons of salt and imports about 850 tons. Salt use within the country is estimated to amount to be 336 000 tons, with an estimated half of this

being for food use rather than for chemical or other industrial use. The Ministry of Agriculture estimates that on a per capita basis, the use of salt amounts to 17 g/day, which is very high, but also reflects losses in cooking and in food manufacturing. However, preliminary analyses of the salt content in 37 snacks and restaurant meals in Casablanca found a very high salt content amounting to 1.5%–3% of these retailed foods. Seventeen traditional Moroccan meals were also assessed and these had an average salt content of 0.64 +/- 0.28g, indicating that some of the standard Moroccan dishes can also be high in salt. Cheeses have been found to vary in their salt content by type. Surveys of bakers have found that the usual amount of salt used by bakers is about 1.2 g salt/100 g flour (which amounts to about 1 g salt per 100 g fresh Arabic bread). The average bread intake is 365 g/person per day.

The national goal is to achieve a 10% reduction of salt in staple bread within 3–4 months. This will start the salt reduction process across the nation and reduce salt intake by about 0.438 g/day in the whole population. An awareness campaign for bakers (involving 300 bakeries) in the region of greater Casablanca was carried out in 2014 (70% of these bakers expressed their wish to join the salt reduction in bread programme). The President of the Federation of Bakers has conducted awareness campaigns with all associations of bakers throughout Morocco. In 2015, the Ministry of Health in collaboration with Ibn Tufail university will conduct a study to assess the impact of these awareness campaigns on salt reduction in bread. Around 5%–10% of bakers produce salt-free bread, but the usual salt content of bread varies markedly at present. The Ministry of Health is also establishing a national taskforce on salt reduction representing key stakeholders and partners. A general programme for reducing salt (and sugar and fat) is being negotiated with industrial agribusiness firms in collaboration with associations representing bakeries and patisseries, and the producers of dairy products and their derivatives, drinks, processed meats and oil. Meetings with the major food sectors to raise awareness of the need for food reformulation were held in 2014 and new guidelines have been established to reduce the salt provided to children in school meals.

Oman

After establishing a national task force in October 2014, a decree has now been issued by the Ministry of Health to regulate salt content in bread and eventually attain a level of less than 0.5 g salt/100 g. This has started by reducing the salt content by 10% in staple breads, starting in the major bakeries in Muscat. Thereafter this measure will be rolled out to all 11 governorates. The same measures for a progressive reduction in salt will be applied to food imports and the task force has now started working on how best to reduce the salt content of cheeses. The use of iodized salt only for both local food production and imported foods is now being mandated. The aim is to ensure that the top five contributors to salt intake are involved in the salt reduction programme.

A requirement is being established for all government departments serving food, such as the army, police, hospitals, schools, universities, and local and national government, to record for inspection their salt purchases each month. They are also required to reduce their salt intake by 10% every six months for two years to reduce catering use by 40%. The monitoring of salt purchases is very useful as a new tool and the methods employed need to be explored so that

the Region as a whole can learn from the process. Caterers are also now being targeted as part of a general educational campaign relating to the harmful effects of salt use.

Qatar

Qatar has reduced the salt content in bread by 10% since early 2014 through the main public bread supplier that provides nearly a third of the market's need for bread. A further 10% reduction in salt content of the same bread, to reach a 20% reduction, is currently being implemented in the main bakeries in Qatar, covering 60% of the market. There remains the challenge of how to ensure compliance by the other bakeries that cover the remaining 40% of the population.

Saudi Arabia

A national executive strategy for the gradual reduction of the the amount of salt and fat in food items is being developed. A joint initiative to reduce salt content by 10% is being undertaken with major companies and manufacturers of bread and baked food at a national level. It is currently at a preliminary stage and will progress in stages to reach the recommended target of a universal 30% decrease in salt intake. The challenge will then be to ensure that this applies to all subsidiary small bakeries across all regions of the country. A survey on average salt consumption by the Ministry of Health and the Saudi Food and Drug Authority is currently underway. Salt reduction strategies in the country will need to take account of the persisting prevalence of iodine deficiency goitre, which in some regions affects over 12% of the population.

Tunisia

The government has embarked on a major programme to improve the nutritional quality of the Tunisian diet and to combat obesity as well as noncommunicable diseases by reducing the fat, sugar and salt content of the diet. The prevention and management of obesity strategy runs from 2013–2017, with implementation being pilot tested in the city of Bizerte that has about 165 000 inhabitants. The initial programme of salt screening in the city was undertaken through a cross-sectional survey among adults aged 25–64 years, using stratified three stage random cluster sampling by district, then household, and then with two adults, as the basis for the study, but with the exclusion of those with diabetes, hypertension, renal disease and on diuretics. Salt intake was assessed by 24-hour dietary recall and by 24-hour urinary testing with potassium and creatinine being measured as well as sodium. A specific Tunisian food composition table was used to assess sodium intake from foods.

For the whole population, the median salt intake from 24-hour urinary sodium excretion was 8.1 g/day, significantly higher in men (8.8 g/day) than in women (7.5 g/day; $p < 0.001$). According to 24-hour dietary recall, salt intake among both genders was 10.2 g/day, significantly higher for men (11.3 g/day) compared to women (10.0 g/day). National data from 2010 suggested that daily French bread consumption per person was about 197 g (222 g in urban areas and 135 g in rural areas). The consumption of all types of bread was 245 g (240 g

and 253 g, respectively, in urban and rural areas). French bread intake contributed from 30% to 50% of the added salt intake (7.1 g/day at the national level).

A programme of salt reduction has started in Bizerte where salt content in bread is on average 1.6 g/100 g, so an initiative with 22 bakers was begun with the aim of progressively reducing the salt content of bread by 20% in the first six months and extending the reduction to 18 months. Further sampling of breads from 18 compliant bakers revealed an average fall in salt content of 24%, but the salt concentration was still high with salt content varying from about 1.0 g up to 1.6 g. Further reductions are planned as well as a national programme to replicate the Bizerte experience in the rest of the country. In addition, discussions have already begun with cheese manufacturers who have already placed a low salt cheese product on the market. It was emphasised, however, that all commonly-eaten cheeses in Tunisia should be chosen for salt reformulation. This is easy with some cheeses, but is more challenging with other types of cheese where reformulation changes their traditional flavour.

United Arab Emirates

Abu Dhabi Health Authority has started the Wegayeh initiative to require the health labelling of food served in restaurants.

3.2 Fat reduction

Egypt

There has been a major change in subsidy policies on fats, sugar and bread in Egypt due to the huge cost of these subsidies. There are now no longer direct subsidies on fats and oils. Previously, the government had mainly subsidized the import of palm oil as the cheapest option.

Gulf Cooperation Council

In its standard-setting role, the Gulf Cooperation Council has now begun the approval process for guidance on mandatory food labelling for total fat, saturated fatty acids, trans-fat and salt in all food imported or locally produced. This will become mandatory in all seven GCC countries. The draft Codex Standard specification for the elimination of trans-fat in foods (above 2% of the fat content of all foods locally produced and imported), which includes the requirement not to substitute saturated fat for trans-fats, has been finalized and now awaits the approval of ministers of health who have asked for a cost-benefit analysis of the proposed measures.

Iran (Islamic Republic of)

In 2014, the Iranian High Council of Health and Food Security approved the revision of the standards for trans-fatty acids to be less than 2%, and saturated fatty acid to be less than 25%, in the fats and oils used in the country. In order to reduce saturated fatty acid intake, the Ministry of Trade was asked to reduce the amount of imported palm oil. As a consequence, in 2014, palm oil imports were reduced from 70% to 30%, and in 2015 they will be reduced further to 15%.

Iraq

The Ministry of Trade has removed palm oil and ghee/shortening from the food subsidy system.

Kuwait

There has been a major change in policy on subsidies for the edible oil industry. Kuwait continues to subsidize dietary oils, but these must now have low levels of saturated fatty acids.

Qatar

The government continues to subsidize dietary oils but these must now have low levels of saturated fatty acids. They are considering changing the subsidy of the oil used by bakeries in order to remove palm oil and the saturated fatty acid-rich shortening which is currently used.

Tunisia

There is a major programme underway involving the four food oil refiners in Tunisia for the progressive reduction in their use of trans-fat. Trans-fat has major chemical advantages from a food oil and food processing point of view because its structure and melting temperature mean that it allows a crisp structure to food at normal temperatures and provides an excellent sensation in the mouth as the temperature of the mouth allows the trans-fats to melt in the mouth. To overcome this problem, and given the need not to use palm oil, the usual substitute for trans-fat as it also has a very stabilizing effect on the fat phase of foods, means that these companies have to develop new techniques for handling the fats and this is expensive. As palm oil imports are US\$ 100/ton cheaper than other oils, the industry would normally use palm oil, particularly given the particular physical benefits of palm oil with its rich content of relatively long saturated fats and other ingredients that help to stabilize the oil. Margarine production is therefore at risk, as is the generation of fats for baked goods, cakes, some confectionary and so on.

Although the major European food industry effectively removed the vast majority of its trans-fat from the diet over a period of a year or so, this was because they could apply new techniques that are more difficult for smaller Tunisian companies. In Denmark, where there is a law banning trans-fat use, the exclusion was achieved within six months but at a great cost to the margarine industry. In practice, the very influential Danish dairy industry strongly backed the ban which was a major financial blow to the dairy industry's rivals in the margarine industry. On this basis, the Ministry of Public Health, as the lead department in a cross-government task force, accepted the protracted timetable suggested by the industry, although the persistence of trans-fat in the diet clearly means that more Tunisians will have cardiovascular events than if there was an immediate ban.

4. CONCLUSIONS

- Despite much progress, there remains a need to monitor compliance by countries with the agreed set of interventions (which often need to be scaled-up), using measures of their impact at both national and regional levels.
- The sharing of evidence on what works in the Region is valuable.
- There is a need to review policies and action plans in each country to assess if there is a need to revise them.

5. RECOMMENDATIONS

To Member States

Salt reduction

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 by about 0.25 g per day in the whole population and can be progressively increased so that bread salt is brought down by a minimum of 30%–40%.
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. This approach is strongly supported by the main bakers' associations consulted.
5. Mandate use of iodized salt in local and imported food to ensure adequate maintenance of the population's iodine status and the avoidance of goitre and cretinism.
6. Identify the top five food contributors to salt/sodium other than bread in the national diet, such as cheese and processed meat, in order to develop national plans for their reformulation with less salt and fats (see below).
7. Review and progressively revise national food standards for bread to reflect the recommended minimum levels of salt/sodium content (a 30% reduction in salt/sodium in bread from current levels over an 18 month period). It may be possible in some countries to reduce salt content in bread by over 50%.
8. Establish a national group 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-hour urine measurements.
9. Expand salt reduction to cheese and other food product reformulation.
10. Consider adding taxes to salt, sugar, ghee and palm oil, and the use of the generated funds to support the poor or the health system.

Fat reduction

11. Introduce legislation to ban the sale, and therefore local production and importation, of products containing artificially produced trans-fatty acids (in oils and fats alone or as part of processed food products) in shops and catering outlets. Legislation is needed to establish the maximum content of all trans-fatty acids in products (maximum 2 g/100 g of oils).
12. Identify processed foods rich in artificial trans-fatty acids and determine the average population intake of these foods.
13. Require food importers to have all imported foods certified as free of artificially produced trans-fatty acids, and monitor compliance with national food standards and establish measures for non-compliance.
14. Develop national standards to limit the use of palm and coconut oil in the food industry.
15. Develop national standards to ensure the lower saturated fatty acids content of dairy products.
16. Reconsider social support policies, such as subsidies for the poor, allowing only the purchase of foods with low saturated fat content and modest amounts of total fat.
17. Establish mandatory labelling schemes for saturated fatty acids content that are easily understandable for most consumers (such as the traffic light system) and/or consider the establishment of a "low saturated fatty acids" label.
18. Scale-up fat reduction intake through targeting dairy products and palm oil imports.

To WHO

19. Provide technical support for policy implementation and enforcement in countries with salt and fat reduction policies.
20. Finalize the regional report on salt and fat intake at a population level.
21. Work with the Gulf Cooperation Council to finalize the implementation of measures to ban trans-fatty acids.
22. Conduct a regional study on the economic impact of salt, fat and sugar intake, and organize a technical consultation on food supply chain measures to discuss the findings of the study.
23. Develop communications and advocacy tools on salt and fat reduction.
24. Review the food subsidy system in the Region with a greater focus on countries such as Tunisia and Egypt where there is already new thinking on the value of changing food pricing while helping the poor by means other than food subsidies. It is important to remove the subsidy on unhealthy food components such as fat, oil and sugar.

Annex 1**PROGRAMME****Monday, 30 March 2015**

08:30–09:00	Registration	
09:00–09:30	Welcome remarks	
	- Introduction of participants	
	- Objectives of the consultation and expected results	<i>Dr Ayoub Aljawaldeh</i>
09:30–09:50	Assessing salt intakes: the challenges of dietary approaches and the use of 24-hour urine measurements	<i>Professor Francesco Cappucio</i>
09:50–10:00	Discussion	
10:00–11:20	Preliminary assessment of salt intakes in different countries of the Eastern Mediterranean Region Two countries describe the details of work-problems in collection, etc.	<i>Dr Ayoub Aljawaldeh</i>
11:20–12:00	Salt reduction in bread-experiences of:	
	- Bahrain	
	- Kuwait	
	- Islamic Republic of Iran	
	- Qatar	
12:00–12:20	Variation in salt content in bread survey of Egypt	<i>Dr May Mattar</i>
12:20–12:50	Critical issues to be considered in reducing bread salt content? Case study from Bahrain	<i>Dr Salah Almeer</i>
12:50–14:00	Discussion	
14:00–15:15	Salt reduction plans in:	
	- Egypt	
	- Lebanon	
	- Morocco	
	- Oman	
	- Saudi Arabia	
	- Tunis	
	- United Arab Emirates	
15:15–15:35	The challenge of identifying the different sources of salt in the diet: how to develop a strategy for salt intake reduction in coordination with the private sector/industry	<i>Professor Graham McGregor</i>
15:35–15:50	Key elements of food safety that would support the monitoring of salt levels in bread and other food items	<i>Professor Philip James Dr Jalila El Ati</i>
15:50–17:00	Plenary discussion: challenges and solutions for salt reduction in bread and other food items Recommendations for scaling-up implementation and priority interventions in salt reduction	

Tuesday, 31 March 2015

09:00–09:15	Day one brief	<i>Rapporteur</i>
09:15–09:35	The importance of saturated fat as well as trans-fat reductions: implications also for total fat	<i>Professor Philip James</i>
09:35–09:50	Levels of total fat/trans-fat/saturated fatty acids in the Eastern Mediterranean Region	<i>Dr Lara Nasredine</i>
09:50–10:00	Discussion	
10:00–10:15	Sources of trans-fat and saturated fatty acids – sources and monitoring variations within the region	<i>Dr Seyed</i>
10:15–10:45	Discussion	
10:45–11:00	The precise process for enacting legislation for banning the production of trans-fat: experiences of the Gulf Cooperation Council	<i>Dr Ayoub Aljawaldeh</i>
11:00–11:15	Iranian experience of trans-fat regulation	<i>Dr Zahra Abbollahi</i>
11:15–12:00	Best practices and recommended interventions for reducing trans-fatty acids in the Region: Egypt, Iraq, Iran (Islamic Republic of), Morocco, Tunis If legislation banning trans-fat is not an option, how to reduce trans-fat intake: food manufacturers and importers – who to approach and how to proceed	
12:00–12:45	Total fat and saturated fat sources in the Region need: a) Tunisian overview of sources of fat and types of fat to supplement b) Moroccan expert on food supply in oils and fats sources c) Islamic Republic of Iran: fat supply chain analysis	<i>Dr ElSayed Hasanin</i> <i>Dr Majid Hajifaraji</i>
12:45–14:00	Discussion	
14:00–15:00	Internal issues relating to vegetable oil processing: Egyptian and Tunisian experts	
15:00–15:45	How to develop a strategy on total fat intake reduction with a specific emphasis on saturated fat in the Eastern Mediterranean Region – different options	<i>Professor Philip James</i>
15:45–16:30	Plenary discussion: challenges and solutions for fat reduction strategies in food items	
16:30–17:15	Plenary discussion: recommendations for scaling-up implementation and priority interventions in fat reduction	
17:15–17:45	Challenges and recommendations Closing	

Annex 2

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