National Research Programme NRP 69
Healthy Nutrition and Sustainable Food Prodution

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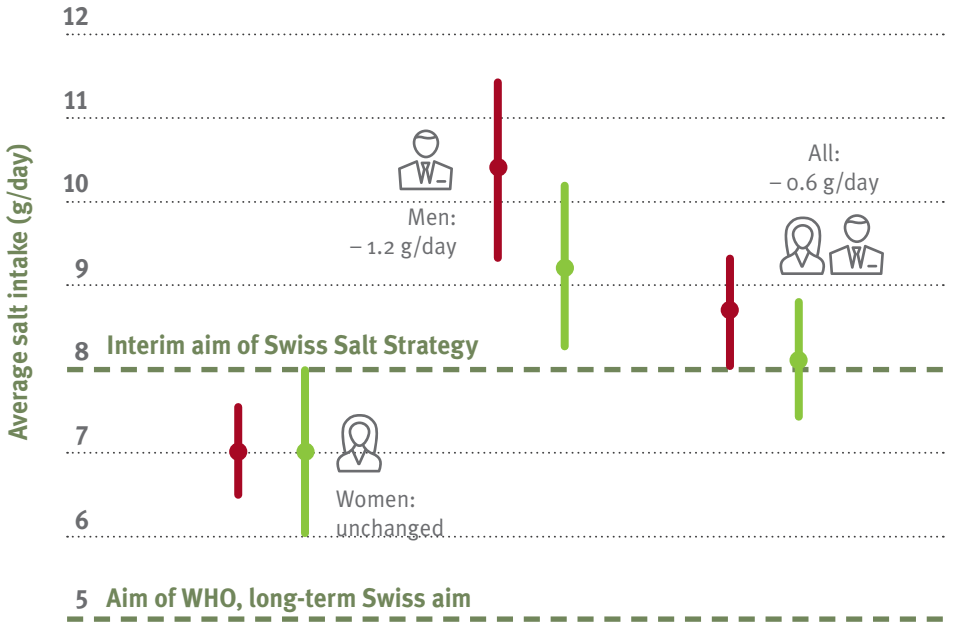
Reducing employees salt consumption through workplace health promotion

A high salt intake contributes to higher blood pressure and increases the risk of cardiovascular disease. Measures to reduce salt consumption are therefore included in the promotion of healthy eating. An NRP 69 research group conducted a study in which they sensitised employees at their place of work and helped their staff canteens reduce the salt content of menus. Using this combined approach, it was possible to reduce the average daily salt intake per person by 7% in a year. The researchers recommend systematically extending workplace health promotion to cover nutrition.

High blood pressure is a known risk factor for cardiovascular disease, but people are often unaware that they are affected. Cost-effective measures are needed for reducing blood pressure and minimising the risk of cardiovascular disease. One important starting point is nutrition. An unbalanced diet characterised by the frequent consumption of foods rich in salt and fat but lacking fruits and vegetables can be conducive to hypertension. The Swiss Salt Strategy of the Federal Food Safety and Veterinary Office (FSVO) therefore aims to gradually reduce the population's salt intake (see box on page 3). In this context, an NRP 69 research group examined the effect that nutritional measures in the workplace have on reducing daily salt intake.

The researchers' goal was to reduce the average salt intake of employees who ate in seven different staff canteens in German-speaking Switzerland by 15% within a year. They combined two approaches. First, they provided the 132 study participants with theoretical and practical knowledge about healthy eating in various everyday situations, and subjected them to health checks every three months. In addition to their blood pressure and weight, their salt intake was measured via questionnaire and sodium excretion

Salt intake at study start and end, for women, men and all



From study start to study end, the mean salt intake of the participants fell by 7% overall, from 8.7g to 8.1g per day. Women's salt consumption remained unchanged at 7g per day. On average, men's salt consumption decreased by 11.5%, from 10.4g to 9.2g per day. The graph shows in each case the mean value (the point) and the 95% confidence interval.

in their urine. Second, the researchers intervened in the nutritional environment with a coach supporting the catering teams in taking steps to reduce the salt content of the menus on offer. Following some brief theoretical input, practical measures for preparing healthier food offerings were planned in workshops and tested in daily routine. The aim was for kitchen staff to become more aware of their shared responsibility for the health of their customers. The salt content of the prepared menus was tested in the laboratory.

A health-relevant reduction was achieved

The evaluation showed that at least half of those who participated in the nutrition education programme developed a greater awareness of health, nutrition and their own salt consumption during the study. The average salt intake decreased by 7% during one year, from 8.7g to 8.1g per day. There were, however, clear differences between the sexes. The average reduction for men was 11.5% (from 10.4g to 9.2g per day), while the average salt intake for women remained unchanged at 7g per day. The reduction in the amount of salt intake was greater when the initial figures were higher. Although the goal of reducing salt intake by 15% was not reached, the nutritional education led to a reduction in average salt intake that was relevant to health.

The catering coaching programme was also able to consolidate the kitchen staff's awareness of the health aspects of nutrition. Although considerably lower quantities of salt were subsequently measured in the menus of some staff canteens, the effect across all of the canteens over the course of one year was negligible. The median salt content for the standard plated menus fell only slightly, from 4.5g to 4.4g per serving. The changes in salt content ranged from -2.4g to +3.2g per serving. It was primarily the organisational conditions in the catering organisations that hampered a substantial continuous reduction in

Recommendations

Swiss quality standards for health-promoting communal catering

The researchers recommend that workplace health promotion be systematically expanded to include nutrition, thereby supporting healthy eating habits among the population. The following points should be considered:

1. Health-promoting communal catering should form an integral part of occupational health management. Supporting measures in the immediate nutritional environment are necessary for the long-term promotion of balanced eating habits among employees. Targeted development and training as well as professional coaching for catering staff can help to institutionalise health-promoting food offerings.

2. Partnership between organisations and health or educational institutions support effective health promotion through nutrition, for example by jointly establishing practice-based development and training programmes or nutrition education classes. Support for these tailored measures by corporate management is a prerequisite for success.

3. The example of salt consumption shows that dietary risk factors for cardiovascular disease vary greatly from individual to individual, and that there are differences between the sexes. Workplace health promotion measures should therefore take account of the varying needs of employees, and programmes should be designed in an appropriate modular format.

4. The national standards for health-promoting communal catering should be implemented across the board, in line with the holistic approach of the Swiss Nutrition Strategy.

salt content. However, the researchers were able to show that the recommended quantity of 2.5g of salt per plated menue serving is realistic.

The research group concludes that nutritional interventions within the context of workplace health promotion are conducive to promoting healthy nutrition among the population. It considers the promotion of nutrition-specific health literacy, accompanied by targeted measures in the food sector, to be a promising way of helping consumers to change their eating habits.

Further information:
www.nrp69.ch

Salt strategy: less than 8 grams per day

The Swiss government's Salt strategy has been in place since 2008. Its mid-term objective was reducing the average salt consumption of the Swiss population to less than 8g per person per day by 2016. In the longer term, it seeks to reduce salt intake to the World Health Organisation's (WHO) recommendation of 5g. As part of the salt strategy, measures were evaluated for the effective reduction in salt consumption. For the period 2017–2024, the Swiss Confederation's Nutrition Strategy is focussing on a holistic approach to promoting a balanced diet. This includes measures relating to communal catering and salt reduction.