DRAFT

Collated information on salt reduction in the EU

April 2008

Compiled by the European Commission

1. Introduction

This document sets out compiled information regarding salt campaigns in Member States, and a synthesis of relevant scientific data from the World Health Organization. It is therefore a reference document to support further discussion in the High Level Group on Nutrition and Physical Activity (HLG), and a support for decision making. It is therefore not intended as a scientific document on salt but rather as a specific EU decision making reference document. It has been compiled by the Commission services in relation to the European Commission's role to facilitate the sharing of knowledge in public health.

The information contained is based largely on the results of a salt workshop held by the Commission at the end of January 2008, and the results of a questionnaire to Member States, "Implementing the White Paper". Annexes of the report contain the original presentations made at the salt workshop. The report has been reviewed by EU participants to this workshop.

2. Rationale and potential population impact of salt reduction measures

This section is based on the presentation given by Dr F. Branca at the EC's salt workshop held 31 January 2008. His slide presentation is available at the circa site for the HLG.

Scientists have developed models that estimate the potential health impact of a reduction in salt intake. This is summarised in the table below. For example, a decline in average daily individual salt consumption by 3 g has been estimated to result in nearly 40,000 fewer deaths per year from stroke (in the wider European region), and over 45,000 fewer deaths per year from ischemic heart disease (IHD).

Crudely extrapolating to consider the European Union alone, based on a reduction proportionate to the smaller population size of the EU (approximately 68%), the figures might be 27,000 fewer deaths per year from stroke, and 31,000 fewer deaths per year from IHD. In summary this would mean an estimated total of 58,000 fewer deaths per year.

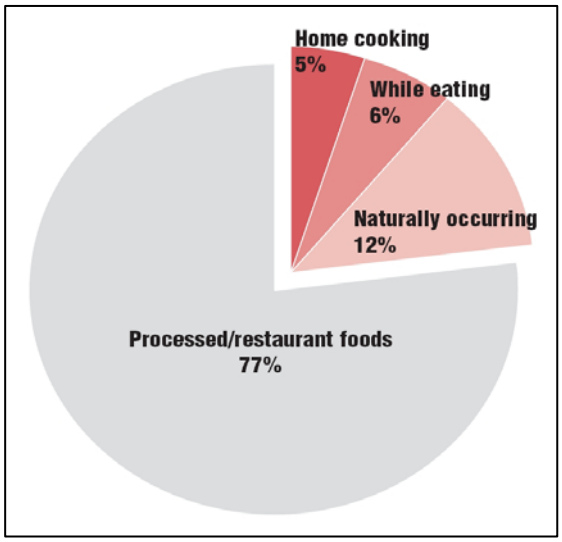
Predicted reductions in deaths from stroke and IHD with reductions in salt intake in Europe

	Reduction in daily salt (sodium) intake					
	3 g/d (50 mmol/d)		6 g/d (100 mmol/d)		9 g/d (150 mmol/d)	
	SBP	DBP	SBP	DBP	SBP	DBP
Average fall in BP (mmHg)	2.5	1.4	5.0	2.8	7.5	4.2
Reduction in stroke death (%)	12	14	23	25	32	36
Stroke deaths prevented in Europe per year	39,698	46,314	76,088	82,704	105,861	119,094
Reduction in IHD death (%)	9	10	16	19	23	27
IHD deaths prevented in Europe per year	45,590	50,656	81,050	96,247	116,509	136,771

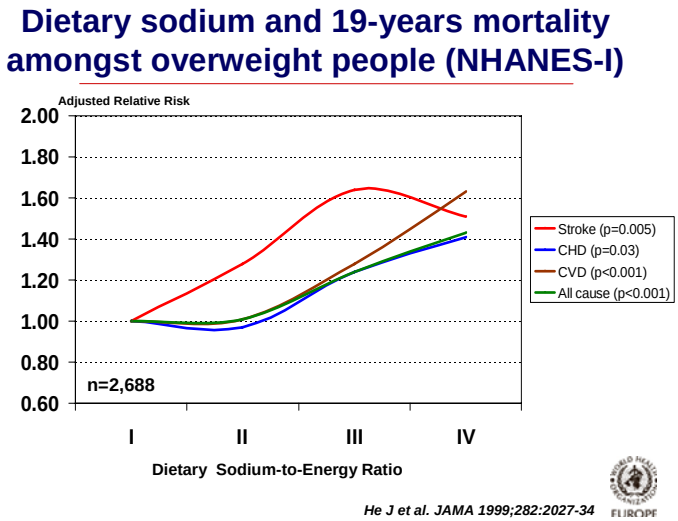
Modified from He FJ & MacGregor GA. Hypertension 2003;42:1093-9

EUROPE

The major contributors of sodium/salt intake in the diet are processed foods and foods eaten at restaurants as illustrated by the diagram below.



Several studies have shown that high intakes of salt are associated with increased cardiovascular disease (CVD) mortality risk as for example the study below shows.



Intake data for salt varies across the EU; salt intake recommendations also vary. The WHO suggests a gradual reduction of salt to < 5 g/day with a 10% reduction per year in salt intake. The products contributing the major share of salt intake bear the main part of the reduction.

Reducing salt intake to <5 g in 5 years

	Current	Target
Table/cooking	1.8 g (15%)	50% reduction 0.9 g
Natural	0.6 g (5%)	No reduction
Food industry	9.6 g (80%)	60% reduction 3.8 g

≈ 10% reduction per year

Monitoring actions is a necessity. A number of monitoring approaches were considered appropriate; four particular methods are outlined below, each one with their own advantages and disadvantages.

- Urinary sodium excretion
- Dietary surveys
- Market surveys
- Calculated sodium content of foods

Monitoring through the measurement of urinary sodium excretion is neither complicated nor expensive. 24 hour urine collection from around 100 people would provide sufficient statistical power to give a fairly accurate estimate on the salt intake in the population. If expanded to 24 hour urine collection from around 200 people disaggregating results for women and men is possible.

3. Member States' experiences (UK, Ireland, France, Finland, Spain)

Information was collected by internet search and summarized for each country under eight subheadings, namely 1) background of initiative; 2) aim of initiative; 3) area of action; 4) public private partnership; 5) description of activities; 6) labelling; 7) monitoring and 8) achievements.

The information collected from the internet was updated with information given on the expert workshop on 31st of January 2008. Slides presented by the UK, Ireland, France and Finland at the meeting are available on the HLG circa site as is the Danish presentation on sources of salt in the diet.

Annexed to this report is data for each Member State and neighbour countries based on responses to the questionnaire sent out in advance of the expert meeting and based on information given during this meeting.

The 5 countries especially mentioned in the report aim to reduce salt content in processed foods and increase awareness on the health effects of salt among consumers. In all countries the food industry is committed to reduce the salt content of processed foods. The UK and Ireland have a separate initiative on salt, while Spain and France embedded the message within a wider initiative. Finland started salt reduction already 30 years ago as part of a community-based intervention project.

All initiatives focus on food products that contribute most to total salt intake. Specific labelling systems help consumers to choose products containing less salt in the UK and Finland.

Most initiatives monitor the salt content in food products, while Finland and the UK monitor the sodium excretion levels of the population as well. All five countries can document a certain decrease in salt content in the foods monitored.
The approaches of the different countries examined are showing similarities, but also differ in some elements from each other. Countries that engaged in salt reformulation initiatives seem to be successful in committing the food industry to reduce salt content in foods.
Finland showed that salt reduction in products can actually lead to a reduction in sodium excretion levels and to a corresponding drop in blood pressure levels. This implies that salt reduction initiatives can be effective in reducing cardio-vascular diseases.

3.1 UNITED KINGDOM

Slides presented by the UK at the Salt Workshop in Brussels on 31 January are available at the circa site.

3.1.1 Background information

In the UK, the initiation of the Salt Campaign took place after the Scientific Advisory Committee on Nutrition (SACN) published its report: 'Salt and Health' in 2003. The main conclusion from this report was that there was a link between high salt intake and high blood pressure and that a reduction in the average salt intake of the population would proportionally lower population blood pressure levels. The reduction in salt intake would lead to significant health benefits due to reduced risk of cardiovascular disease. SACN recommended that the average salt intake should be reduced from 9.5 g/d to 6 g/d, with lower levels recommended for children

The conclusions and recommendations of the report of SACN induced the Food Standard Agency of the UK (FSA) and the Department of Health (DH) to take action to reduce the salt intake and to start the initiative in 2003.

3.1.2 Aim of initiative

The aim of the initiative is to reduce the salt intake of the population of the UK from 9.5g per day in 2003 to 6g per day in 2010

3.1.3 Area of action

The FSA and DH are taking the lead to reduce salt intake since the start of the initiative. Both organizations are committing themselves to reduce the salt intake of the British population from 9.5g per day to 6g per day. The commitment of the FSA was published in the 'Food Standards Agencies Strategic Plan to 2010'. In the Public Health White Paper – 'Choosing Health: Making Healthy Choices Easier' the Department of Health published its commitment .

The work takes place in 2 main areas:

- Reformulation work (retailers, manufacturers, trade associations, caterers and suppliers to the catering industry) to reduce the salt content of processed and prepared food products *voluntarily* involves all sectors of the food industry.
- Ongoing public awareness campaign to inform consumers on the issue and provide the public with guidance on how to reduce the salt intake.

3.1.4 Public Private Partnership: development of salt targets

The FSA has sought cooperation from the food industry to develop food products with less salt. The first stage of this process was the development of a salt model to initiate discussions with the food industry. This model demonstrated one way in which the 6g intake target could be achieved taking into account reductions in levels of salt in foods as well as reductions of

salt used by consumers. This salt model was published for public consultation and comments were received from a wide range of stakeholders.

At a meeting with stakeholders in November 2003, the Minister of Public Health requested the industry and other partners involved to write to her by February 2004 outlining what they were doing to reduce salt in food. The food industry and others submitted their plans to the Minister.

Since then, the FSA continued the dialogue and has strengthened the collaboration with the food industry. To guide the food industry as to the level of salt reduction required in food products, the FSA developed proposals for targets in a wide range of food categories. Again, these targets were issued for public consultation and many stakeholders from the food industry submitted responses. Issues raised in the responses were further discussed with industry before the final targets were agreed and published in March 2006 .

The targets cover 85 categories of processed food that contribute most salt to the diet, including bread, bacon, breakfast cereals and cheese as well as a wide range of convenience foods .

3.1.5 Description of activities

Reformulations of processed foods:

The food industry has responded positively to reducing salt levels in food, which implies that the food industry has committed itself to salt reduction on a voluntary basis. Major retailers and manufacturers have stated publicly that they are working towards the voluntary salt reduction targets. Trade associations are supporting the work of their members and have coordinated salt reduction programs for a number of key foods that contribute to salt intakes. At the moment, the FSA is increasing its engagement with the catering sector [9]. Salt reformulation takes place in categories of processed food that contribute most salt to the daily intake .

The industries' commitments and achievements are published. This will demonstrate to stakeholders the progress which is being made voluntarily and also serves to help inform consumer choice .

Public awareness campaign:

FSA has started an awareness campaign to inform the consumers how to lower their salt intakes. Up until now, there have been three phases of the campaign. The first phase started in September 2004. The main message was to make consumers aware of the negative health effects of salt intake.

The second phase of the campaign was launched in October 2005, to encourage consumers to check food labels for information on the salt content and to raise awareness of the aim to eat no more than 6g of salt a day. The third phase of the campaign was launched in March 2007. The aim was to inform the people that 75% of the salt is already in foods and encourage and enable them to choose low-salt products.

This mass public awareness campaign is supported by a website. The messages were delivered by different media including TV advertising, posters, articles in women's press and national newspapers and news coverage. In addition, leaflets and credit card prompts were distributed to try and help consumers increase their awareness and make them aware of the action they can take.

NGOs and food industry have been involved in communicating the message to the consumers, throughout the campaign. However the FSA built upon its learning in the first phase and involved external organisations more fully in the second and third phases.

3.1.6 Labelling

The food industry is encouraged to label foods with information about salt content to help consumers make a healthier choice. In the UK around 80% of food is voluntarily labelled with nutrition information.

In addition the industry is encouraged to use on the front of pack the traffic light labelling, developed by the FSA, which helps consumers to choose a low-salt product at a glance. Food manufacturers can use the traffic light label voluntarily .

3.1.7 Monitoring

Overall monitoring

The FSA has set up a program to track and monitor commitments and reductions in salt. It will review the salt reduction targets in 2008 to establish whether further reductions are necessary to reach the population average intake target of 6 g/d.

Four information sources are used::

- A UK wide survey of salt intake (via urinary sodium analysis) was carried out in 2005/06 to estimate changes in salt intake. The next survey is planned for 2008. In April 2008 a rolling programme of dietary surveys will commence which will provide urinary sodium analyses along side other dietary information.
- Levels of salt in processed foods are monitored via a Processed Food Databank. This databank was set up as a reference tool to provide information on levels of sodium and other macro- and micronutrients. The first sample was taken from around 1000 products bought in the UK between December 2004 and February 2005. A second sample was taken in 2007 The FSA has encouraged the industry to provide information on current levels of salt in their food products through a self reporting framework which was published in August 2007. Initial submissions were made at the end of 2007/early2008. This framework will be reviewed as part of the consultation on revised targets to be issued in summer 2008.
- Sales data and salt declarations off label purchased from a marketing company covering all food products sold on the UK market which bear labelling information on salt content.

Public awareness campaign

The public awareness campaign will be evaluated through monitoring changes in consumers' claimed behaviour .

3.1.8 Achievements

Overall achievements
Monitoring of the UK salt reduction intervention is ongoing, and the trend is positive. The Public health information campaign has created a considerable awareness, a reduction in salt intake and a 50 % increase of consumers who claim to read the label.

From food industry a decrease in salt content of products is reported, which was confirmed by checking label information and sales data.

The first urinary sodium analysis, carried out in 2005-2006, showed a reduction in average salt intakes of 0.5g to a level of 9g/d, with male intake reducing from 11g/d to 10.2g/d and female intake falling from 8.1g/d to 7.6g/d. This is a small, but significant reduction .

Food reformulation

85 targets for 30 categories of foods were established in partnership with the industry.
A broad range of actors in the food industry are engaged in reducing the salt content in processed foods. Seventy organizations have committed themselves to reduce salt in foods.
Examples of salt reduction achievements in processed foods to date:

- Breakfast cereals 43%
- Packed sliced bread over 30%
- Ready to use pasta sauces over 30%
- Soups over 25%
- Sweet biscuits over 45%
- Savoury biscuits over 25%
- Cakes over 25%
- Pastries 40%

Public awareness campaign

The UK approach relies on cooperation with the food industry in coordinated campaigning so that the consumers get the same message from many places, and find the salt reduced products the government campaigns tell them to choose.
The objectives of the campaigns are:

1. Raising awareness
2. Translating awareness into action by giving clear messages
   - make 6 g salt your daily limit
   - always read the label
3. Key messages
   - 75% of salt in processed food
   - check labels and choose options lower in salt

The number of consumers cutting down on salt has increased by around one third, there has been a 10-fold increase in awareness of the 6g a day message and the number of consumers trying to cut down on salt by checking labels has doubled .

3.2 IRELAND

Slides presented by Ireland at the Salt Workshop in Brussels on 31 January are available at the circa site. This presentation focused largely on the work with the food industry to lower the salt content in processed foods.

3.2.1 Background information

In April 2005 the FSAI (Food Standards Authority of Ireland) published the scientific report 'Salt and Health: Review of the Scientific Evidence and Recommendations for Public Policy in Ireland'. The report highlighted that Irish people are consuming much more salt than the recommended daily allowance, thereby contributing to a large number of preventable deaths from cardiovascular diseases and stroke. In the report, a number of recommendations were published that included engaging the food industry to reduce the salt content in processed foods.

In reaction to the results and recommendations of this report, the FSAI initiated a salt reduction initiative in line with the report's recommendations .

3.2.2 Aim of initiative

The aim of the initiative is to reduce the average population intake of salt from 10g/d to 6g/d by 2010. This has to take place through partnership with the food industry and State bodies to raise awareness among the Irish population .

3.2.3 Area of action

The FSAI is taking the lead in the salt reduction initiative, and is fully supported by the Irish Department of Health.

The implementation of the initiative is based on 2 main areas:

- The first area is cooperation with the food industry to lower the salt content in processed foods. The initiative focuses on manufacturers in the food industry that process food groups that contribute most to the salt intake in the Irish population. Not only manufacturers are approached, but retailers and catering representative bodies are also engaged in the initiative. An important aspect deals with the labelling of salt in packaged foodstuffs. It is aimed to develop a universal labelling of salt in packaged foodstuffs.
- The second area aims to increase consumer understanding of the salt and health issue and bring about behavioural change in consumers. This is done by working together with other State bodies and NGOs .

3.2.4 Public Private Partnership

Already before the initial start of the national salt reduction programme in 2005, the FSAI started discussions with the food industry to cut down the levels of salt in processed foods. This was done by raising awareness in the general food industry on the health effects of salt on blood pressure and the role of processed food in salt intake. The discussions were aimed to secure a gradual and sustained reduction in salt working on a front across each sector. Other

food manufacturers were invited to reduce the salt content in foods as well. Food retailers were also targeted to reduce the salt content of own brand processed foods and to focus on stocking low salt options of branded processed foods. Caterers were asked to participate as their products (prepared foods eaten outside home) contribute to salt intake as well.
These discussions lead to some reductions in level of salt in processed foods. Food products that contribute most to salt intake were selected to be reformulated.

After the publication of the report 'Salt and Health: Review of the scientific evidence and recommendations for public policy in Ireland' in April 2005 it was clear that further reductions of the salt content of processed foods were needed to reach the goal of the intake of salt of 6g/d .The industry agreed to continue working on the incremental reduction of salt content of several food products.

3.2.5 Description of activities

Reformulation of processed foods

The food industry has made voluntary commitments on the reduction of salt in processed foods. Food manufacturers, food retailers and caterers have committed themselves to incrementally reduce the level of salt in their processed foods. Mostly, salt reformulation takes place in product groups that contribute most to salt intake. These product groups include bread, meat and meat products, breakfast cereals, cheese and soups and sauces . A number of Irish hospitals have also liaised with bread manufacturers and are offering lower salt bread to employees.

Public awareness campaign

Several state bodies are conducting campaigns in order to raise awareness among the Irish consumers to lower their salt intake. In 2006, *Safe*Food (The Irish Food Safety Promotion Board) launched a campaign called '*Already Salted – Six weeks to change your tastebuds*' which was primarily aimed at employees and caterers in the workplace setting. The campaign ran for six weeks during which registered companies displayed information materials including posters, tray-liners and table tent cards. A year earlier, *Safe*Food launched a campaign '*How much salt is good for you?*' which outlined the need to reduce salt intake .

The theme of the Irish Heart Week (Irish Heart Foundation) in 2004 was '*Time to cut down on salt*' which aimed to raise consumer awareness about the nature of salt in the diet and to provide information on appropriate salt intake. Several activities were organized, including forum discussion with food industry. Advertisements on the radio contributed to national awareness of salt .

3.2.6 Labelling

One aspect of the campaign deals with labelling. Manufacturers will have to adhere to new laws governing claims on salt content in foods. Salt limits have been defined in order to be able to state 'low salt', 'very low salt' or 'salt free' on packaging. Salt reductions should be more than 25% before a manufacturer can claim a 'reduced salt content'.

3.2.7 Monitoring

Reformulation of processed foods

In cooperation with an analytical laboratory FSAI conducts surveys in order to monitor the commitments of the food industry. This is done by analyzing the salt content of food products to see whether the salt content of foods has actually decreased.

Public Awareness Campaigns

The public awareness campaigns are monitored in order to see behavioural change towards salt consumption.

3.2.8 Achievements

Reformulation of processed foods

In November 2007 76 food business and their representatives groups were participating in the salt reduction programmes. The salt content in foods has been reduced substantially. Initial salt reduction goals for food have already been reached. Just a few examples of achievements are described here:

In standard white and brown bread, the salt content has been reduced by 10%, and the Irish Bread Bakers Association has agreed to extend its 10% salt reduction to all breads by the end of 2008. In dried sauces salt has been reduced by 15% and in dried soups by 10% since 2005. Further reductions are announced .

Public awareness campaign

An evaluation of the ‘Already Salted Campaign’ reported that more than half of consumers surveyed claimed to have change or planned to change their behavioural habits towards salt consumption .

3.2.9 Research

The Department of Agriculture, Fisheries and Food have awarded funding of over €2 million in 2006 to fund research into salt reduction in food.

3.3 FRANCE

Slides presented by France at the Salt Workshop in Brussels on 31 January are available at the circa site.

3.3.1 Background information

In 2000 the French Food Safety Authority (AFSSA) recommended a reduction in salt consumption by the French population and an evaluation of the achievability of a gradual decrease in the salt content of processed foods. In response to this recommendation, a Working Group was constituted in 2001 which brought together scientists, physicians, consumers and various sectors of the food industry to enable a dialogue between the health sector and industry.

This working group established three objectives:

1. To estimate salt intake in French adults
2. To identify the major sources of salt consumption
3. To propose measures to reduce salt intake

That resulted in the First National Individual Food Consumption Survey (1998/99) which showed that the average intake of salt from foods only in the French population was 8.1g/d. Bread, meat products, soups, cheeses and ready-to-eat meals were the main contributors to salt intake in the population.

In response to the results of the survey, the Working Group defined several recommendations and goals:

- Reduce salt intake of the population by 20 %
- Lower salt content in breads and bread products (morning goods) from 24 g to 18 g of salt added per kg of flour (5% less salt per year)
- Reduce salt content and its variability within the same product for
  - Meat products,
  - Cheese
  - Ready-to-eat meals
  - Soups
- Run information campaigns on salt to the population within the context of an overall approach to good nutrition

This resulted in a Public Health Law in 2004 in which the objective of salt intake reduction, defined by the Working Group, was approved .The proposals from the working group have also been adopted by the 'Second National Nutrition Health Programme 2006-2010 (PNNS 2)' . The overall aim of PNNS 2 is to improve the state of health of the whole population by acting on one of the main determinants: nutrition.

3.3.2 Aim of initiative

The objective in the Public Health Law related to salt intake is to reduce the average total salt (salt from foods and discretionary salt) intake to < 8 g/d in the French population by 2010.

3.3.3 Area of action

The PNNS 2 is an intergovernmental framework which is coordinated by the Ministry of Health. Related ministries implement the program in its own area. A steering committee of consumers, local authorities and businesses are involved in the program .

To reduce salt intake in the French population, PNNS 2 emphasizes that the action on salt should focus on three different areas:

- Promoting the consumer guidelines that aim to limit the consumption of salty food
- Develop communication campaigns on the consumer guidelines, with a specific emphasis on salt
- Encourage economic operators to improve the nutritional quality of the products in order to meet the objectives of PNNS 2, including improve the nutritional composition of products such as salt that have an impact on public health .

3.3.4 Public Private Partnership

After the Working Group on salt published its recommendations, some food manufacturers committed themselves to reduce salt content in several food products. In preparation of PNNS 2 these commitments were evaluated and it seemed that although salt content in foods were reduced, more action was needed to reach the aim of salt intake. It was recommended that the salt reduction initiative would be part of PNNS 2. The food industry was invited to participate in the preparatory work of the PNNS 2 .

Now that PNNS 2 is being implemented, the food industry is given the opportunity to develop charters of commitments to nutritional progress. These charters will be submitted to the State and will be assessed by a committee of experts. Special emphasis will be put on the salt content, which should meet high nutritional standards . The commitments should comply with the general principles, objectives and consumption guidelines of PNNS 2, but it is to the food industry itself to develop the commitments. However, an expert committee will assess the relevance of the commitment .

3.3.5 Description of activities

Within PNNS 2 several activities are described:

Consumer guidelines

The consumer guidelines have been developed, and are currently widely promoted by the national nutrition campaigns, for example ‘La santé vient en mangeant’. This campaign includes the message to limit the salt intake.

A recommendation on salt intake is included in the guidelines on nutrition and health issued under the framework of the National Nutrition Health Program. Special guidelines are developed for health personnel.

Food reformulation

Before the start of PNNS 2, some bakers had committed themselves to reduce the salt content in bread, voluntarily, as well as the meat sector and some manufacturers of soup.
The food industry is invited to develop commitments to reduce salt content of foods within PNNS 2.

Communication campaigns

Within PNNS 2 a communication campaign is developed to increase the knowledge of consumers on healthy nutrition. This includes a message to reduce added salt during cooking or on the table. However, information on reduction of salt intake is not the main message of the campaign. It is planned that the government will start a campaign that will promote the benefits of iodised salt as well as a message to limited salt intake and reduce the consumption of most salty food products. This campaign is scheduled for 2009, according to PNNS 2 .

3.3.6 Labelling

A general labelling strategy is part of the PNNS 2. PNNS 2 will work on an optional label that will summarize in a short way the PNNS 2 dietary guidelines, including salt intake.

3.3.7 Monitoring

In 2003 the AFSSA has set up a surveillance program to monitor the level of salt in food products together with a consumer organization. This analysis was repeated in 2005 [20].
PNNS 2 has a separate chapter on monitoring, which states that it will evaluate the effectiveness of the actions undertaken within the programme .

3.3.8 Achievements

France's approach to reducing salt bread strongly contrasts that of the UK, where most bread is sold through the major retailers. In contrast, France has very many small producers of bread, approximately 33.000 bakeries. Information campaigns were therefore designed specifically to reach these small producers. France is also working with the flour industry to reduce salt "upstream" in bread ingredients. France has yet to report a small decline in salt content in breads, but it can report an overall downward trend in salt content in foods, see table below, and also in salt intake from foods in the population. It is estimated that intake (provided by foods) has reduced from 8.1 g/day to 7.7 g/day between 1998/99 and 2006/2007 in the overall adult population – a reduction of approximately 0.4 g/day, and a decline of 5.2 %. However, the trend is more pronounced in the highest salt consuming group. For example the proportion of men consuming more than 12 g/d of salt from foods decreased by a third between 1998/99 and 2006/07. The reduction is slightly greater for men than for women.

33% of bakers reported having reduced salt content of their products since 2002 and, among these, 82% state that they had no complaints concerning taste; moreover 13% of them reported having planned a further reduction over the next 3 years; a 7% reduction in salt content of soups was achieved and new recipes containing less salt were formulated. New meat products with lower salt content were developed and a Code of Practice on the use of salt was adopted by the cheese industry .

However, surveys of the AFSSA showed that some food groups tended to have lower salt content (breakfast cereals, some soups and some cheeses), but others had similar or higher levels (bread, ham).

The effectiveness of salt reduction work is also reflected in the French salt industry report of a reduction in salt sales of 15% from 2001 to 2006 to the food industry, and a reduction of 5% in sales of household salt. Another source of data showed that between 1997 and 2003, the decrease of salt purchases by household was about 3% per year.

3.4 SPAIN

3.4.1 Background information

In Spain, the prevalence of overweight is increasing enormously, especially in children. In order to curb the situation, the Spanish Ministry of Health and Consumer Affairs developed the NAOS strategy, which aims to improve the diet and encourage regular practice of physical activity by all citizens, with a specific emphasis on children and adolescents .
Within this overall goal, several objectives are formulated to improve diet and encourage physical activity. Dietary guidelines have been developed to improve the diet. It is emphasized that the current diet contains too much salt, which contributes to cardiovascular diseases. Reductions of salt intake are needed to maintain vascular health. One of their guidelines defines a goal for salt intake .

3.4.2 Aim of initiative

The objective for salt intake is:
The consumption of salt, from all sources, should be reduced to below 5g/d, and the use of iodized salt should be promoted .

3.4.3 Area of action

The Spanish Food Safety Agency and the General Directorate of Public Health are coordinating the program. This program is implemented by several other stakeholders.

Within NAOS, some objectives are formulated to reach the objective of salt intake:

1) Promote policies and plans of action aimed at improving dietary habits and increasing physical activity in the population
2) Establish a framework of collaboration with the food industry to promote the production and distribution of products which contribute to a healthier and more balanced diet .

There are four different areas in which actions are undertaken to reach the salt intake of 5g/d:

- Population awareness campaigns on healthy nutrition
- School
- Business

All these areas must take action to establish an increasing awareness on the impact of a balanced diet and physical activity on health; promote healthy eating habits and increased physical activity, favouring a collaborative framework with the food and drinks industry in promoting healthier products .

3.4.4 Public Private Partnership

One of the objectives is to establish a framework of collaboration with the food industry to promote the production and distribution of products which contribute to a healthier and more balanced diet.
As the main source of salt intake in the adult population is bread, an agreement has been signed with the industry of Spanish Baker’s to reduce the percentage of salt in bread .

The food industry had been invited to set up a plan to reduce the salt content in foods that contribute for a large part to salt intake. It is unknown whether this has resulted in commitments with the food industry .

3.4.5 Description of activities

Population awareness campaigns on healthy nutrition

The media will disseminate a positive message on healthy nutrition. Spanish people should be aware of the nutritional recommendations, including the amount of salt they should eat. Specifically for salt, people will be made aware to moderate the addition of salt to food when cooking or on table, and on the negative health effects of salt.

School

At school, children will be educated about healthy nutrition. For children's school meals, iodized salt will be used in areas known to have iodine deficiency.

Business

The Spanish Confederation of Bakeries have committed themselves to reduce the percentage of salt used in making of bread going from 2.2% in 2005 to 1.8% within four years time. Annually, the bakers will reduce the salt content with a rate of 0.1%.
Other businesses will be motivated to reduce the salt content in their processed foods as well .

3.4.6 Labelling

To our knowledge, no specific salt labelling initiatives has been included in the project.

3.4.7 Monitoring

The NAOS Strategy includes a chapter on evaluation and monitoring, in which the writers demand a rigorous and permanent evaluation to identify successful initiatives. It is however unknown which methods will be used to monitor the developments of salt reduction and consumer awareness .

3.4.8 Achievements

No achievements have been published yet.

3.5 FINLAND

Slides presented by Finland at the Salt Workshop in Brussels on 31 January are available at the circa site.

3.5.1 Background information

Finland has 30 years experience of systematic work in lowering salt intake, starting with recommendations to reduce salt intake by the National Nutrition Council in 1978. The traditional Finnish diet was high in salt since this has been a vehicle for conservation of food before other methods were available.

The North Karelia project was a mass population intervention (1979-1982) aiming to reduce the mortality in CVD in Northern Finland by reducing salt intake in the population. This project was the starting point, after which all the activities have been at the national level.

The salt intervention in Finland has the following milestones

- Since 1979 population surveys registering intake of salt both using 24-h urines and dietary data.
- Mass media campaigns, cooperation with food industry to reduce salt voluntary and education of health care personnel.
- First labelling decrees were launched in the 1980s

3.5.2 Aim of initiative

Currently, the official recommendation of the National Nutrition Council is to decrease the intake of salt from 7g for men and 6g for women .

3.5.3 Area of action

The North Karelia project was initiated by the local and national authorities, in cooperation with WHO 1972. Several local and national actors were involved, such as health services, schools, NGOs, as well as media, food industry and agriculture. The project was carried out by local people and community organization, supervised by national authorities, such as KTL. So the project was a community based intervention program.

After the project demonstrated it was effective, the program turned into a national program. This national program also included health services, schools, NGOs, mass media and food industry. All these actors were involved in reducing the salt intake in the Finnish population, all in their own area of expertise. Legislation and other public policy have supported the initiative.

3.5.4 Public Private Partnership

The food industry was involved in the project from the beginning in 1979. The food industry was invited to participate by developing new products with no salt and produce food products with less salt. The food industry felt responsible for the health status of the Finnish population

and started to participate voluntarily. The public started to ask for healthier products, which encouraged the food manufacturers to produce products with less salt.

Emphasis was paid on foods that contributed most to salt intake, such as sausages, bread, fish products, butter, soups and sauces, ready made meals and salt containing spicy mixtures.

The labelling legislation (see below) has also encouraged food manufacturers to reduce the salt content in foods.

3.5.5 Description of activities

The promotion of reduced salt intake came from several different actors in the field.

Health education of consumers
Broad based health education aimed to improve the knowledge of high salt consumption and emphasized the health effects of salt reduction. Practical advice was given on how to prepare less salted foods and people were encouraged to demand less-salty products .

Studies published results on comparisons of sodium content in different products, which increased consumer awareness of salted products and motivated food industry to lower the salt content .

Training programs for professionals
Health care professionals, home economic teachers and catering personnel were given trainings on how to reduce salt.

Mass media campaigns
NGOs have conducted mass media campaigns to raise awareness on the issues of salt on health and within a broader message related to heart health.

Food industry
The food industry voluntarily started to develop less salty foods. Since the start of the project, an increasing number of companies have reduced the sodium content of their food products. Labelling regulations have contributed to the developments as well. A new mineral salt have been developed (‘Pansalt’) that can replace sodium. Products using ‘Pansalt’ are allowed to use the ‘Pansalt’ logo. This logo is well recognized in Finland.

But in Finland, an important share was reserved for the media. A leading newspaper in Finland (Helsingin Sanomat) published many articles and editorials on salt. It reported on harmful effects of salt and on available alternatives, thereby educating the Finnish population on the health effects of salt and increasing the awareness of the government in salt .

3.5.6 Labelling

The labelling of salt is determined in national regulations since the early 1990s. The labelling applies to all foods that contribute for a large extent to salt intake of the Finnish population. Finland is the only country in Europe that has issued labelling regulations for salt. The labelling is regarded as very important to reduce salt content due to a reluctance to label foods as "highly salty".

The regulation sets limits for salt and introduces mandatory labelling text for products falling into the regulated categories: breads, sausages and other meat products, fish products, butter, soups and sauces, ready made meals and salt containing spicy mixtures.
Foods that are high in salt according to the regulation are required to carry a 'high in salt content' warning. Moreover, foods need to apply to national standards to be labelled as 'reduced salt'.

3.5.7 Monitoring

The monitoring of salt intake was done as part of the FINRISK studies. These studies assessed the urinary sodium excretion among the Finnish population in 1979, 1982, 1987 and 2002 [32]. Salt intake has also been calculated based on dietary surveys every five years since 1982. The most recent data are from 2007. Intake calculations have been validated against 24-hour urine values and found to be reliable, thanks to regularly updated food composition tables.

3.5.8 Achievements

Sodium excretion levels have dropped significantly over the last 20 year. Between 1979 and 2002 urinary sodium excretion decreased from over 220 to less than 170 mmol/day among men and from 180 to 130 mmol/day among women. The decline in sodium excretion is in line with an observed decrease in blood pressure levels in Finland. It is assumed that this decline in blood pressure can be contributed to the decline in salt intake.

Due to the legislation of salt labelling, many products disappeared from the market. It is thought that manufacturers did not want to label those foods as 'high in salt'. In turn, many new reduced salt products came on the market and remained on the market.

Annex

Table 1: Estimates of national salt intake values based on an "on the spot" survey of participants to a salt workshop at the end of January 2008

MS	**Estimated intake level g/day**	**Source of estimate**	**Main salt contribution from**	**National recommendation**
Austria 	No estimate			
Belgium 	≈ 11 g/ day	Unknown have to conduct new analyses	Bread	8, 75 g/ day
Bulgaria 	≈ 12 g/day (10-15 g/day)	National Monitory and Dietary Intake and Individual status	Bread and bakery (40-50% of the total amount) Salt added in cooking (25-30%) Meat products (10%), Cheeses (9%) Pickles, canned vegetables (6%)	5 g/day
Cyprus 	No estimate		Unknown	5/day
Czech Republic 	Probably 11- 12 g/day	Data is currently being updated through a study	Salted kind bakery products Instant soups Cheeses Meat products	5g/day

Denmark 	Men 9 -11 g/day Women 7-8 g/day	Individual food consumption studies	Prepared food type not specified Canteen meals	5-6g/day
Estonia 	No estimate			Not more than 5g/day for women, Not more than 6g/day for men (national nutritional recommendation)

Finland 	Women 8 g/day Men 10 g/day	National survey data	Meat products Bread Catering	Men 7 g/day Women 6/day <2 years 0,5g/day
France 	≈ 8,5g/day	National Food consumption studies	Bread Meat products Soups, cheeses, ready to eat meals	8 g/day
Germany 	No information			
Greece 	No estimate		High blood pressure correlated with high bread intake	5g/day

Hungary 	Men 18g/day Women 16 g/day	National survey 2002/2004	Ready to eat meals Bread Meat products	5g/day
Ireland 	≈10 g/day	7 day weighted consumption study	Bread and rolls Cured processed meats and meat products Meat and meat dishes Milk and milk products Spreading fats	6g/day
Italy 	10g/day	National institute for nutrition research	Bread? Household salt? (Danish presentation)	< 6 g/day
Latvia 	Not estimated		Potato chips Bread Meat products Ready to eat products (processed products)	5g/day

Lithuania 	11 g/day	2003 Health Behaviour and Nutrition Status of Lithuanian Population	Meat, Salt, Bread, Fish	< 5 g/day
Luxembourg 	Not estimated			5 -10 g/day
Malta 	No information			5 – 8 g/day

Netherlands 	Men 9,7g/day Women 7,6 g/day	Governmental survey urinary sodium excretion (RIVM 2006). Cohort study with slight risk of underestimation but survey will be repeated in same cohort		6 g/day
Poland 	About 90% of diets contained too much sodium.	National representative survey in 2004	Bread, sausages ready-to-cook foods	1 teaspoon/day ca 5-6 g/day
Portugal 	2005 11g/day 2006 12g/day	Consumer Association University Nutrition faculty		≤ 6 g/day
Romania 	Not estimated			6 g/day
Slovakia 	No information			
Slovenia 	12,5 g/day	National survey 24 hour recall		< 5g/day
Spain 	≥12 g/day	Individual studies	Individual studies	5 g/day

Sweden 	10 -12 g/day	Nutrition surveys	Mixed meat products Bread Cheese Ready made foods	5 – 6 g/day
UK 	2006 9,0 g/day	Urinary sodium	White bread 9all) Bacon and ham (grown ups) Breakfast cereals (children) Crisp and Savoury snacks (children) Home made meat dishes (grown ups) Cheese (grown ups) Sausages Baked beans	Children 0-6 months < 1 g 6-12 months 1g 1-3 years 2g/day 4-6 years 3 g/day 7-10 years 5/g day Older children and grown ups 6 g/day
Iceland 	≈9 g/day	Dietary survey 2002	Bread	6 -7 g/day
Norway 	≈ 10g/day	Household consumptions surveys		5g/day
Switzerland 	10 – 13 g/day	Salt consumption and Hypertension report	White bread Whole Bread Cheese Soups Pizza	

Table 2: Compiled Member States responses to salt questions as part of the questionnaire "Implementing the White paper"

MS	**Government actions on salt**	**Estimation methods of the salt intake of the population**
Austria 	No action has been undertaken on salt	Salt intake is irregularly measured. Information about salt content of particular food groups is available.
Belgium 	Belgium established a national food and health plan (NFHP) in 2006 which aims at bringing together and supporting actions to improve dietary habits and physical activity in the Belgian population. The NFHP comprises 7 nutritional objectives that we aim to meet, including one in relation to salt. The main message consists of two parts. On the one hand the reduction of added salt in the diet and on the other hand the encouragement of the use of iodised salt instead of regular table salt. The part on reduction of salt intake was also illustrated in the television spot that was aired to announce the initiation of the NFHP. Another initiative is the possibility of food businesses to make reference to the health messages of the NFHP on products that respect certain compositional criteria laid down by the authorities. This included messages in relation to salt (either covering the reduction of salt or the iodised salt message). The authorities also plan multi-stakeholder meetings with relevant stakeholders involved with salt (salt producers, food sector, producers of ready to use meals, bakery sector, scientific experts, consumers associations, etc) to agree on the strategy to reduce the use of salt in their sectors and to develop a strategy for the introduction of iodised salt in the food chain (bread and kitchen salt seem the most likely candidates).	Belgium carries out regular food consumption surveys, the last one dating from 2005. A new survey is scheduled for 2009. This survey is carried out by the Belgian Public Health Institute. A concrete estimation of salt intake has not yet been carried out because of methodological difficulties. Our scientific experts are currently looking into the issue to develop a methodology to more accurately measure salt intake.

Bulgaria 	The food intake guidelines include recommendations for reduction of salt intake to reach the target on 5 g/day. Have had meetings with industry on implementing the guideline targets.	
Cyprus 	Cyprus has a high frequency of CVD. They have just published their intake recommendations and are working on how to follow this up.	
Czech Republic 	The Food Based Dietary Guidelines for the Citizens of the Czech Republic contain recommendation for salt intake. However there is no specific campaign focused on salt.	Dietary exposition to the sodium is surveyed from 1996 in the Czech Republic by the National Institute of Public Health).
Denmark 	Salt not included in population dietary guidelines, since most of population salt intake stem from industry added salt. A newly started partnership on guidelines for work place meals will focus on limiting salt consumption as one of the 8 chosen areas.	Salt intake is part of the general population survey conducted every four years. It will probably also be an element in a future common Nordic monitoring.
Estonia 	Have national food intake recommendations which include salt recommendations. Cooperation with industry is under discussion. On the national level - the restriction of serving/offering of the strongly salted foodstuffs for children is set in the regulation of ministry of social affairs "Health protection requirements for catering at schools and preschool child care facilities" (2002). According to the Regulation of the Government of the Republic „Requirements for food Labelling and Labelling order" (2003) the maximum percentage by weight of cooking salt (sodium chloride) shall be indicated in the following food: 1) butter, margarine and other emulsified fats; 2) cheese and cheese products, and cottage cheese; 3) sausages and other meat products;	The salt intake is not monitored on the regular bases. There are some salt intake estimates for some population groups (in kindergartens, elderly homes) based on the analyses of the menu cards.

	4) fishery products; 5) ordinary bakers' wares; 6) unroasted or roasted cereal flakes or puffed cereals with or without additives; 7) salads; 8) broths, soups and sauces, including powdered or concentrated; 9) casseroles, and minced meat, liver and fish dishes; 10) mixtures of spices or herbs containing salt.	
Finland 	Labelling regulations: different limits of salt content in different product categories to be labelled as "high salt" already in the 1990´s. The limits have been lowered again in 2004. As a result the industry has lowered the salt content in their products strongly. Current regulations set limits for product call highly salted and reduced salt for categories of products. There are no governmental campaigns so far but we have numerous very active NGO´s which have campaigns dealing nutrition, including salt matters. The National Public Health Institute (KTL), as a government institute, continuously advocates for and supports such activities. Salt level is included in the criteria for the Hearth symbol label. For more information on the Finnish salt campaign see the report "Salt reformulation in five European countries."	The salt intake of the population has been monitored regularly at least 20 years (24-hour urine collection, Public Health Institute)

France 	En 2001-2002 : groupe de travail comprenant scientifiques et acteurs du secteur économique, débouchant sur un rapport de l'Agence française de sécurité sanitaire des aliments, avec des recommandations pour parvenir à une réduction progressive de la teneur en sel des aliments principaux contributeurs, et pour influencer la demande. Inscription dans le rapport annexe à loi relative à la politique de santé publique d'août 2004 d'un objectif relative à l'apport en sel dans la population générale : objectif 2008: apport moyen inférieur à 8g/personne /jour. Information de la population, dans le cadre notamment des guides nutrition pour la population française (pour tous, pour les enfants, pour les plus de 55 ans) sur la nécessité de limiter l'apport en sel Travaux de suivi régulier avec les acteurs économiques principalement concernés (en 2003-2005-2007) : secteur boulangerie-charcuterie-bouillons et potages- produits transformés-produits laitiers Ouverture en 2007 de la possibilité pour les acteurs économiques de signer des chartes d'engagements avec l'Etat, sur la base d'un référentiel établi par les pouvoirs publics et après l'avis d'une commission d'experts réunie par les pouvoirs publics. L'un des items mis en avant est la réduction de la teneur en sel des aliments For more information on the French salt campaign see the report "Salt reformulation in five European countries."	Une étude nationale, prenant en compte cette méthodologie, sur échantillon représentative des individus âgés de 4 à 75 ans a été menée en 2006 afin d'évaluer la situation nutritionnelle et la consommation alimentaire de la population. La consommation en sel sera ainsi connue. Les résultats doivent être présentés lors d'un colloque à Paris le 12 décembre 2007. Un suivi régulier de la teneur en sel de 400 produits alimentaires choisis en 2002 est réalisée par l'AFSSA, en lien avec une association de consommateurs (2002-2005- de nouveaux dosages sont prévus).
Germany 	No information	
Greece 	Try to lower salt in bread but no other activities	

Hungary 	There are occasional consultations between experts of nutrition, and food industry, mass catering on the actions to reduce the salt content in foods, and meals of mass catering. At present there is no consensus between the scientists, and the food manufacturers and caterers. Government support, and on the other side civil demand is needed to reach results. In 2005 recommendations for school meals was issued, and Hungary will focus on school catering meals.	In the last 20 years there were 3 dietary surveys in Hungary, the last one was in 2003-2004. All of them demonstrated a huge salt intake it was 3-4 times higher than the recommendation.
Ireland 	Actions taken nationally 1.population awareness campaigns Irish Heart Foundation/ Department of Health and Children (DOHC) have had a national awareness campaign on salt and safe food, The Food Safety Promotion Board have had a national awareness campaign on salt specifically aimed at workplaces 2. reformulation actions such as engagement with industry Food Safety Authority Ireland (FSAI) ongoing work over last 3 years The FSAI nutrition subcommittee is the national committee that advises the DOHC on nutrition issues- they have produced a report on salt. The FSAI is funded by the DOHC. For more information on the Irish salt campaign see the report "Salt reformulation in five European countries."	The salt intake of the Irish population was measured in 2001 and this includes information about particular food items and self- reported data is being collected in SLAN 2007 (Irish Lifestyle survey carried out every 4 years) – results by year end.

Italy 	Have established a national Platform which has a specific WG on Salt. The target is to reduce salt intake by 20%. Have agreement with the bakers on a salt reduction on 10 % /year. Food industry evaluates salt content in their products and are willing to reduce this. Target are set.	Intake information needs to be updated, and plans for monitoring and evaluation of the development.
Latvia 	N specific salt labelling Action Plan for implementing political guidelines named Healthy Nutrition. 2003. – 2013 has pointed out different initiatives for improving health: healthy nutrition, consumption of fruits and vegetables, physical activities. Healthy nutrition in schools – guidelines for healthy catering. Amendments to the Regulations of the Cabinet of Ministers *Hygienic Requirements for General Primary and Secondary Education Institutions and Vocational Education Institutions* and Amendments to the Regulations of the Cabinet of Ministers *Hygienic Requirements for Pre-school Education Institutions* prescribe the mandatory requirement that food products are not distributed in education institutions if they exceed 1.25 g salt per 100 g. The Ministry of Health has elaborated Healthy Nutrition Recommendations for People over 60 Years - not exceed salt consumption 3 g per day. Nutrition, Physical Activity and Health Recommendations, Healthy Nutrition Recommendations for Teenagers, and Healthy Nutrition	Adding of salt to food during the mealtime is monitored within the FINBALT Health Monitoring (a collaborative system for monitoring health related behaviour, practices and lifestyles in Estonia, Finland, Latvia and Lithuania. FINBALT Health Monitoring system monitors behaviour such as smoking, alcohol consumption, food habits and physical activity.)

	Recommendations for Adult Persons prescribe to reduce salt consumption. It is planned to discuss with food producers about the possibility to decrease the salt content in processed products and to promote the self-regulation of the food industry.	
Lithuania 	Government of Lithuania approved the Hygiene Norm HN 15:2005 "Food Hygiene" where Art. 7 states requirement for mandatory fortification of salt by iodine in catering, bakery and food retail industries: Public and producers are permanently informed about a need to reduce salt consumption by media, lections, leaflets. Salt reduction advice is included in the nutrition recommendations. Investigates the possibility to legislate to achieve salt reduction in food production. The laboratory tests are occasionally executed by food control authority during the official food inspection procedures. The bigger producers perform quantitative salt content analyses	The intake of Sodium and Chlorine is indirectly calculated by Food Consumption Monitoring executed by 24-hr recall method. It is easy to know the NaCl intake. .
Luxembourg 	No isolated action has been taken in this field but all awareness campaigns (cardio-vascular prevention, hypertension prevention, healthy nutrition campaigns) are accompanied by messages for a reduced salt consumption, according to the recommendations of the WHO. By the means of our national program for healthy nutrition and physical activity, initiated in 2006, we attempt to raise the consciousness for a balanced diet with different awareness campaigns. One of our basic recommendations concerning a balanced diet is the limitation of salt consumption and also the message that people should prefer salt supplemented with iodine. “Du sel avec moderation, mais du sel iodé”	No data is available and no action is being planned for measuring or monitoring the salt intake of our population.

Malta 	Malta has dietary guidelines stipulated in its National Food and Nutrition Policy (1988) which state a level of 5 to 8g/day. This is communicated to the public through ongoing information campaigns run through health promotion. All efforts are taken to encourage the public to consume less salt in their diet whether during cooking or at the table. Public is also urged to look at food labels and avoid those foods and food products with high salt content.	There are currently no plans to monitor salt intake in the Maltese diet.

Netherlands 	Have accepted a logo for good foods where salt content is part of the criteria. Task force on salt reduction, (self regulation industry, since 2007) Government is preparing a policy document on nutrition which includes salt policy: salt reduction by above mentioned industry Task Force, consumer education as part of Good Nutrition project	Dietary survey (new data in 2010) and urinary sodium excretion study (2006, to be repeated in 2010)
Poland 	Decrease of salt consumption in Polish population is one of the task of the National Program for the Prevention of Overweight, Obesity and Non-Communicable Diseases through Diet and Improved Physical Activity. The activities stimulating food industry to produce low-sodium products are foreseen in this program. There has not been a direct government action on salt. However, the National Food and Nutrition Institute, a leading national scientific research institution in the field of food and nutrition in cooperation with the food industry within the framework of the Polish Platform for Action on Diet, Physical Activity and Health, has undertaken activities aimed at the reducing the salt added to food products, while such reduction shall not disturb the technological process. Initial collaboration with the bread producers has been started. Initial organoleptic research of such	Data available on salt based on the representative household budget surveys conducted annually in Poland. There are also several individual dietary surveys which show the salt intakes but their results are rather not consistent. The National Food and Nutrition Institute plans the regular monitoring of dietary habits of Polish population within the National Programme for the Prevention of Overweight, Obesity and Non-Communicable Diseases through Diet and Improved Physical Activity (POL-HEALTH). One of the aims is to collect more accurate information on salt consumption.

	bread shows that consumers accept salt content in bread amounting to 1%. The Institute conducts also educational activities in the Polish society promoting the reduction of salt intake.	
Portugal 	Have some consumer awareness programs. Try to reduce salt in bread but the monitoring is difficult. As PT has many small and medium sized enterprises it is challenging to reach out to all producers. Had a working group on salt last year and will propose some actions for 2008 – 2009.	
Romania 	1. Population awareness campaigns – mass-media "Consumption of too much salt is dangerous for health" 2. Monitoring the level of salt in food products. In 2007, we started monitoring the level of salt in the main groups of food: milk products, meat products, to decide which will be the action to reduce the level of salt in foodstuffs. After final evaluation we can propose the reduction of salt added in food	
Slovakia 	No information	

Slovenia 	Preparation of the Action plan for salt reduction – draft document, following WHO recommendations. Participation in WHO Salt action Network Dietary guidelines: for kindergartens and schools –guidelines were introduced by Ministry of Health and Ministry of Education; for students; for active population at the workplace - limit of daily recommended salt intake is set; for patients in hospitals and elderly care centres; Limits of daily recommended salt intake are set for different age groups. More active role of food processing industry is foreseen in following years, including reformulation actions Also works with the health professionals.	Salt intake is estimated from different sources, the salt intake of the population is not regularly measured or monitored in Slovenia. Sources for estimation: from availability data (Household budget surveys), on annual basis; self reported data on salting habit, for active population from 25 to 64 years – CINDI Surveys, for 18 + population Slovene Public Opinion; national individual intake data in preschool age population, school children, adult population; several researches on individual intake data on limited population samples; National research data on salt content in bread and meat products; measuring 24-h urine sodium excretion in representative sample is planned.
Spain 	Agreement with the Spanish industry of bakeries for the progressive reduction of the percentage of salt used in bread (February, 2005). Agreement with the Spanish food industry to reduce the content of salt in their foodstuffs (February, 2005). Agreement with leading restaurant chains in Spain, which includes measures to reduce the salt consumption (February, 2005). Members of the Salt Action Network organized by WHO. For more information on the Spanish salt campaign see the report "Salt reformulation in five European countries."	Report on “Food sources of energy, total fat, saturated fat, salt, sugar and trans fatty acids on Spanish diet” (UCM, 2004). Not published. Currently, there is no monitoring system to regularly measure the population salt intake.

Sweden 	A five year's programme (2007 – 2011) to decrease the salt intake in the Swedish population is now in progress as a joint undertaking of the National Food Administration and the commercial food sector including restaurants and the catering sector. In the 2007 guidelines for food in schools, pre-schools and guidelines for food at workplaces, salt is particularly emphasised. On the website for food industry and consumers the information on salt is updated. Salt (sodium) is one of the criteria for the Swedish logo for better choice of food. No national campaigns have been planned until we can show a real decrease regarding the sodium levels in a significant number of products.	Self report data on the use of table salt: 8% used table salt on most occasions 28% sometimes 40% seldom 23% never
UK 	Has an ongoing salt campaign with the aim to reduce salt intake in UK for 9,5g/day in 2003 to 6 g/day in 2010 main areas are: - consumer awareness campaigns - voluntary reformulation from all sectors of food industry and joint target setting for salt content in different categories of food - traffic light labelling includes salt, as does the voluntary label schemes developed. For more information on the UK salt campaign see the report "Salt reformulation in five European countries."	Dietary surveys Regular measure of urine excretion level on grown ups.
Iceland 	Study on salt content in Icelandic breads at the Public Health Institute in Iceland in cooperation with the Federation of Iceland Industries The 13 largest bakeries are to be contacted and asked to provide information on salt content in their most popular breads. This will cover large part of sold breads in Iceland. This information will be used to calculate sodium content of Icelandic breads and compared to sodium content in bread in other countries.	Salt intake was last measured in a national dietary survey in 2002. A new survey will be carried out 2008/2009.

Norway 	No special activity on salt but reduction of salt intake is one of the goals in the Norwegian action plan on nutrition 2007 – 2011. Processed foods and labelling of salt is considered as important.	
Switzerland 	The Swiss Salt Strategy starting in 2007 is based on an experts report "Salt consumption and Hypertension" (www.bag.admin.ch/themen/ernaehrung) and has 4 goals: 1. an improved public awareness of the topic; 2. better and more detailed data on salt consumption; 3. a stepwise reduction of the salt content in processed foods and 4. an improved international collaboration. The following partners are involved in this public-private partnership project: The government (Federal Office of Public Health), NGO's (Swiss Heart Foundation and Swiss Medical Association) and Food Industry. Switzerland is a Member of the WHO Action Network on Salt.	Several studies on salt intake in Switzerland mentioned in the report "Salt consumption and Hypertension" are available. Particular food groups which contribute most to the salt intake are white and whole wheat bread More detailed data on salt intake on a national level will result the project NANUSS (National Nutrition Survey Switzerland)