



Survey on Members States’
Implementation of the
**EU Salt Reduction
Framework**

**Survey on Members States’
Implementation of the
EU Salt Reduction
Framework**

The information contained in this publication does not necessarily reflect the opinion or the position of the European Commission.

Neither the European Commission nor any person acting on its behalf is responsible for any use that might be made of the following information.

Table of contents

Preface	4
Context	5
Relationship between salt intake and health issues	6
Progress since the adoption of the Salt Reduction Framework	7
The current level of salt intake throughout the EU	12
Majors sources of salt in the diet	16
Working with economic operators	17
Monitoring approaches	20
Factors influencing implementation	21
Conclusions	23
More detailed information about individual national salt reduction initiatives	24

Preface

On 8 June 2010, the Employment, Social Policy, Health and Consumer Affairs Council adopted conclusions on action to reduce population salt intake for better health¹. The Council Conclusions set out the political commitment by Ministers towards the shared objectives and goals of the common European Union Framework on voluntary national salt² initiatives (the 'Framework')³ and gave added momentum to implementation efforts.

The Conclusions welcomed the work on the Framework since 2008 of the High Level Group on Nutrition and Physical Activity (the 'High Level Group') chaired by the European Commission and confirmed the need for a regular monitoring to measure progress. Following the mandate of the Council, the Commission services compiled this report providing an analysis of the situation and actions taken in the European Union (EU) and its Member States in 2012.

This report is an overview and synthesis of responses to a questionnaire sent to Member States in August 2012⁴. The questionnaire sought to capture activities at national level from mid-2008 until mid-2012 that had taken place within the context of the Framework.

¹ OJ (2010/C 305/04)

² http://ec.europa.eu/health/archive/ph_determinants/life_style/nutrition/documents/salt_initiative.pdf

³ The nutrient that should be reduced is sodium. As most sodium is consumed in the form of sodium chloride, which is salt, the High Level Group decided to communicate about 'salt' and not about 'sodium'. Moreover, this is better understood by the public. Therefore, this report mostly refers to the term 'salt'. The amount of sodium is multiplied by the factor 2.5 to give the equivalent amount of salt.

⁴ Responses were received from 27 of the 29 participating European countries; 25 Member States of the EU plus Norway and Switzerland. The Czech Republic and Estonia did not submit a completed questionnaire. However, data from their responses to the 2009 survey was used for drafting some sections of this report

Context

EU strategy on nutrition, overweight and obesity related health issues

The Strategy for Europe on Nutrition, Overweight and Obesity related Health Issues, adopted in May 2007, sets out the Commission's priorities to contribute to reducing ill health due to poor nutrition, overweight and obesity. One of these priorities is 'making the healthier option available', which encompasses actions on nutrient composition of manufactured foods including food reformulation initiatives such as salt reduction campaigns. The European Commission brought together a High Level Group of Member States' representatives, aimed at addressing a range of health topics related to nutrition and physical activity through the exchange of good practice. On 7 December 2007, the Council of Ministers of the European Union welcomed the initiative of the European Commission to propose salt reduction as a first priority for discussion within the High Level Group.

European Union framework for national salt initiatives

Following two salt expert workshops that were chaired by the European Commission in January and June 2008, Member States agreed to the creation of a common European Union Framework on voluntary national salt initiatives. The Framework set a benchmark of a minimum of 16 % salt reduction over 4 years for all food products, also encompassing salt consumed in restaurants and catering. The Framework was approved by the High Level Group in July 2008, with the understanding that participation was voluntary. Member States had the flexibility to decide on different benchmarks or timelines in order to tailor their initiatives to the national situation.

The overall goal of the Framework on salt reduction was to contribute towards meeting the World Health Organization (WHO) or national recommendations on the appropriate level of salt intake. Five key elements of a comprehensive approach towards salt reduction were identified: data collection; setting of benchmarks and major food categories; reformulation by the industry; raising public awareness; monitoring and evaluation.

The Framework aimed to support and reinforce national plans, enabling comparison of progress across the EU. The common approach facilitated the delivery of coherent and coordinated messages to the food industry about the importance of reducing

salt and it generated momentum and measurable action. Salt reduction is only one element of the broader efforts on reformulation designed to improve the nutritional quality of foods, such as reducing the content of total fat, saturated fatty acids, trans fatty acids or sugars.

In order to maximise the impact of salt reformulation, food manufacturers were invited to prioritise products with the largest market share. Furthermore, efforts were to be designed for salt reformulation to take place across the full range of food products from premium to economy items, so that all population groups could benefit.

Implementation of the Salt Reduction Framework

In September 2008, the European Commission invited the High Level Group members to inform on their ongoing or planned national salt reduction initiatives. All EU Member States, Norway and Switzerland responded to the survey.

On 21 October 2009, the European Commission organised a seminar on salt reduction in bread, including technical, taste and other parameters for healthy eating, inviting national and EU level bakery associations. The International Federation of Plant Bakeries (AIBI) signalled that it was willing to be a partner in salt reduction initiatives.

Within the Salt Framework, it was agreed that by the end of 2009, participating Member States would provide a first evaluation and monitoring report to the Commission. In order to gather this information, the Directorate-General for Health and Consumers of the European Commission sent out questionnaires early 2010 to assess such data and information. The results of this survey were set out in a report published in the beginning of 2012.⁵

On 8 June 2010, the Employment, Social Policy, Health and Consumer Affairs Council adopted Conclusions on action to reduce population salt intake for better health. Following the mandate of the Council to analyse the situation and actions taken in the EU and its Member States and report the findings in 2012, the Commission compiled this report. By updating the first report that covered the first one and a half years of the Framework, the present report covers the entire time span – 4 years – of the Framework, from mid-2008 until mid-2012.

⁵ http://ec.europa.eu/health/nutrition_physical_activity/docs/salt_report_en.pdf

Relationship between salt intake and health issues

Salt and health

Evidence suggests that current levels of sodium consumption in Europe contribute to increased blood pressure in the population, and a consequent higher risk of cardiovascular and renal disease.⁶ There is a clear link between high sodium intake and high blood pressure; likewise there is conclusive scientific evidence showing that reduction of sodium consumption reduces blood pressure. The greatest number of deaths attributable to cardiovascular disease occur in the upper range of the normal blood pressure, at levels which would currently not be treated with drugs. According to Eurobarometer data published in 2007, the most common cause for respondents to receive long-term medical treatment is high blood pressure (hypertension). Over a third (36 % EU-27) of respondents who are currently receiving long-term medical attention, mentioned this as forming part of the basis or the sole reason for such care.

Intake recommendations

The WHO recommends no more than 2 grams of sodium (5 grams of salt) per day. Approximately ninety five per cent of sodium is consumed in the form of salt. According to Member States data collected for the survey, the current daily salt consumption in most European countries is estimated or measured to range between 8 to 12 grams per day, with few Member States above and few below this intake level.



©Stockphoto.com/monkeybusinessimages

⁶ European Food Safety Authority: Opinion of the Scientific Panel on Dietetic Products, Nutrition and Allergies related to the Tolerable Upper Intake Level of Sodium. The EFSA Journal (2005) 209, 1-26

Progress since the adoption of the Salt Reduction Framework

Participating countries

Since the Framework was adopted, there has been an increase in the number of countries with salt reduction initiatives in place. Today, a total of 29 European countries, consisting of all EU Member States as well as Norway and Switzerland, have salt reduction initiatives in place.

In a survey carried out by the European Commission in 2010, many of the countries that had salt reduction initiatives in place before the Framework was adopted indicated that the Framework influenced their activities. Bulgaria for instance, reported that whilst they had existing national activities on salt reduction, the Framework had provided a model for the national program and helped to support action. Finland and Ireland said that the Framework had strengthened their approaches. Five countries (Belgium, Italy, Portugal, Spain and Switzerland) reported that the Framework served their national frameworks to define and support the strategy and to empower actions towards the different food sectors. Seven countries (Denmark, Germany, Latvia, Luxembourg, Romania, Spain and Sweden) said that it helped to trigger or increase dialogue with stakeholders, especially the food industry. Eight countries (Austria, Cyprus, Greece, Hungary, Malta, Norway, Poland and Slovenia) noted that the Framework initiated the strategic planning or national action on salt reduction. Portugal reported that national legislation on the salt content of bread was triggered, as well as an increase of the value added tax rate for salty products.

A number of countries highlighted the importance of the added European dimension that was introduced by the Framework to their national activities on salt reduction. The Netherlands and the United Kingdom (UK) noted that the EU Framework underlined the shared European focus on the issue, even though national activities had already started by the time the Framework was adopted. France also stated that while their national policy on salt reduction was initiated in 2001, the European initiative confirmed and consolidated this national policy and referred to the fact that different Member States act together, reinforces the activities. Furthermore, as Luxembourg is widely dependant on the international marketplace for food, they highlighted the importance and the need of EU-wide efforts and objectives for food reformulation.

National voluntary and legislative approaches

The Framework describes a voluntary approach to work on salt reduction. Most countries follow such a voluntary approach in their national initiatives. Five countries combine a voluntary approach to salt reduction with a voluntary labelling measure by introducing healthy eating logos. Denmark, Norway and Sweden have introduced the 'Green Keyhole' symbol, the Netherlands has the comparable 'My Choice' logo and Italy developed the 'Smiling Heart' logo. Products that are using those logos have to meet a number of nutritional criteria; maximum levels of salt content exist for a number of product categories.

Thirteen countries (Belgium, Bulgaria, Finland, Greece, Hungary, Latvia, Lithuania, Netherlands, Portugal, Romania, Slovak Republic, Slovenia and UK : Wales) combine a voluntary approach with legislative measures, about half of which were in place before the Framework was introduced. After the Framework was agreed in 2008, some of the existing laws were tightened or new legislation was introduced.

With regard to legislative measures, laws limiting the maximum salt content in bread or nutritional criteria for mass caterers were most frequently reported. Seven countries (Bulgaria, Greece, Latvia, Lithuania, Romania, Slovenia and UK: Wales) indicated standards for mass caterers and foods allowed to be sold in schools involving criteria on salt levels, covering kindergartens, schools or hospitals. Hungary was in the process of drafting a law on nutritional criteria for mass caterers, which had not yet been adopted. Seven countries (Bulgaria, Belgium, Greece, Hungary, Netherlands, Portugal and Slovak Republic) referred to maximum levels of salt for some food categories, mostly for bread. While laws on maximum levels of salt in bread existed in Belgium, Greece and the Netherlands before the Framework started in 2008, the level in the Netherlands was tightened in 2009 at the request of the bakery sector and another tightening will take place per their request in 2013. Finland reported their national legislation on products entitled to EU subsidies, as well as compulsory 'warning labels' for highly salty foods in some food categories. Hungary and Portugal have introduced taxes for some salted product categories. Detailed information about the different legislative approaches in the EU is given in Table 1.

Table 1
Legislative approaches to salt reduction

Country	Approach	Legal requirement	Year of introduction of law/modification
Belgium	Max. level	Royal decree: bread max. 2% salt on dry matter (1.7% at flour or 1.2-1.4% salt on final product); not applied to imported bread	1985
Bulgaria	Max. level	Special Ordinance for healthy nutrition at schools: all school buffets and canteens and Special Ordinance for healthy nutrition at kindergarten: all kindergarten canteens: there are special requirements for salt reduction.	2009 2011
	Max. level	Standards for flour and bread - 3 type of flour and 3 typical national type of bread ($\leq 1,2$ g salt/100 g bread); Bulgarian State Standards for milk products (Bulgarian white cheese - white cheese in brine - $3,5 \pm 0,5\%$ salt, Bulgarian yellow cheese - yellow cheese "Kashkaval" - $1,8 - 3,0\%$ salt); Approved standards "Stara planina" for meat and poultry products (≤ 2 g salt/100 g; for durable boiled smoked sausage - $\leq 3,5$ g salt/100 g, Approved Branch Standard for lutenica (product from processed tomato and vegetable mixture - $\leq 1,7$ g salt/100 g). Products produced according to Bulgarian State Standards should be with lower quantities of salt	2011-'12
Finland	Warning label	National legislation on compulsory 'warning labelling' of high salt foods	From the 1980's Tightened 2009
	Max. level	National legislation on products entitled to EU's subsidies (School Milk Scheme): upper limit to salt content of eligible products (cheese in 1,3%)	2009
		Quality criteria for meals to get subsidies for meals at university restaurants, have to pass; were renewed and now contain limits for salt in main meals and all meal components	2011
Greece	Max. level	Food and Drinks Code of Greece: bread $< 1.5\%$ added salt Tomato juice: max. 1% salt Tomato concentrates: single concentration (i.e. tomato solids min. 22%) and semi-concentration (i.e. tomato solids at least 16%) max. 2% salt; double-concentration (i.e. tomato solids at least 28%) and triple concentration (i.e. tomato solids at least 36%) - packages of up to 10 Kg net weight max. 3% salt - packages of more than 10 Kg net weight max. 5% salt Concentrated Tomato puree paste: max. 4% salt	1971 Processed tomato products under revision
	Max. level	Nutrient profiles that serve as the scientific basis for legislation regarding the list of foods allowed to be sold in school canteens include sodium level requirements max. level of sodium in biscuits: 0.5 g/100g	2006 Revision in progress

Hungary	Max. level	Codex Alimentarius Hungaricus modified salt content for bread and some other bakery products (on dry matter): Certain bakery products (1-3/81-1): White bread: from 1.1.2015 >1.3%, < 2.5% from 1.1.2018 >1.3%, <2.35% Baked products (2-81): different bread: from 1.1.2015 >1.3%, < 2.5% from 1.1.2018 >1.3%, <2.35%	2012
	Tax	Act CIII on public health product tax: salty snacks with salt content exceeding 1g/100g and condiments (soup and other powders, artificial seasonings) above 5 g salt /100 g	2011
	Max. level	'Nutritional recommendation for mass caterers' issued by Chief Medical Officer in 2011 along with the Normative Order for the Government Office Policy Administration Services of Public Health (monitoring check list enabling to control compliance with recommendations); documents together form a draft proposal for a ministerial decree	Recommendation issued (ministerial decree is in progress)
Latvia	Max. level	Dietary standards in schools, kindergartens, long-term social care institutions and hospitals. Sausages, frankfurters, dried, smoked, salted meat and fish products, factory made ravioli, frozen manufactured meatballs and fish fingers, etc. are allowed once a week if they contain at least 70 % meat or 60 % fish, salt <1.25 g per 100 g of meat products and 1.5 g per 100 g of fish product. Amount of salt in the prepared meal is also limited	2012
Lithuania	Max. level	'Course of action for Nursery school, Primary and Secondary school children and Foster Home Nutrition', article 17 prohibits confectionary which contains sodium > 0,4 g/100g	2011
Netherlands	Max. level	Bread max. 2.5% salt on dry matter, tightened to max. 2.1% salt on dry matter (1.8% salt in flour). Per 2013 it will be tightened again to 1.8% salt on dry matter (1.5% in flour)	Beginning of 20th century /changed in 2009, next change in 2013
Portugal	Max. level	Bread ≤ 1.4g salt/100g	2009
	Tax	Value added tax on salty products	2012
Romania	Max. level	Ministerial Order 1563/2008: foods not recommended for school and pre-school children: food with salt content above 1.5 g salt/100 g or 0.6 g sodium/100 g (not allowed to be sold in schools)	2008
Slovak Republic	Max. level	National legislation, focus on salt in some food categories	1996 / currently preparing an amendment
Slovenia	Max. level	Nutritional recommendation for infants, kindergartens, schools, students, workers at the workplace and hospitals. Nutritional recommendation for salt content in bread and meat products.	2010
UK: Wales	Max. level	mandatory requirements for foods vended in hospitals requiring hospital caterers to vend lower salt products (as defined by FSA traffic light labelling criteria)	

Benchmarks and major food categories

The Framework sets a benchmark of a minimum of 16 % salt reduction over 4 years for all food products, also encompassing salt consumed in restaurants and catering. Products should be reduced by 4% per year in order to allow consumers to adapt to the slightly decreasing salty taste and in order to ensure continuous progress. Member States may set individual benchmarks as the Framework acknowledges the need for flexibility for Member States to shape their approaches to salt reduction according to national specificities. Thirteen Member States (Austria, Belgium, Denmark, Finland, France, Germany, Hungary, Lithuania, Portugal, Slovenia, Spain, Sweden and UK: England and Wales) developed or are in the process of developing specified national benchmarks for salt reduction, covering between 1 to 80 food categories. Switzerland noted that they are in the process of agreeing on target levels per food

category with the food industry. Three countries reported on general national reduction benchmarks; Cyprus aims at a reduction of 10 % in 5 years, Malta by 10 % by 2020 and Spain by 16 % in 4 years. Five countries (France, Malta, Norway, Switzerland and UK: England and Wales) indicated population intake levels as targets for their national salt reduction strategies.

The food categories identified in the Framework as priority for activities match the food categories that most countries chose to focus on in their national salt reduction initiative. Bread was most frequently identified by countries, followed by meat products, cheeses and ready meals. The number of food categories which were in focus of national action varied from one (Austria, Germany, Greece, Malta and Slovenia, all of them choosing bread) to all food categories containing salt (Belgium, France and Spain) or to all those food categories which contribute the most salt in the diet (UK: England and Wales).

Examples of specific reduction benchmarks or benchmarks that are under discussion for bread:

Austria:	reduction by 15 % in 4 years
Denmark:	reduction to a maximum of 1.1 to 1.2 g salt in 100g bread, depending on the kind of bread
Germany:	working on a reduction to a maximum of 1.6 % salt in 100g fresh bread, depending on the kind of bread (wheat, rye, etc.), timeline not yet defined
Ireland:	reduction by 16 % starting from 2004
Italy:	reduction by 15 % in 4 years
Lithuania:	reduction by 5 % until 2013
Portugal:	reduction to a maximum of 1.4 g salt in 100g bread
Spain:	18 % reduction starting in 2004; this was over-achieved
Slovenia:	reduction to a maximum of 1.0 g salt in 100g bread over 10 years, reduction by 4% per year
UK (England and Wales):	2010 targets: reduction to a sales weighted average of 1.1 g salt in 100g bread and rolls without additions reduction to a sales weighted average of 1.3 g salt in 100g bread and rolls with additions 2012 targets: reduction to a sales weighted average of 1.0 g salt in 100g bread and rolls without additions reduction to a sales weighted average of 1.2 g salt in 100g bread and rolls with additions

Changes in salt intake

Ten out of the twenty-four countries reporting on changes in the national salt intake stated that no data was available; about half of them reported that this lack of data was due to a lack of financial resources. While one country estimated that salt intake had decreased (Cyprus), three countries indicated a measured decline in salt consumption. England and Wales reporting from the UK, stated a continued decline in salt consumption since they started their national initiative in 2000/2001; for the period of the Framework the average salt intake decreased by around 0.5 grams per person, from 8.6 grams to 8.1 grams between 2008 and 2011. Finland, France and

Lithuania measured a decrease in salt intake by 26 %, 5.2 % and 27 % respectively for periods preceding the Framework. Four countries (Netherlands, Slovak Republic, Sweden and Switzerland) could not detect a change in salt consumption for a period that was partly covered by the Framework. Five countries (Belgium, Finland, France, Hungary and Slovenia) reported that monitoring was planned over the next three years, and three countries (Germany, Luxembourg and Portugal) plan to evaluate their national salt intake levels in the next two years using improved data collection methods. It is expected that in the coming years, new data on intake and intake trends will be available, at least for some EU Member States.

Public Awareness Campaigns

Sixteen countries have developed public awareness campaigns on salt in their country since the adoption of the Framework. For example, Cyprus developed a public awareness campaign on salt with a number of publications and initiatives; it was decided that one week per year in November is attributed to the prevention of hypertension and salt reduction. Thirteen countries (Austria, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Latvia, Netherlands, Norway, Poland, Slovenia and UK:

England) reported that their consumer education on salt issues takes place as part of broader campaigns and general nutrition education about a healthy diet. Finland noted that raising public awareness on salt is for them a much broader issue than having campaigns. They work on structural changes to improve public awareness such as improving information via the educational system, labelling and the health care system, viewing such an approach as a more sustainable way of improving public awareness. Such a holistic approach is also followed by other countries.



Denmark, Norway and Sweden are all promoting the 'Green Keyhole' labelling scheme and Denmark is running a parallel public awareness campaign to highlight the benefits of the scheme in stores. In the Netherlands a healthy choice logo called 'My Choice' has been introduced. Food products must respect specific maximum salt levels for different product categories in order to bear those logos. Lithuania plans to introduce the 'Green Keyhole' labelling scheme at the end of 2012. In Italy a 'Smiling Heart' logo was developed for a program on prevention of non-communicable diseases which appears on the packaging of reformulated, lower salt products if authorized by the Ministry of Health. In the UK (England) a voluntary front-of-pack nutrition labelling scheme was introduced with the aim to provide easy access to nutritional information per serving for salt and other nutrients. Such a labelling scheme can support public awareness raising activities in the UK (England) that aim at increasing the motivation of consumers to include the salt content of foods in their decision making process when purchasing food.

Evaluation

Only a few countries have undertaken definitive evaluations of their public awareness raising activities, among them Portugal, Slovenia and the UK. Portugal ran campaigns for several years with different intervals and target audiences. Slovenia reported the results of their evaluation with computer-assisted telephone interviews in February 2011 as compared to baseline levels of public awareness about salt measured in April 2010 before the campaigns started. The UK has a wide-ranging campaign and referred to the information on its web-site. Bulgaria reported plans to evaluate their campaigns in 2013. Denmark reported public awareness raising campaigns about the 'Green Keyhole' label in the fall of 2012 and their plan to measure its effect in general as well as with specific link to consumer knowledge on salt and

consumer behaviour. Ireland has run a series of public information campaigns in partnership with the Irish Heart Foundation. France has evaluated the impact of healthy eating messages that included information about salt.

At the European level, awareness about the importance of avoiding eating too much salt has increased since 2005. Data about the public perception of a healthy diet was gathered in October 2009 as part of a special Eurobarometer survey on health determinants⁷. Respondents were asked about their perception of a healthy diet. In 2009, 24 % of the EU 27 mentioned 'avoid/ do not eat too much salt' as one of the issues involved, whereas in 2005, 19 % (of EU25) mentioned the same issue.

⁷ http://ec.europa.eu/public_opinion/archives/ebs/ebs_329_sum_en.pdf

The current level of salt intake throughout the EU

Salt intake of adults

Estimates of salt consumption since the 1990s in nearly all countries show that intakes are too high with the majority ranging between 8 and 12 grams of salt per day (Table 2, on page 14). Germany, Cyprus, Bulgaria and Latvia reported the lowest estimates of salt intakes – 6.3 grams, 6.5 grams, 7.1 grams and 7.3 grams respectively. The Czech Republic reported the highest estimate of salt intakes at 13.6 grams per day, followed by Slovenia, Hungary and Portugal – 12.7 grams, 12.5 grams and 12.3 grams respectively. Salt intakes are generally higher in men than in women. For adult men, the salt intake range is from 6.5 to 16.6 grams per day, with

Salt intake of children

Seventeen countries provided information on salt intake in children, this information is summarised in Table 3, on page 15. The different age ranges used for the assessments hamper the comparability of the data. For the oldest age group of adolescents (here defined as the age range between 14 or 15 and 17 or 19) estimates of salt consumption are available from five countries; Austria, Bulgaria, Germany, Netherlands and Slovenia. Intake levels



data being currently unavailable in two countries. For adult women, the salt intake range is from 5.4 to 12.3 grams per day, and data is again unavailable in two countries. The most striking examples of the gender difference in salt intake are in Latvia, the Czech Republic and Lithuania where men's salt intake (9 grams, 16.6 grams and 10.9 grams respectively) is reported to be more than one third higher than women's salt intake (5.6 grams, 10.5 grams and 7.1 grams respectively).

The regions with the highest reported salt intake levels are East and South Europe, as demonstrated in the map in Figure 1 on page 16, illustrating salt intake levels of adults in European countries participating in the Framework.⁸

range between 6.8 and 10.5 grams per day. The intake levels in this age group were lower than the intake levels of adults in the same countries except for Bulgaria and Germany, where adolescents aged 14 to 19 had an intake level of 7.4 grams per day (Bulgaria) or adolescents aged 15 to 17 had an intake level of 8.5 grams per day (Germany), which for both countries was well above the average intake level for the adult population at 7.1 grams or 6.3 grams respectively per day. In Romania an evaluation for salt intake in children is in progress.

⁸ Hungary, Norway and Sweden indicated salt intake levels for Figure 1 that differ from the average intake levels noted in Table 2.

Data collection and accuracy of data

The data reported by Member States has been collected from the 1990s through to 2012.

The main collection methods used are: 24 hour dietary recall, collection of 24 hour urine samples and dietary records. The collection of 24 hour urine samples provides accurate information on salt intake at population level, but neither the origin of the salt nor the means to reduce it can be identified.⁹ In order to identify the dietary sources of the salt being consumed, several other tools need to be used, including evaluation of dietary intake (foods consumed, amounts and frequency of consumption), measurement of salt content in foods and assessment of salt added during cooking or at table. The 24 hour recall is an in-depth interview that collects detailed information on all foods and beverages consumed by a participant during the previous 24 hours and is understood to be less accurate than 24 hour urinary collection, because it usually underestimates salt intakes. Also, dietary records are understood to provide less accurate information about the salt intake of populations.

For adults, only four countries had average estimates of around 7 grams or less (Bulgaria, Cyprus, Germany and Latvia) and all of these were estimated with dietary studies and not with 24 hour urinary sodium collections. All of the countries with the highest estimates of salt intakes used 24 hour urinary sodium collections to estimate salt intake, either alone (Slovenia and Portugal) or in combination with the 24 hour dietary recall method that was repeated for several days (Czech Republic and Hungary). Most of the countries that had average estimates of between 8 and 12 grams of salt, used 24 hour urinary collections as the method of assessment. Countries most frequently used 24 hour urinary collections and a 24 hour dietary recall method to assess salt intake.

For children, countries most frequently used dietary records to estimate salt intake, followed by 24 hour recalls and, less frequently, food frequency questionnaires and 24 hour urinary collections.

Sample sizes for studies with the collection of 24 hour urine samples and dietary studies ranged from 143 to 4580 study participants.

The reported salt intake levels of different countries in Tables 2 and 3 provide only a limited comparability due to a number of factors, such as different data collection methods, inclusion or exclusion of salt added during cooking or at the table and different age ranges covered. However, the reported data can serve as orientation ranges describing the problem of excessive salt intake in the EU. When data from different studies was reported or ranges were given, the average was calculated for comparisons.



©iStockphoto.com

⁹ World Health Organization: Strategies to monitor and evaluate population sodium consumption and sources of sodium in the diet, report of a joint technical meeting convened by WHO and the Government of Canada, October 2011

Table 2
Estimates of salt intakes of adults and measurement method

Country	Adult men	Adult women	Year	Collection method(s)	Sample size
Austria	9 g/day	8 g/day	2000-7	3 day dietary record, 24 hour dietary recall	3000
Belgium	11.8-11.5 g/day	8.6-9.9 g/day	2009	urinary sodium for 24 hour collections	280
Bulgaria	6.8-8.9 g/day	5.9-6.8 g/day	2004	24 hour dietary recall	1022
Cyprus	5-8 g/day	5-8g/day	2005-8	24 hour dietary recall food frequency questionnaire	1000
Czech Republic	16.6 g/day	10.5 g/day	2003/4	Repeated 24 hour dietary recall urinary sodium for 24 hour collections	2590
Denmark	9.8 g/day	7.3 g/day	2003-8	7 day dietary record (salt added at dinner not included)	3354
Estonia	Approx. 10 g /day	Approx. 10 g/day	1997	self reported data	Ca. 1000
Finland	9.3 g/day	6.8 g/day	2007	24 hour dietary recall (underreporters excluded), 2x3 day dietary records	2039 1518
France	9.7*-9.9° g/day	7.4*-7.2° g/day	2006/7	7 day dietary record* 3x24 hour dietary recall (including an estimation of 1g table salt)°	1920* 3115°
Germany	7.1 g/day	5.4 g/day	2010/11	24 hour dietary recall	2000
Greece	currently unavailable	currently unavailable	-	-	-
Hungary	11.2*-17.2° g/day	9.6*-12.0° g/day	2009/10	urinary sodium for 24 hour collections* 3x24 hour dietary recall°	163* 1165°
Ireland	11.1 g/day	8.5 g/day	2007-10	urinary sodium for 24 hour collections	559
Italy	10.8 g/day	8.3 g/day	2008	urinary sodium for 24 hour collections	National sample of 1196 men and 1231 women
Latvia	9 g/day	5.6 g/day	2007-9	24 hour dietary recall, food frequency questionnaire	2000
Lithuania	10.9 g/day	7.1 g/day	2007	24 hour dietary recall	3000
Luxembourg	9.1 g/day	9.1 g/day	2007/8	food frequency questionnaire	1432
Malta	Currently unavailable	Currently unavailable	-	-	-
Netherlands	9.3-10.2* g/day 10.1° g/day	7.3-7.5* g/day 7.5° g/day	2007-10	2x24h dietary recall*, urinary sodium for 24 hour collections°	3819 incl children* 342°
Norway	10 g/day estimate	Somewhat lower than males	1997; 2010/11	food frequency questionnaire, 2x24 hour dietary recall (including an estimation for table salt)	2672 1787
Poland	11.5 g/day	11.5 g/day	2009	household budget survey (whole population)	37 302
Portugal	12.3 g/day estimate	12.3 g/day estimate	2006	urinary sodium for 24 hour collections	426, probably not representative
Romania	12.26 g/day	10 g/day	since 2010	7 day dietary record in national survey	1457
Slovak Republic	9.6-9.6 g/day	6.4 -6.8 g/day	2009	24 hour dietary recall and food frequency questionnaire	720
Slovenia	14.3 g/day	11.0 g/day	2007	urinary sodium for 24 hour collections	143
Spain	11.5 g/day	8.4 g/day	2009	urinary sodium for 24 hour collections	406
Sweden	9 g/day	7 g/day	2011	4 day dietary record in national survey	1797
Switzerland	10.6 g/day	7.3 g/day	2010/11	urinary sodium for 24 hour collections and questionnaire	1448
The United Kingdom: England	9.3 g/day	6.8 g/day	2011	urinary sodium for 24 hour collections, food consumption survey	547
The United Kingdom: Wales	9.7 g/day	7.7 g/day	2008 (UK)	urinary sodium for 24 hour collections	700 (UK)

Table 3
Estimates of salt intakes of infants, children and adolescents and measurement method

Country	Adult men	Adult women	Year	Collection method(s)	Sample size
Austria	3-6 y: 4.5 g/day 7-14 y: 5.8 g/day 15-18 y: 6.4 g/day	3-6 y: 4.5 g/day 7-14 y: 6.9 g/day 15-18 y: 7.1 g/day	2000-2	3 and 7 day weighted dietary record	989
Belgium	<4 y: 4.6 g/day ≥4 y: 5.0 g/day	<4 y: 4.9 g/day ≥4 y: 4.6 g/day	2009	urinary sodium for 24 hour collections	280
Bulgaria	1-3 y: 4.8 g/day 3-7 y: 6.1 g/day 7-10 y: 6.5 g/day 10-14 y: 7.9 g/day 14-19 y: 7.9 g/day	1-3 y: 5.2 g/day 3-7 y: 6.2 g/day 7-10 y: 6.7 g/day 10-14 y: 7.6 g/day 14-19 y: 6.8 g/day	2004	24 hour dietary recall	157 329 212 270 292
	1-2 y: 3.5 g/day 3-4 y: 4.8 g/day	1-2 y: 3.6 g/day 3-4 y: 4.5 g/day	2007	2x 24 hour dietary recall	607 624
Denmark	4-9 y: 7.5 g/day 10-17 y: 8.8 g/day	4-9 y: 6.5 g/day 10-17 y: 6.8 g/day	2003-8	7 day dietary record (salt added at dinner not included)	1077
Finland	Infants: 1.85g/day 3 y: 4.6 g/day 6 y: 5.8 g/day	Infants: 1.83 g/day 3 y: 4.25 g/day 6 y: 5.1 g/day	2003-5	3-day dietary recall	455 471 713
France	3-17 y: 6.8*-7.4° g/day	3-17 y: 6*-6.3° g/day	2006/7	7 day dietary record* 3x24 hour dietary recall (including an estimation of 1g table salt)°	1450* 1675°
Germany	6 y: 4.6 g/day 7-9 y: 5.6 g/day 10-11 y: 5.8 g/day 12 y: 7.6 g/day 13-14 y: 8.4 g/day 15-17 y: 10.4 g/day	6 y: 4.3 g/day 7-9 y: 4.8 g/day 10-11 y: 5.6 g/day 12 y: 6.6 g/day 13-14 y: 6.9 g/day 15-17 y: 6.6 g/day	2007	3 day dietary record or 4 weeks dietary history	2400
Greece	Boys and girls: 10-12 y: 56 % <3.8 g/day 21 % 3.8-5.6 g/day 23 % >5.6 g/day	-	2009	food frequency questionnaire (salt added at table or at cooking not included)	4580
Hungary	11-14 y: 13.3 g/day	11-14 y: 12.1 g/day	2005/6	3 day dietary record	235
Ireland	Boys and girls: 1 y: 2.3 g/day 2y: 3.0 g/day 3 y: 3.1 g/day 4 y: 3.6 g/day	-	2010-12	7 day dietary record (excludes salt added in the home)	500
	4-6 y: 4.5 g/day 7-10 y: 7.5 g/day	-	2003-4		594
Italy	6-18 y: 7.6 g/day	6-18 y: 6.9 g/day	2010	urinary sodium for 24 hour collections	1422
Latvia	7-16 y: 7.1 g/day	7-16 y: 5 g/day	2007-9	24 hour dietary recall, food frequency questionnaire	2000
Netherlands	7-8 y: 6.1 g/day 9-13 y: 8.0 g/day 14-18 y: 9.4 g/day	7-8 y: 5.7 g/day 9-13 y: 6.7 g/day 14-18 y: 7.3 g/day	2007-10	2x24 hour dietary recall (for the youngest children interview with parents).	3819 in total, incl. children
Romania	5-18 y: not yet available	5-18 y: not yet available	2011	7 day dietary record	Ca. 840
Slovak Republic	Boys and girls: 2-6 y: 5.43 g/day	-	2009	24 hour dietary recall	4320
Slovenia	Average age: 4.4 y:5.09 g/ day* 14-17 y:11.5 g/day°	Average age: 4.4 y:4.81 g/day* 14-17 y: 9.4 g/day°	2007* 2003-5°	3 day dietary records* food frequency questionnaire°	174* 2581°
Sweden	Boys and girls: 4y: 5.1 g/day 8y: 6.9 g/day 11y: 6.8 g/day	-	2003	4 day dietary record	590 889 1016

y: years of age

Major sources of salt in the diet

Bread

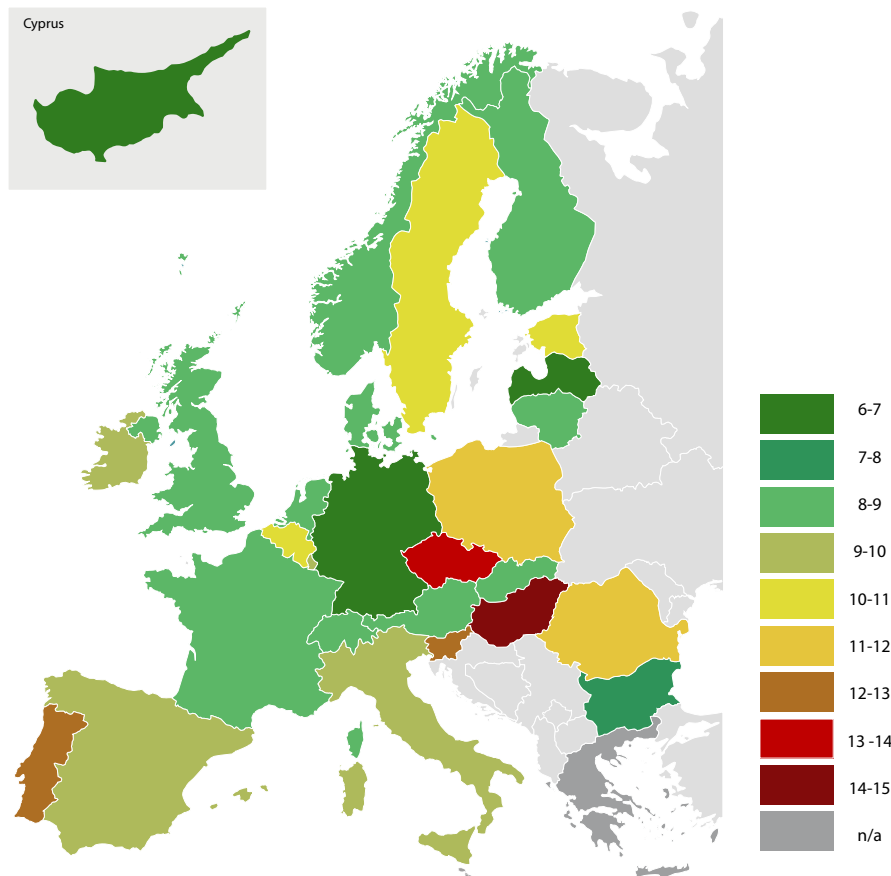
Most of the countries which participated in the survey (23) reported on the food categories that were the major salt contributors in their national diet. Bread, cereals and bakery products were reported to be the most important sources of salt in most national diets, except for the Czech Republic, Poland and Romania where salt added during cooking is the most significant source of salt in the national diet, and Norway and Spain, where meat products were reported to be more significant sources of salt in comparison to bread. Among the 13 countries that quantified the contribution of the different food sources to the total salt intake, bread ranged between 19.1 % in Spain to 28 % in France. Nearly all countries that quantified the contribution of the different food sources to total salt intake, reported that bread contributed with around 20% or more of the total salt intake.

Other food categories

Most countries reported that apart from bread, meat and meat products and dairy products (including cheese) were the most important sources of salt in their national diet. In Spain and Norway, meat products accounted for around one fourth of the total salt intake – 26 % and 24 % respectively. Among the 13 countries that quantified the contribution of the different food sources to total salt intake, meat and meat products ranged between 8 % in Switzerland to 26 % in Spain. However, in Switzerland this category was the third most important contributing food category to the overall salt intake. Many countries that quantified the contribution of the different food sources to the total salt intake, reported that meat and meat products contributed to around 10 to 20% of the total salt intake.

'Cheese' or 'cheese and other dairy products' contributed to around 10 % of salt intake among most of the 13 countries that quantified the contribution of the different food sources. Other product categories that were frequently mentioned among the five most important sources of salt intake were ready meals and soups.

Figure 1
Map with estimates of daily salt intakes (in g) of adults in European countries participating in the Framework



Working with economic operators

Negotiations with industry

Most of the countries (26) reported that they have had negotiations with food business operators or associations representing their sectors. One country did not respond, and Sweden indicated that they were working only in the area of the 'Green Keyhole' labelling. While most countries had negotiations with a range of industry sectors or their representing associations, two countries (Germany and Malta) said that their negotiations were limited to the bakery sector so far. Luxembourg explained that their activities were modest because the production



©iStockphoto.com/AdShooter

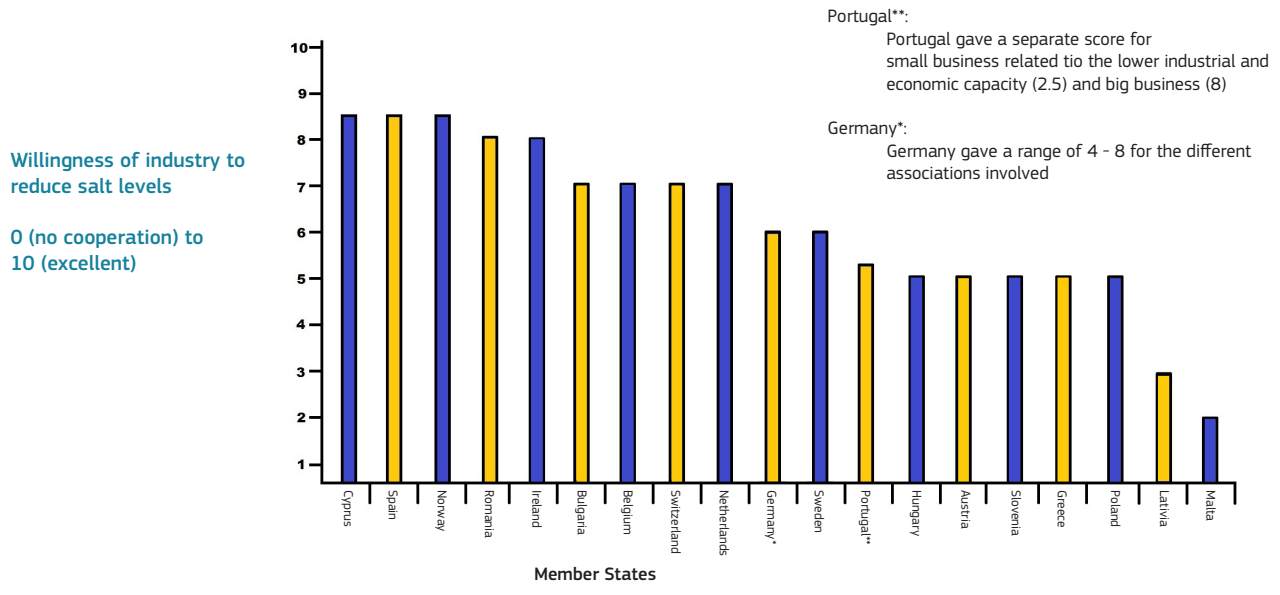
of foods in their country is only marginal and that they rely on efforts from the international food market. Norway stated that they have previously had negotiations as part of their general nutrition work, but that they are planning new negotiations as part of the implementation of their new strategy. One country (Poland) said it had issued a questionnaire to food companies to find out more about issues relating to salt use in foods.

Industry engagement

There was a mixed, but overall positive response about the willingness of food business operators to engage. For example, the UK (England) reported that 71 % of the retail market and 48 % of the catering market of the 80 largest high street caterers committed to salt reduction and signed up to achieve the national salt targets stated in the 'Responsibility Deal'. Most countries reported that food producers were willing to engage.

Nineteen countries evaluated the willingness of food business operators or their associations to reduce salt levels in their products by giving a rating on a scale from '0' for 'no cooperation' to '10' for 'excellent', as illustrated in Figure 2. The average rating achieved across the eighteen countries was '6' which is slightly above the average value of the scale. Seventeen countries evaluated the willingness of food business operators or their associations to reduce salt levels as average, here '5', or better. Denmark reported that in their country industry works hard with salt reduction.

Figure 2
Member States' evaluation of the willingness of food business operators or their associations to reduce salt levels in their products on a scale from 0 (no cooperation) to 10 (excellent)



Barriers for engagement

Most countries reported that food producers were willing to engage. However, a few cited a range of potential barriers including:

- Not a lot of room for further reductions, bakery sector with mainly small and medium - sized businesses (Greece)
- If imported products do not change, national producers are not willing to reformulate for financial, taste and technical reasons (Luxembourg)
- 3 stakeholders out of the 25 that reject the national strategy are salt manufactures (Switzerland)
- Smaller companies are less engaged than bigger companies; willingness for engagement is high in general but currently reduced due to the economic crisis (Portugal)
- Food producers consider that reformulation is linked to financial, taste and technological aspects; mass caterers are less engaged than the food industry (Poland)

One country (Latvia) reported some reluctance by economic operators to engage; no experience of self-regulation was named as a reason for the lack of interest, however, Latvia reported that some food business operators cooperated by creating some products with lower levels of salt as a healthier option. Hungary specified that while there was only light willingness for active cooperation in the beginning, this has been improved to a certain extent by the end of 2011.

The most frequently voiced doubts and constraints of food business operators and their associations were lack of consumer acceptance for less tasty products, food safety and technological problems, financial implications, and the anticipated loss of sales. Other factors were named less frequently, such as a loss of food varieties and traditional products, already salt reduced products, issues related to the use of sodium replacers or legal problems.

Concrete Agreements

Out of the countries that have had negotiations with food companies, 18 reported that they had reached concrete agreements whilst 4 had not. Cyprus and Germany stated that they were working on reaching concrete agreements with the food industry. It is unknown whether the remaining countries have reached agreements with their food sectors or not.

Twelve countries had specific quantifiable commitments on salt reductions in any product categories:

- A 15 % reduction of salt levels in bread in 4 years (Austria).
- A 10 % reduction of salt intake in our population by 2012 (reformulation and change in food habits) (Belgium)

- Gradual reduction of sodium levels in dried soups and sauces to 50 % of the Guideline Daily Amounts i.e. 1.2 grams of sodium or less (Czech Republic)
- Work towards specified benchmarks for salt reduction in 77 product categories by November 2013 (Denmark)
- Among the 31 charters that have been signed in the food industry, 23 cover salt with concrete reduction targets ranging between 5 to 22 % (France)
- An agreement with the Hungarian Bakery Association was signed in January 2012 in which the significant representatives of the Hungarian bakers (1300 bakeries in the country) committed to reduce the salt content of bread by 10.7 % by the end of 2014, and another 5.3 % by the end of 2017; a number of companies reported voluntary salt reduction programs to the government (Hungary)
- Work towards 16 % reduction as specified in the Framework by 2012, starting with levels in 2004, when the salt reduction initiative commenced (Ireland)
- A food industry taskforce on salt reduction had committed to an average : 12 % reduction across all product categories between 2008 and 2010; the bakery sector, both craft and industry, asked the government to lower the maximum salt level in bread legislation from 2.5 % to 2.1 % on dry matter (or 1.8 % on flour base), which was introduced on 1 June 2009; as of January 2013 a second reduction of the maximum salt level in bread legislation will apply, the maximum salt level will be set at 1.8 % on dry matter (1.5 % on flour base) (Netherlands).
- Salt in bakery products to be reduced by 4 % a year, reduction to a maximum of 1.0 g salt in 100g bread over 10 years (Slovenia)
- Signed agreements in 2004 with bakeries to reduce 18 % of salt in bread and bread products; the objective was achieved; a new agreement with meat product producers has been signed, with a benchmark of 10 % of salt reduction in 2 years (Spain)
- A total of 10 commitments on salt reduction have been signed by food companies and retailers within the initiative 'Actionsanté'; the targets are fixed on a case by case basis and the companies report annually; the corresponding sectors are: bread and bakeries, meat products and convenience food (fresh and frozen); also in the catering sector companies are engaged in salt reduction (Switzerland)

- Businesses are working towards, on a case by case basis, the Food Standard Agency's or the Public Health Responsibility Deal salt targets for 2012; these targets will potentially deliver a further 15 % reduction on the salt targets set for 2010 (UK: England)
- At the end of 2009, 26 of the major food industries in Portugal took the commitment to reformulate the composition of their products and be evaluated until the end of 2011; there are at present agreements to reduce salt, but not in a quantifiable manner (Portugal)

Six countries reported that they had achieved formal agreements to collaborate but these were not quantifiable. These included:

- A formal commitment for collaboration towards reformulation of dairy products was signed between the Association of Milk Products Producers and Bulgarian Federation of Dairy Products and the Coordination Committee of the Food and Nutrition Action Plan; some initiatives in the field of meat production (Bulgaria)
- Voluntary agreements with the association of craft bakers and the associations of plant bakeries, as well as with producers of 'fresh pasta' to reduce salt content in some of their products (Italy)
- Significant progress achieved with salt free and low salt bread (Malta)
- A position paper concerning initiatives aimed at decreasing salt consumption in Poland was formulated by the National Food and Nutrition Institute under the patronage of the Polish Minister of Health in 2008 in cooperation with representatives of food industry organisations, governmental organisations, consumer organisations, non-governmental organisations, science representatives and others (Poland)
- In November 2010 the Ministry of Health and Romaliminta (Romanian Federation of Food Industry) signed an agreement on reducing salt consumption in the population, which involves provisions on food reformulation for salt (Romania)

Amongst the countries that responded to the survey that there was no concrete agreement with industry, Latvia explained that there is almost no experience with industry self-regulation and voluntary measures in the country, which makes it difficult for the national food processors to understand the essence of the Framework initiative; also, national industry sees no benefit for them in the initiative. Therefore, Latvia concluded that real changes could be achieved in the event that the salt content of food products is defined by law.

Endorsement of Framework's Vision¹⁰

Twelve countries (Belgium, Denmark, France, Finland, Hungary, Ireland, Italy, Portugal, Romania, Slovenia, Spain and Switzerland) achieved broad endorsement of the vision of the framework by food business operators or representative sectorial associations. Among the remarks made were:

- There is still room for improvement (Slovenia)
- Negotiations with all sectors of the food industry are a continuous process throughout the Agency's work on salt reduction which started in 2003 (Switzerland).

¹⁰ There is no data from eight countries regarding on whether they had achieved broad endorsement of the vision framework by food business operators or representative sectorial associations, or not.

The experience in Ireland provides an example of how the food industry has supported the national salt reduction campaign which has been running since 2004:

- A total of 63 food companies and trade associations are participating and have made written commitments to reduce salt and report on their progress annually.
- All the major retailers and symbol groups have reported that salt is being removed from their own brand products.
- The catering trade and their representative bodies continue to promote salt reduction initiatives
- The Irish Hotels Federation launched a 'Food for Kids' initiative in July 2008. Some 250 hotels joined this initiative and committed to not adding salt to children's food at preparation, cooking or serving stages.
- The Irish Dairy Industries Association has undertaken to reduce salt in spread and butter by 2010 by 10% and 5% respectively.
- Major high street restaurant chains have all reported removal of more salt from products.

Indications from other countries demonstrate that there is still work in progress regarding the Framework's endorsement. Austria reported that the Framework is endorsed to some extent while in the Netherlands and the UK (England) the framework has supplemented activities that they report as already on-going before the Framework was agreed. Norway indicated that there was willingness to contribute to salt reduction among food producers since the 1980s, which increased since 2005 following the international focus on salt.

Five countries (Bulgaria, Estonia, Latvia, Malta and Sweden) indicated that they did not achieve broad endorsement of the vision of the framework by economic operators or representative federations; however some progress was reported by Latvia where some food business operators agreed to work on this issue.

Monitoring approaches

Most countries (24) indicated that they had a monitoring approach in place or planned, but four countries (Cyprus, Estonia, Latvia and Sweden) indicated that they did not. One country did not provide any information on this point. Sixteen countries analysed or planned to analyse the salt content of products. For example, France monitors the evolution of the salt content of almost 400 main products every 3 years since 2003 and since 2009 the evolution of the salt content of all products by category, sub category as well as per segment of the market. Population salt intake was assessed for monitoring the initiative by fifteen countries. Four countries (Denmark, Greece, Slovenia and UK) included evaluations of their awareness raising activities in their monitoring approach. Two countries did not specify their monitoring approach in detail.

Results of the described monitoring were either generated at a regular interval, such as a yearly evaluation, already available, or were frequently expected for the end of 2012, in 2013 or 2014.



Factors influencing implementation



©iStockphoto.com/duncan1890

Supporting factors

Sixteen countries reported on the major supporting factors in reaching results in their national salt reduction initiatives between mid-2008 and mid-2012:

Stakeholders – the cooperation with stakeholders or media was noted by seven countries (Denmark, Hungary, Latvia, Poland, Portugal, Switzerland and UK: England) as a major enhancing factor in reaching results. Switzerland noted that health concerns everybody, stakeholders such as the medical profession, research, industry, non-governmental organisations as well as individuals.

Government, governmental institutions – six countries indicated governmental support, such as the increased awareness and willingness to act among politicians (Greece, Romania) or the commitment of the National Institute for Food and Nutrition Science (Hungary) as a major supporting factor. Slovenia and Cyprus mentioned the financial support as another key factor. In Poland the Ministry of Health financed the salt reduction programme for the period 2009 to 2011.

EU initiative – four countries mentioned the European dimension of the initiative as enhancing their national actions. While Austria indicated that the European-wide approach was a major supporting factor, Belgium added that the existence of the EU Framework maintained the pressure on food operators. In Ireland, signing up to the Framework provided an additional stimulus by the Department of Health who brought key stakeholders together for workshops. It also supported the drive for urinary sodium excretion measurements. Bulgaria highlighted EU financial support for the realisation on the national information campaign for salt reduction in 2011 to 2012.

Industry support – industry support was mentioned by four countries (Cyprus, Portugal, Romania and UK: England) as a major enhancing factor in reaching results.

Legislation – three countries (Hungary, Latvia and Portugal) identified new national legislation in relation to salt content in foods as a support factor.

Raising public awareness and reformulation – noted by Spain; Germany indicated that a higher awareness in the public and in food producers about the health implications of a high salt intake is important, apart from less conflicting messages concerning the benefit of salt reduction in this context. In Ireland, state and voluntary bodies provided support to increase public awareness.

Focus on biggest selling products in the market – the UK (England) indicated that their focus on those products was the major supporting factor for the biggest salt reduction at population level.

Major challenges

Eighteen countries elaborated on the major challenges for the implementation of their national salt reduction initiative from mid-2008 until mid-2012:

Working with industry: Ten countries said that working with industry posed a major challenge, either to raise their awareness (Austria), to convince and motivate them or to overcome their resistance to act sufficiently (Belgium, Denmark, Latvia, Lithuania, Slovenia and Switzerland) or to build a partnership with them (Hungary). Romania specified the involvement of medium and small food business operators as a major obstacle for progress while Poland identified the lack of appropriate action of mass caterers as a major problem.

Lack of resources – overall eight countries referred to a lack of different resource. Six countries (Bulgaria, Cyprus, Greece, Hungary, Malta and Sweden) indicated the lack of financial or human resources as major challenges. A lack of expertise and baseline nutritional information on foods in the local market was reported (Malta). Switzerland referred to the difficulty of obtaining precise data for convincing arguments for salt reduction.

Economic crisis – three countries (Hungary, Latvia and Portugal) considered it a major challenge to implement the national initiative in a moment of economic crisis.

Raising public awareness about salt and health – raising public awareness about salt and health was indicated by Spain as a major challenge. Ireland stated that while industry targets are being achieved, especially among the major Irish exporters to the UK who implement the UK target goals; a need was seen for further salt reduction behaviours such as reducing added salt in cooking and at the table especially by Irish males.

Deciding on national targets – Denmark considered the completion of a target list with benchmarks for salt reduction in 77 product categories as a major challenge of their initiative.

Long legislative process – Hungary specified the prolonged legislative process as a major challenge.

Future plans

Member States plan to continue their national initiatives on salt reduction beyond mid-2012. Fifteen countries reported on their plans to raise awareness among consumers (Austria, Bulgaria, Cyprus, Spain, France, Greece, Denmark, Hungary, Latvia, Poland, Romania, Slovenia and UK: England), health professionals (Bulgaria and Denmark), or school health teams (Bulgaria and Portugal). Twelve countries (Belgium, Bulgaria, Malta, Slovenia, Spain, Germany, France, Greece, Italy, Latvia, Lithuania and UK: England) envisage starting or continuing to work with food business operators in order to achieve further decreases in salt content of foods or meals. Four of those countries plan to involve the catering sector with different measures (France, Greece, Hungary and UK: England). Furthermore, some countries (Belgium, Denmark, Spain, Malta, Netherlands, Slovenia, Slovak Republic and UK: England) explained their plans to continue monitoring and evaluation activities. Other plans involved revising nutritional guidelines (Finland), elaborating on the national initiative for the period 2013 to 2016 (Switzerland) or organising a regional meeting regarding salt reduction with neighbouring countries (Norway). Ireland noted their plan to continue the national salt reduction initiative.

Conclusions

The reduction of salt intake in populations is a step by step process as technological barriers and food safety concerns need to be addressed. Ensuring consumer acceptance by allowing for the necessary taste adaptation over time is a significant factor which also determines the speed of the relevant measures' implementation. This report illustrates the first steps taken towards reducing the excessive salt intake across the EU, one element for improving the diet and promoting the health of Europeans.

While the economic crisis in Europe may have an impact on the funding available for public health programmes, European as well as global developments since the adoption of the framework are expected to increase the momentum for salt reduction initiatives.

This report shows that the EU salt framework has been a catalyst for action for a number of Member States with new initiatives introduced across the EU. Countries reported that the Framework provided a model for a national programme, it supported pre-existing action, strengthened or broadened the approach or helped to increase dialogue with industry. Furthermore, the added European dimension introduced by the Framework to national activities on salt reduction was highlighted as an asset.

Most countries have had negotiations with food business operators or representative sectorial associations. The overall willingness of food business operators to engage was positive. Many concrete agreements between Member States and

food business operators or representative sectorial associations were reached. Many countries have started awareness raising actions. Most countries have a monitoring approach in place or planned, and results are already published or are expected during the coming two years.

Work in the coming years should focus on further increasing the number of quantifiable commitments to reduction from the food industry and on evaluating the results obtained from monitoring programs in Member States. The European Commission will continue, through the supporting mechanisms of the High Level Group on Nutrition and Physical Activity¹¹ and the EU Platform for Action on Diet, Physical Activity and Health¹², to secure quantifiable commitments from the food industry and ensure that effective mechanisms for monitoring salt reduction programmes are in place.

This work should be further enhanced by the political momentum created in September 2011, when the United Nation's General Assembly adopted by consensus the resolution on a Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. Heads of State and Government and representatives of States and Governments, assembled at this United Nations meeting committed to work towards reducing the use of salt in the food industry in order to lower sodium consumption. The European Commission will continue its work to ensure the EU's contribution in this respect.

¹¹ http://ec.europa.eu/health/nutrition_physical_activity/high_level_group/index_en.htm

¹² http://ec.europa.eu/health/nutrition_physical_activity/platform/index_en.htm

More detailed information about individual national salt reduction initiatives:

Austria:

http://bmg.gv.at/home/Schwerpunkte/Ernaehrung/Kampagne_Weniger_Salz_ist_g_suender_

Belgium:



www.stophetzout.be (NL)
www.stoplesel.be (FR)

This salt campaign was part of the National Food and Health Plan:

www.monplannutrition.be (FR)
www.mijnvoedingsplan.be (NL).

Denmark:

http://www.foedevarestyrelsen.dk/Foedevarestyrelsens_oevrige_hjemmesider/Sider/Sparp%20a5-saltet.aspx

www.altomkost.dk

Estonia:

<http://www.toitumine.ee/kampaania/sool/>

Finland:

No special website, salt reduction is part of the overall nutrition and reformulation strategy:

Nutrition recommendations and actions, including guidelines salt and recent seminar on salt can be found on National Nutrition Council pages: <http://www.ravitsemusneuvottelukunta.fi/portal/fi/>

Government resolution on health enhancing physical activity and nutrition:

http://www.stm.fi/julkaisut/esitteita-sarja/nayta/_julkaisu/1069549#en

Better Choice -Health Symbol for packed products, including salt limits for different product groups:

http://www.sydanmerkki.fi/sydanmerkki_tuotteet/etusivu/fi_FI/englanniksi/

Information about Better Choice -Health Symbol for meals, including salt limits for different meal components:

http://www.sydanmerkki.fi/sydanmerkki_ateria/etusivu/fi_FI/englanniksi/

France:

<http://www.sante.gouv.fr/les-chartes-d-engagements-de-progres-nutritionnels.html>
<http://www.anses.fr/Documents/NUT2012sa0052.pdf>
http://www.oqali.fr/oqali/publications_oqali/etudes_sectorielles

Germany:

Information on nutrition; recommended food intake incl. salt:

“<http://www.dge.de>” <http://www.dge.de>

Information about Implementation of the National Action Plan:

“<http://www.in-form.de>” <http://www.in-form.de>

Greece:

On the website of Hellenic Food Authority (EFET) there is information on salt reduction among other information on issues related to food and nutrition:

http://www.efet.gr/portal/page/portal/efetnew/consumers/consumers_info (Greek version)

http://www.efet.gr/portal/page/portal/efetnew/news/view_new?par_newID=471 (English version)

Hungary:

Hungarian „Stop Salt!” salt reduction program:

http://www.oeti.hu/download/national_salt_reduction_programme_-_english_summary.pdf

and

<http://www.stopso.eu>

Italy:

Ministry of Health website (www.salute.gov)

National Health Institute website (www.cuore.iss.it)

Italian Society of Human Nutrition ([HYPERLINK](#)

“<http://www.sinu.it>” www.sinu.it)

Lithuania:

National Food and Veterinary Risk Assessment Institute (short description of the Project on the Promotion of Salt Reduction): <http://www.nmrvvi.lt/uploads/File/Strukturos/Salt%20project.pdf?phpMyAdmin=MtIMMYuLWaqvnmD5LOgFzF6NfE4>

Luxembourg:

Information about the national plan « Nutrition and physical activity »:



<http://www.sante.public.lu/fr/rester-bonne-sante/040-alimentation/index.html>

Malta:

https://ehealth.gov.mt/healthportal/health_promotion/library/publication.aspx

Norway:

Information about our dietary guidelines:
www.helsedirektoratet.no

Poland:

Link to Institute with information on salt reduction among other information on issues related to food, nutrition and health:
[izz.waw.pl](http://www.izz.waw.pl)

Detailed information on the program are available on the website of the Ministry of Health (version available in Polish):
http://www.mz.gov.pl/wwwfiles/ma_struktura/docs/otylosc_06012010.pdf

Institute:http://www.izz.waw.pl/index.php?option=com_content&view=article&id=247&Itemid=5&lang=pl;

Romania:



**PREVEČ
SOLI ŠKODI**

On the Ministry of Health website in the menu "Nutrition" information about the initiatives in this field, including the salt initiatives, are given:
<http://www.ms.ro/?pag=184> .

Slovenia:

<http://www.nesoli.si/>

Spain:



<http://www.naos.aesan.msp.es/>
<http://www.plancuidatemas.es/Plan-Cuidate-Mas.htm>

Sweden:

<http://www.slv.se/sv/grupp1/Mat-och-naring/Kostrad/Rad-om-salt/>

Switzerland:

Salt strategy:

http://www.bag.admin.ch/themen/ernaehrung_bewegung/05207/05216/index.html?lang=de
http://www.bag.admin.ch/themen/ernaehrung_bewegung/05207/05216/index.html?lang=fr

http://www.bag.admin.ch/themen/ernaehrung_bewegung/05207/05216/index.html?lang=it
http://www.bag.admin.ch/themen/ernaehrung_bewegung/05207/05216/index.html?lang=en

UK: England:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_121941

<http://responsibilitydeal.dh.gov.uk/2012/02/03/f2-factsheet/>

<http://responsibilitydeal.dh.gov.uk/2012/07/27/f5-factsheet/>