



Section

Fields (of activity)

What does the Swiss population eat? Characterization of food consumption, dietary patterns and lifestyle in the Swiss language regions

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Key words

menuCH, population, food consumption, dietary patterns, population health

Aim of the study

The study was performed (i) to characterise the menuCH dietary intake for meat and meat products, milk and dairy products, and beverages (including alcohol); (ii) to analyse dietary patterns using menuCH data by language region; and (iii) to examine differences in dietary habits using menuCH data compared with simpler dietary assessments.

Material and methods

For aim (i), mean intake of each food group was computed to identify differences between subgroups of the population. We also used linear regression models to examine associations of food intake with sex, age, language, body mass index, education, and lifestyle. Data-driven and hypothesis-driven dietary patterns were derived for aim (ii) to compare differences between language regions in Switzerland and to link dietary patterns with mortality. For aim (iii), we compared the food intake as computed in aim (i) with the available information from the Swiss Health Surveys (SHS) by sex, age groups, language region, and socioeconomic/demographic status.

Results and significance

The results of our analyses showed for the first time in Switzerland differences in food consumption (red and processed meat, milk and dairy consumption and beverages, including alcohol and sugar-sweetened beverages) across subgroups of the population and revealed four distinct dietary patterns in the population and corresponding sociodemographic and lifestyle determinants of these patterns. As expected, we observed differences between the Swiss language regions, sex and age, but also by other factors, such as smoking and alcohol consumption, as well as nationality and body mass index. Although menuCH data cannot be linked directly with disease outcomes, we examined the associations between dietary patterns and mortality using spatial epidemiology. In this analysis, we observed significant associations between dietary patterns and mortality from various chronic diseases and significant spatial dependence in the investigated associations. The comparison of menuCH results with SHS data shows a lower consumption of fruits, vegetables and dairy, but higher alcohol intake in menuCH compared with the SHS.

The results help to better characterise population groups requiring specific dietary recommendations, enabling public health authorities to develop targeted interventions and provide an important basis for monitoring changes in food consumption in future or as supportive data for other studies in Switzerland. Much expertise in analysing survey data was gained across the team. This should lead to advantages in further research using menuCH data, leading to new knowledge. The project led to training of many students (10 Bachelor or Master students, 1 Ph.D) and peer-reviewed publications in international journals.

Publications, posters and presentations

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Project 5.17.02ERN

Project duration Juni 2017 - November 2020