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# **Salt Strategy for 2013 - 2016**

Paper on a Strategy for reducing Salt Consumption

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January 10, 2013

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## 1. Mission

On 18 June 2008, the Federal Council approved the National Programme on Nutrition and Physical Activity (NPNPA) for 2008 - 2012 (FOPH, 2008). The aim of the programme was to facilitate health promoting decisions in the field of nutrition and physical activity. Based on the evaluation of the programme (FOPH, 2011 a) and in order to ensure the sustainability of all involved stakeholders, the Federal Council ruled on the 9 May 2011 to extend the NPNPA for a further four years up to 2016 (FOPH, 2012 a).

An important objective followed by the FOPH in the context of the NPNPA is the promotion of a healthy food supply. In this context, the Salt Strategy 2008-2012 (FOPH, 2009 b) was compiled, in which the objectives presented in the FCN expert report "Salt and High blood pressure" (FOPH, 2004) were clarified, the strategies to achieve them set out and, by taking account of experience gained in other countries, a plan containing measures for Switzerland was drawn up for the years 2008-2012.

In the present paper on the Salt Strategy 2013-2016, the experience and the results obtained at the national level will be illustrated, the scientific literature on the topic Salt and Health reviewed and the key aspects defined for the objectives and measures for the following four years. The 2013-2016 Salt Strategy is part of the 2013-2016 Swiss nutrition strategy newly derived from the sixth Swiss nutrition report (FOPH, 2013).

## 2. Background

Cooking salt consists of sodium and chloride, both of which are of physiological importance and a minimum intake in food is thus necessary, specific for different groups of the population. For young people and adults this minimum is 550 mg sodium per day or about 1.5 g of salt (DACH 2000). However, as in other European countries, salt consumption in Switzerland is several times greater than this value, so when a risk assessment is made, this overconsumption represents one of the main dangers. The expert study entitled "Diet, nutrition and the prevention of chronic diseases", drawn up by WHO in 2003, studied and evaluated more than 50 nutrition factors as regards their role in the most important nutrition-dependent diseases. There was convincing evidence to classify the high consumption of salt as a risk factor for cardiovascular diseases, and based on the data it was recommended that average salt consumption be reduced at the level of the population to 5 g per person per day. In the WHO meeting "Reducing Salt Intake in Populations" (2006) and in other recent reviews (He and MacGregor, 2008; Hooper et al., 2009) the connections between salt consumption, hypertension and cardiovascular diseases are discussed in detail, based on the results of epidemiological studies.

According to the World Cancer Research Fund and the American Institute for Cancer Research (2012) second expert report there are also convincing data that salt and food preserved using salt are risk factors for stomach cancer. The 2004 FCN report also came to the conclusion that "high consumption of salt can have negative effects on health, above all through an increase in blood pressure and in particular for groups of the population who are at risk, such as those who are elderly, overweight, hy-

pertonic or sensitive to salt". Determining sensitivity to salt in relation to blood pressure in a clinically reproducible way in each case would require considerable effort. Therefore it makes more sense to pursue strategies to reduce salt intake in the population as a whole, in combination with the other measures recommended in the WHO strategy (WHA 57.17 of 19 May 2004) (WHO, 2004), such as striving for a healthy body weight and greater consumption of fruit and vegetables.

The National Programme on Nutrition and Physical Activity (NPNPA) follows a similar overall approach. The NPNPA wishes to facilitate decision-making that promotes health in the areas of nutrition and physical activity, in order to improve the prevention of non-transmissible diseases. One of the objectives of the NPNPA is the integration of a balanced diet into everyday life. The national recommendations on nutrition (FOPH, 2011b) serve as a basis. Calculations of menus on this basis show that if these recommendations are followed, salt consumption should be less than 5 g per day (Graf and Rosé, 2008).

The reduction in salt intake is one of many policy options that can contribute to achieve this goal. A meeting of the WHO (2006) showed that this is a measure by means of which the most can be achieved in a preventive way in the area of nutrition for the least expenditure of effort and expense.

The EU white paper (European Commission, 2007) made proposals for a community approach to reduce diseases caused by an unhealthy diet, overweight and obesity. Like the NPNPA, this strategy targets specified measures encompassing different areas of policy to reduce the risks linked to poor nutrition and lack of physical activity. Players in the private sector, such as those in the food industry, can also make a contribution here, e.g. by reformulating processed foods as regards their content of fat, saturated fatty acids, *trans* fatty acids, salt and sugar. Based on this strategy, efforts to reduce salt consumption have been underway in the EU since 2008 (see section 3.2).

In Switzerland, cardiovascular diseases are at the top of the list of all causes of death. There has not been a regular, nationally representative analysis in Switzerland of the relevant risk factors and their changes in the population.

A study carried out in the Canton of Geneva measured changes in hypertension in people aged 35 to 74 in the period 1993 to 2002. The prevalence of hypertension was 40 – 50% in men and 25 – 40% in women, with a tendency to decrease for both sexes (Costanza, 2004). Similar figures are available for Lausanne, where a prevalence of 36.7% was found (Firmann et al., 2008). Higher values, on average 56%, were found in a campaign carried out by the Swiss Heart Foundation, although the study cannot be considered to be representative (Zellweger et al., 2006).

Similarly there is a lack of current, reliable, national data on salt consumption in Switzerland. The most recent nationwide study, which was based on measurements of sodium excretion over 24 hours in urine, dates from 1984, and resulted in a value of 11.9 g salt per day (Mordasini et al., 1984). A regional study carried out in 2007 with 251 participants in Lausanne (Bochud et al., 2008) found an average of about 8 g of salt per day (8.3 g / day for men; 7.4 g / day for women). The most comprehensive current study comes from the Canton of Geneva and gave an average of 10.6 g per day for men and 8.1 g per day for women. The latter values are 3 to 6 g greater than the recommendations and did

not change significantly over the period from 1993 to 2004. The greatest contribution to these values comes from processed foods such as bread (21%), cheese (8%), meat products (14%) and the other processed products such as ready meals and other convenience products (34%), whereas non-processed foods such as vegetables, fruit etc. with 12% and salt added on cooking (5%) and eating (6%) do not significantly contribute to the total sodium intake (Züllli and Allemann, 2011).

The report made by the Federal Commission for Nutrition and entitled "Salt Consumption and Hypertension" (FOPH, 2004) refers to the "Nutrition and Health: a Policy on Nutrition for Switzerland" (FOPH, 2001), which was based on a thorough analysis of the fourth Swiss Report on Nutrition (FOPH, 1998) and established eight main goals, which the FOPH then used as a guide to implementation. The focus is on the promotion of a healthy body weight and on an increased consumption of fruit and vegetables. In May 2004, the WHA approved a resolution on "Global strategy on diet, physical activity and health" (WHO, 2004) which, both in regard to its contents as well as in the distribution of roles among stakeholders concerned with nutrition, is important for the continued development of the policy on nutrition. In the annex to this WHA resolution, the general recommendations for the population that come first are working towards an energy balance and a healthy body weight. Limiting the salt consumption is also mentioned. This requirement was already acknowledged in the FCN report (FOPH, 2004) and defined three general objectives:

#### **Objective 1**

The knowledge that the population has about the relationship between salt consumption and health should be improved so that consumers take more personal responsibility.

#### **Objective 2**

The salt content of processed foods, which make a considerable contribution to salt intake, should be optimised, whilst maintaining quality and food safety.

#### **Objective 3**

In the longer term, we have to use appropriate measures to attempt to reduce salt consumption in Switzerland. The extent and timing of this reduction require detailed analysis.

The relationship between salt consumption and hypertension is discussed at length in the FCN report. Recently, Bochud et al., 2008 briefly updated the data and carried out a critical analysis. A reduction in salt consumption of 3 g per day leads to a reduction in blood pressure of 3.6 to 5.6 / 1.9 to 3.2 mmHg (systolic / diastolic) in hypertensive individuals and 1.8 to 3.5 / 0.8 to 1.8 mm Hg in normotensive individuals. According to a conservative estimate, this would cause a 13% reduction in strokes and a 10% reduction in ischemic heart disease (He et al., 2003).

If salt consumption is reduced it is important to bear in mind that table salt is a means of supply for iodine and fluorine. These additives would have to be adjusted to the new circumstances in cooperation with the Commission on Fluorine and Iodine of the Swiss Academy of Sciences, in order to avoid deficiencies and their consequences. There should also be an examination of the need to adjust the

dietary recommendations for specific groups (age categories, athletes, those carrying out physically-demanding work etc.) (Keller et al., 2012)

### 3. Experience and Initiatives in other Countries

#### 3.1. Successful Strategies and Measures adopted in other Countries

Efforts to reduce salt consumption are already underway in several western countries. The recent experience this provides about the effectiveness of the measures taken and their political acceptance provide valuable basic information for Switzerland. The FCN report (2004) provided an initial assessment of the situation and this was supplemented two years later by a survey of European countries carried out by the Swiss Society for Nutrition, under the auspices of the FOPH (SSN, 2006). The internationally available data have recently been updated in the EU report "Implementation of the EU Salt Reduction Framework: Results of Member States Survey" (EU, 2012) and by Webster et al. (2011), as well as in the Infrac report: Fundamentals for the Coordination of the Salt Strategy 2013-2016 (FOPH 2012b).

Country	Beginning of programme	Most important measures	References
Finland	1982	Information, declaration measures "heart symbol" Salt substitutes	Laatikainen et al. (2006)
France	2002	Reduction in the salt content of foodstuffs Information	AFSSA (2002)
Great Britain	2005	Reduction in the salt content of foodstuffs Information	Food Standard Agency (2005)
Ireland	2005	Reduction in the salt content of foodstuffs	Food Safety Authority of Ireland (2005); <a href="http://www.fsai.ie">www.fsai.ie</a>
Australia	2007	"Drop the Salt!" Campaign Information	<a href="http://www.awash.org.au/dropthesaltcampaign.html">http://www.awash.org.au/dropthesaltcampaign.html</a>
USA	1995	Regulatory measures (health claims, declaration, maximum levels)	<a href="http://www.cfsan.fda.gov">www.cfsan.fda.gov</a> ; IOM (2010)

Table 1: Current programmes to reduce salt consumption in other countries

Table 1 gives an overview of a selection of current programmes in other countries to reduce salt consumption. The long-term goal in all these countries is to reduce salt consumption from currently 9 or 10 g per day to 5 or 6 g per day. The most important measures are lowering the salt content of the processed foods that contribute the most to high salt consumption, promoting salt substitutes, providing more information for the population and introducing provisions on declaration and other regulatory measures.

#### Finland

In Finland, where salt consumption initially in 1970 was 14 g/day, the National Nutrition Council already made recommendations for salt reduction. Between 1979 and 1982 the North Karelia Region introduced a salt reduction project in an overall programme on cardiovascular illnesses. After three years the project was extended to the whole of Finland.

The Finnish programme to improve nutrition has been running since 1982 and has succeeded in reducing salt consumption from initially 14 g per day to 10 g per day over a period of 20 years (Laatikainen et al., 2006). The means used have been to inform the population, the promotion of salt substitutes and the use of the heart symbol as a declaration on foodstuffs with a favourable profile of nutrients. Furthermore, pending harmonisation with EU legislation, products with a high salt content had to carry a warning. The heart symbol is a label that was launched by the Finnish Heart Association and the Finnish Diabetes Association at the beginning of 2000. Foodstuffs that fulfil certain criteria in regard to fat and salt contents and other ingredients are awarded the label. The information campaign included the distribution of leaflets, the creation of a homepage, as well as advertisements on television, radio and in newspapers on various occasions. The heart symbol is widely employed, and in 2006 was found on 274 products. A survey in 2006 demonstrated high familiarity with the label: 84% of the population recognised the symbol and 40% had been influenced at some point in their purchasing decision (SSN, 2006).

Thanks to regular monitoring, data on salt consumption in Finland are available from 1977 to 2007. Monitoring provides data based on 24 hour urine as well as on consumption studies. Both sources show a reduction of more than 20% within 30 years.

### **France**

France was the first country to start using a different strategy to reduce salt consumption, and to carry it through consistently. It was directed at those processed foods that contribute the most to salt consumption and the objective was to achieve a stepwise decrease in salt content, in close collaboration with the food industry, whilst maintaining the safety and quality of the products. The procedure is described in detail in the AFSSA report (2002) (now Anses). Over the period 2001 – 2005, this procedure was successful, as shown in the assessment report (Hercberg 2006): the salt content of bread, meat products and soups was reduced. Overall, the original high targets of reducing salt consumption by 4% per year (20% over 5 years) were not achieved. However, the reduction of about 5% in salt consumption achieved at the level of the population (men: from 9.3 to 8.7 g, women from 6.9 to 6.7 g, without freely added salt) is to be seen as a success, and is very important from the point of view of health. Based on these results, the targets for the second phase of the “National Programme on Nutrition and Health” were somewhat more restrained. The first step is to cut the average salt consumption to 8 g per day for the population as a whole by 2010. This is to be achieved above all by an information campaign and a reduction in the salt content of bread.

### **Great Britain**

Since 2005, the United Kingdom has made a great effort to reduce salt consumption. After a large-scale campaign using print and television advertising to promote public awareness, the second phase focussed on voluntary reduction of the salt content of processed foods. The "Salt Model" that was developed includes 85 categories of food for which targets for salt content have been set. This procedure enabled the following reductions in salt content to be achieved: 33% for breakfast cereals, 25%

for potato crisps and 30% for bread. This led to a small but significant reduction in salt intake at the level of the population.

Thus, regular surveys of salt consumption also show a downward trend in Great Britain (based on 24 hour urine tests): Overall, the average salt consumption since the first 2000/2001 survey has dropped by 1.4 g/day, the reduction for men being 1.7 g/day (from 11.0 to 9.3 g/day), for women being 1.3 (from 8.1 to 6.8 g/day). (Sadler et al. 2011)

### **3.2. EU Common Framework on Salt Reduction**

Since July 2008 the EU has been pursuing the objective of reducing salt consumption in the member states. At national level (1) data on the initial situation are to be collected, (2) objectives (benchmarks) are to be established for reducing the salt content of the most important categories of foodstuffs, which at the national level make a significant contribution to salt intake, (3) an information plan is to be established and information made available to the public, (4) the reformulation of food in collaboration with industry is to be encouraged and (5) a monitoring system is to be set up. The overall European objective is to reduce the salt consumption of the population as a whole by at least 16% within four years (4% per year), with different starting positions in the various European countries. Switzerland has the possibility of cooperating at the level of experts. Close collaboration with the WHO Salt Action Network (ESAN) is envisaged.

A survey of the member states (EU, 2012) showed that 29 European countries (incl. Switzerland and Norway) are participating in the EU Common Framework on Salt Reduction. In the meantime, data on salt consumption are available from most countries: It averages between 8 and 12 g/day, a few countries being above or below this range. The measurement techniques were the 24 hour urine collection or the (less accurate) 24 hour dietary recall method. There is now cooperation in 25 countries with the food processing industry with the aim of achieving a reduction in the salt consumption by reformulating those foods that contribute most to salt consumption.

### **3.3. The European Salt Action Network (ESAN) and its Basis**

The Salt Action Network, which was founded in 2007, under the chairmanship of the United Kingdom, stems from an initiative of WHO Europe and is based on the recommendations of the Second WHO European Action Plan for Food and Nutrition Policy 2007 – 2012 (WHO, 2007), the decision on the Prevention and Control of non-communicable Diseases (WHA60.23 of May 2007) and the conclusions of the forum and technical meeting “Reducing Salt Intake in Populations” (WHO, 2006). By mid-2008 15 countries including Switzerland had joined ESAN. The purpose of the organisation is the exchange of information on strategies to reduce salt consumption and on technological progress in the production of foodstuffs that make a considerable contribution to salt intake, and to develop best practices in communication and monitoring.



### **3.4. World Action on Salt and Health (WASH)**

The World Action on Salt and Health (WASH) originated as an initiative from medical professionals. This organisation was established in the United Kingdom in 2005, but it is active throughout the world, and has the objective of gradually reducing salt consumption in the population as a whole. WASH currently has more than 300 members, mainly experts in hypertension, in 73 countries. In particular, WASH supports the CASH (Consensus Action on Salt and Health) model that was developed in the United Kingdom and aims to achieve a worldwide consensus with the food industry in this field.

## **4. Objectives of the Salt Strategy 2008-2012**

The Salt Strategy 2008-2012 comprised the following five objectives:

**Objective 1:** The basic data that are necessary are available, and are continuously updated and improved.

**Objective 2:** The population is made aware of this issue and is informed so that people are capable of reducing their salt consumption.

**Objective 3:** Thanks to cooperation with businesses, the level of salt is reduced in processed foods and in the catering sector.

**Objective 4:** The approach in Switzerland is adapted to developments in other countries.

**Objective 5:** The foundations are created for monitoring and evaluation of the measures.

## **5. Achievements up to 2012**

Achievements in the Salt Strategy 2008-2012 during the reporting period are documented in the Infrac Report: Bases for the orientation of the Salt Strategy 2013-2016 (FOPH, 2012b). Advances were principally achieved for the objectives 1, 3, 4 and 5.

Objective 1 Improving the basic data

A significantly improved data base on salt consumption and the incidence of hypertension in Switzerland was achieved in the reporting period by the study of Chappuis et al. (2011). Measurements were carried out in 2010-2011 using internationally recognised methods on a total of 1448 persons aged above 15 and took into account all cantonal and linguistic regions (i.e. in the reporting period). The Swiss average of salt excretion in the 24 hour urine was 9.1 g/day (7.8 g/day for women and 10.6 g/day for men) and was therefore only insignificantly different from the data of the Geneva study (Beer-Borst et al., 2009) for the period 1993-2004 with 9.3 g/day (8.1 g/day for women and 10.6 g/day for men), which was used as the starting point and level for the target of 8 g/day when the Salt Strategy 2008-2012 was defined. However, it has now been shown for the first time that the differences in

the three linguistic regions of Switzerland, 9.4 g/day (D), 8.7 g/day (F) and 9.0 g/day (I), are not very pronounced as against the differences in the sexes. An interview with the people who took part in the examination showed that they did not fully understand the sources of salt supply and above all overestimated the role of added salt when cooking and eating. The blood pressure measurements likewise carried out throughout Switzerland in the same study of Chappuis et al. (2011) demonstrated a mean prevalence of 25.6% hypertension, defined as >140/90 mm Hg or by the administration of antihypertensive medicaments. The gender-specific difference is also considerable here with 19.1% (women) and 32.3% (men); however, the differences in the three linguistic regions are also more pronounced with 28.9% (D), 22.9% (F) and 18.1% (I) than for the corresponding salt consumption data. More striking is the different prevalence of hypertension in the corresponding age groups. It rises continuously from only 3% in the age group 15-29 to 64.5% in the over sixties.

#### Objective 2 Public relations

In objective 2 it is planned to carry out public relations on two levels, namely firstly with specialist circles, secondly with the general public. A project "Specialist information on salt and health", based on a concept introduced by the Swiss Heart Foundation and supported by the FOPH, has been running since 2012 (until 2014). It is intended that prominent representatives of the most important medical scientific associations draw up a consensus paper that will be published in technical journals and will represent the basics for further media work.

Objective 3 Thanks to a collaboration involving industry and research, the salt content in processed foods and in gastronomy is reduced.

In a contract research project (Züllli and Allemann, 2011) aimed at achieving this objective, the feasibility of salt reduction for 11 food categories was to be clarified. Practically, it was determined where and to what extent a reduction can be implemented industrially and without impairing taste and safety of the products. The consumers and industry were involved in this. The categories bread, cheese, meat and ready-made meals were principally investigated which were also designated by the EU as the most relevant categories. Target values or measures were defined for 11 product groups (see Table in the annex for target salt contents).

The FOPH led discussions with companies from the food industry in regard to adjusting the product recipes. In this regard, two paths were taken:

- actionsanté (FOPH, 2009a): companies that already participate in actionsanté were motivated to integrate salt reductions into their campaign pledges. This took place principally at the actionsanté 2009 annual conference, which was dedicated to the theme of salt reduction. The companies that are partners of actionsanté are mainly large companies that are very diversified. A total of six companies made campaign pledges for salt reductions in the product categories convenience foods, meat and/or bread.
- Additional industrial partners: The FOPH likewise utilised the meetings with the various industrial stakeholders in order to bring up the salt strategy in these discussions. In this way almost all the relevant major companies could be reached. Contact with the smaller and medium-

sized companies was made through their associations. In general, companies that are present on the market with a product mainly refrain from becoming partners of actionsanté. They fear that by actively communicating the change in recipe (less salt) they will lose their customer base. Some companies have reduced the salt content in their products without saying so. With SMEs in particular, it is not known how many companies and products are concerned by this.

In another research project (Beer-Borst and Sadeghi, 2011) work centred on the identification of effective measures in collective catering, which represents an important setting for the reduction of salt consumption. Here, the production side was examined and critical areas on how salt is introduced were identified. Effective measures were derived from this. In a subsequent project the commonest menus used in collective catering in Switzerland were analysed and their potential for reduced salt assessed (Beer-Borst and Sadeghi, 2012).

A joint project in the field of collective catering was carried out with the Swiss Association of Hospital, Institutional and Collective Catering (SVG). In its newspaper and at events the SVG informed its members on the salt strategy. According to the Association, measures have been taken up by establishments that took part in the study. The association stated that of the companies, the SV Group had evaluated its recipes and adapted them. Of the other companies, however, it is not known whether and which measures for salt reduction have been implemented.

Objective 4 The approach in Switzerland is adapted to developments in other countries.

At the international level the FOPH is represented in the two most important bodies for the topic of salt. The first body, "The high level group on nutrition and physical activity" is located in the EU. It is led by the General Directorate for public health and consumer protection of the EU Commission. The salt initiative adopted by the EU Commission was launched by the member states and developed by the expert group. Switzerland and Norway are members of this body.

The second body, the European Salt Action Network (ESAN), is a body of WHO Europe. Only some of the European member states of WHO are part of ESAN. These projects are complementary to the High Level Group of the EU. ESAN focusses primarily on monitoring and improving the data sources.

Objective 5 Guidelines are created for monitoring and the evaluation of the measures.

In regard to monitoring and the evaluation, the study of Chappuis et al. (2011) served as a basis for the monitoring. Moreover, monitoring is also carried out with the campaign pledges in the context of actionsanté or by the MOSEB. On submitting its pledge the company promises to carry out a self-evaluation and to verify the objectives. Salt consumption has been taken as the indicator 2.5 in MOSEB, the data recorded up to now being essentially based on the two studies of Chappuis et al. (2011) and Beer-Borst et al. (2009). Accordingly, besides the already mentioned differences in salt excretion by sex, age groups and linguistic regions, data also exist on the source of the salt, wherein there are noticeable differences between data obtained from dietary surveys and data estimated by the investigated persons themselves. For the latter, ready-made meals and added salt are the most important salt sources, from which a lack of information can be concluded.

## **6. Overall objective**

The circumstances are changed by involving all interested and affected groups in such a way that the well-informed consumers understand how to reduce their salt intake without any loss in taste. This contributes to a marked reduction in the cardiovascular risk factor hypertension, increases the quality of life and promotes the health of the population.

The salt consumption is reduced gradually in feasible steps. An initial reduction to less than 8 g per day per person is aimed for by 2016. In the longer term the average salt consumption of the Swiss population should meet the WHO recommendations of less than 5 g per day.

## **7. Objectives and measures up to 2016**

### **7.1. National objectives**

The defined objectives, together with the possible measures for Switzerland, are supplemented and coordinated in the following. The measures take into account the described advances achieved with the salt strategy in the period 2008-2012 as well as new scientific findings.

### **7.2. Objective 1: The basic data that are necessary are available, and are continuously updated and improved**

The improvement in the basic data on the specific interrelations between salt consumption and health in Switzerland enables on the one hand coordinated public relations work and on the other hand is the basis for monitoring the salt strategy.

**Measure 1:** New data on salt consumption and blood pressure are systematically studied, evaluated and used in the context of the salt strategy.

**Measure 2:** Representative data on salt intake by the Swiss population and the incidence of hypertension should continue to be collected following internationally recognised methods.

### **7.3. Objective 2: The population is made aware and informed so that they are capable of reducing their salt consumption**

Professionals are informed and recognise how they can contribute to reducing salt consumption. The state of knowledge of the population on the connection between salt consumption and health is improved, thereby increasing consumers' personal responsibility. Consumers who wish to monitor their salt intake are able to estimate how much it is.

Information is provided at two levels: to professionals and to the general public.

**Measure 1:** Information on salt and health is made available to the public through national recommendations on nutrition.

**Measure 2:** A position paper on the topic salt and health should be drawn up by the most important medical associations, and should take account of the Swiss situation and find an information strategy to be used for further communication.

**Measure 3:** The relevant partners are motivated to include and impart the topic of salt consumption in the education and training of professionals (doctors, pharmacists, nutrition advisors, care professionals, caterers, domestic science teachers, food producers etc.).

### **7.4. Objective 3: Thanks to cooperation involving industry, the salt content is reduced in processed foods and in the catering sector**

In processed foods that make a significant contribution to salt intake (bread, cheese, meat products, soups and prepared meals), and in catering and restaurants the amount of salt is to be reduced whilst quality and safety of the products are maintained. By 2012 the reduction is to be at least 16%.

**Measure 1:** The target values for various product categories listed in the annex should be aspired to with the understanding of the production companies. Target values for additional product categories, together with a time line for their realisation should be drawn up by the interested parties.

**Measure 2:** The potential for salt reduction of the most frequently used menus in collective catering in Switzerland should be exploited and implemented with the relevant stakeholders.

#### **7.5. Objective 4: The approach in Switzerland is adapted to developments in other countries**

International cooperation should be arranged whenever possible. This means benefiting from the experience of other countries and of international organisations. Measures are compatible with those of the EU and correspond to international recommendations.

**Measure 1:** Cooperation is pursued with international organisations, in particular WHO (ESAN), EU (High Level Group on Nutrition and Physical Activity) and with other countries.

**Measure 2:** The role of salt as a parameter in nutrient profiling models should be clarified in the context of methods still under development for the reformulation and labelling of foods.

#### **7.6. Objective 5: Guidelines are created for monitoring and the evaluation of the measures**

Monitoring of the strategy on salt is realised inter alia by the MOSEB system (monitoring system for nutrition and physical activity), which was developed for the NPNPA and the national nutritional survey.

**Measure 1:** The measures for the strategy on salt are monitored and evaluated. Monitoring instruments are the data on salt consumption collected at regular intervals by means of the 24 hour urine method, as well as the annual reduction of the average salt consumption in the population as determined by the companies, based on sales figures of processed foods with a reduced salt content.

### **8. Timetable and Financing**

The strategy on salt runs from 2008 to 2016 and is adapted to the "EU Common Framework on Salt Reduction".

The measures will be financed from the budget of the FOPH. The roles and responsibilities of the stakeholders are clarified and supervised in order to take better advantage of synergies and to optimise the use of resources.

## 9. Abbreviations

AFSSA	Agence Française de Sécurité Sanitaire des Aliments
Anses	Agence nationale chargée de la sécurité sanitaire de l'alimentation, de l'environnement et du travail
BAG	Bundesamt für Gesundheit
DACH	Deutsche, Österreichische und Schweiz. Gesellschaft für Ernährung
DASH	Dietary Approach to Stop Hypertension
EEK	Eidgenössische Ernährungskommission
ESAN	European Salt Action Network
EU	Europäische Union
IOM	Institute of Medicine (US)
MOSEB	Monitoring System Ernährung und Bewegung
NPEB	Nationales Programm Ernährung und Bewegung
SVG	Schweiz. Verband für Heim-, Spital- und Gemeinschaftsgastronomie
WASH	World Action on Salt and Health
WHA	World Health Assembly
WHO	World Health Organisation

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## 11. Annex Target values for desired salt contents

Target values for desired salt contents (according to Züllli and Allemann, 2011)

Food Category	Tested Product	Target Value <sup>1)</sup>	Applicability
Bread and bakery products	White bread	max 20 g salt per kg flour	All breads and bakery products
	Whole-grain bread		
	Whole-grain crackers		
Meat products	Lyon Cervelas	max 17 g salt Per kg sausage meat	All cooked sausage products
	Ham	max 17 g salt Per kg meat	Ham, shoulder ham and formed ham and comparable products
Cheese and dairy products	-	No target values, see measures	All cheese and dairy products
Ready-made meals and components of menus	Sausage-cheese salad	max 1.5%	Prepared salads with ingredients with a high salt content (meat products, cheese and dairy products etc.)
	Potato salad	max 1.0%	All other prepared salads (without the above)
	Duchess potatoes	max 1.0%	Potato products such as potato croquettes and comparable products
	Prepared rösti (fried grated potatoes)	max 0.8%	All types of prepared rösti and their specialities (e.g. rösti croquettes, rösti cakes)
	Egg spätzli (pasta) egg ravioli pasta carbonara	max 1.0%	All prepared products (with and without sauce, with and without filling)
	Tomato risotto	max 0.8%	All prepared risottos
	<sup>2)</sup>	max 0.9%	All prepared soups

<sup>1)</sup> For ready-made dishes and components of menus, the target value refers to the prepared product

<sup>2)</sup> No consumer tests carried out; derived target value based on producers' data