

# Dietary habits of young adolescents

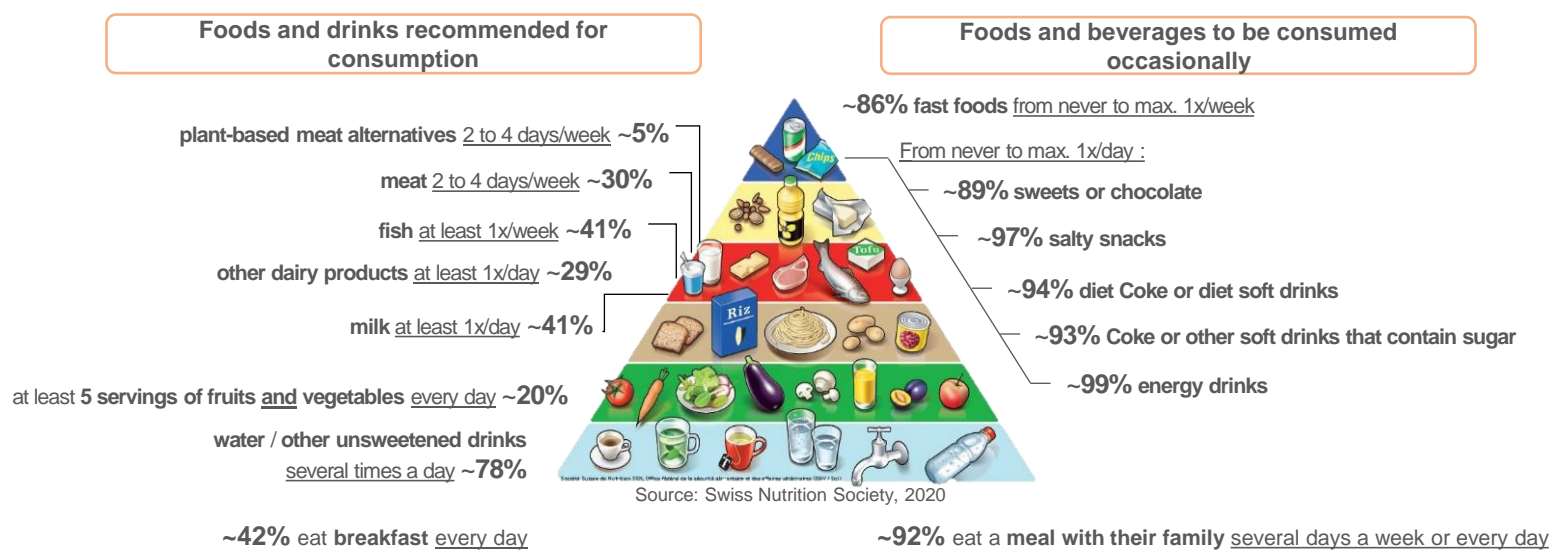
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## Introduction

A varied and balanced diet during adolescence promotes good health and physical and mental development. It can reduce the risk of overweight and, if maintained into adulthood, help to reduce the risk of chronic diseases at this age (e.g. type 2 diabetes, cardiovascular disease). Eating breakfast every day is also recommended, and family meals are considered to have a positive effect on health.

This factsheet presents a selection of results from the national HBSC study 2022 on dietary habits of 11- to 15-year-olds in Switzerland and how they have changed over time.

## Key figures 2022 for 11- to 15-year-olds



### Daily servings of fruits and vegetables

In 2022, 20.1% of 11- to 15-year-olds ate **at least five servings<sup>a</sup> of fruits and vegetables a day**, as recommended by the «Swiss Food Pyramid». This habit is more widespread among girls (22.5%) than boys (17.9%) and decreases between the ages of 11 (21.5%) and 15 (17.5%).

Between 2018 and 2022, the proportion of 11- to 15-year-olds consuming at least 5 servings of fruits and vegetables a day **has increased** (2018: 17.6%), especially among 13-year-old (2018: 14.1%; 2022: 19.0%) and 15-year-old boys (2018: 10.8%; 2022: 15.6%).

<sup>a</sup> Estimate based on declared data, not measured portions.

### Meal frequency

In 2022, 42.4% of 11- to 15-year-olds ate **breakfast every day of the week** (school days and weekends). With a decrease compared to 2018 (46.0%), this habit is more common among boys (45.6%) than girls (39.0%).

91.6% of 11- to 15-year-olds reported eating **a meal with their family several days a week or every day**, the same as in 2018 (91.4%) and with no significant difference between girls (90.4%) and boys (92.8%).

### Correlates of dietary habits

Among 11- to 15-year-olds, a **positive (weak) association** was found between the consumption of **at least 5 servings of fruits and vegetables a day** and **physical activity** (number of days of at least 60 minutes of physical activity in the last 7 days) resp. the frequency of **sports outside school hours**. The same is true for the consumption of **milk/other dairy products** at least 1x/day and the frequency of **breakfast** consumption.

Frequency of **breakfast** consumption was **positively (weakly) associated** with the consumption of **milk/other dairy products** at least 1x/day, the **self-rated health, life satisfaction** and the **satisfaction with one's physical appearance** (14- and 15-year-olds) and **negatively (weakly) associated** with the frequency of **sugary soft drinks** consumption, **slight to severe overweight** [BMI  $\geq$  25kg/(m<sup>2</sup>)], **dieting/other behaviour to lose weight**, and the **wish to be thinner** (14- and 15-year-olds).

A **positive (weak) association** between the frequency of **sweets and chocolate** consumption and that of **sugary soft drinks**, resp. of **fast-foods** was found. The consumption frequency of the latter was **positively (moderately) associated** with that of **sugary soft drinks**.

## Consumption frequency

The food and drink consumption frequencies presented in this factsheet are based on the recommendations of the «Swiss Food Pyramid» (www.sge-ssn.ch), but cannot be used to assess whether these recommendations are being followed. In fact, a frequency does not reflect the quantities consumed, nor the corresponding energy and nutrient intakes. Any specific consumption frequency is therefore only presented as an **approximation** to a recommendation in the «Swiss Food Pyramid».

## Foods and drinks recommended for consumption

Between 2018 and 2022, among 11- to 15-year-olds, the consumption of **water and other unsweetened drinks several times a day** and the **daily** consumption of **fruits** has stagnated, while that of **vegetables** has increased (Figure I). Daily consumption of **milk** and **other dairy products** has decreased, while the consumption of **meat 2-4 days a week** has increased and that on **at least 5 days a week** has decreased. The consumption of **fish at least 1x/week** remained stable between 2018 and 2022.

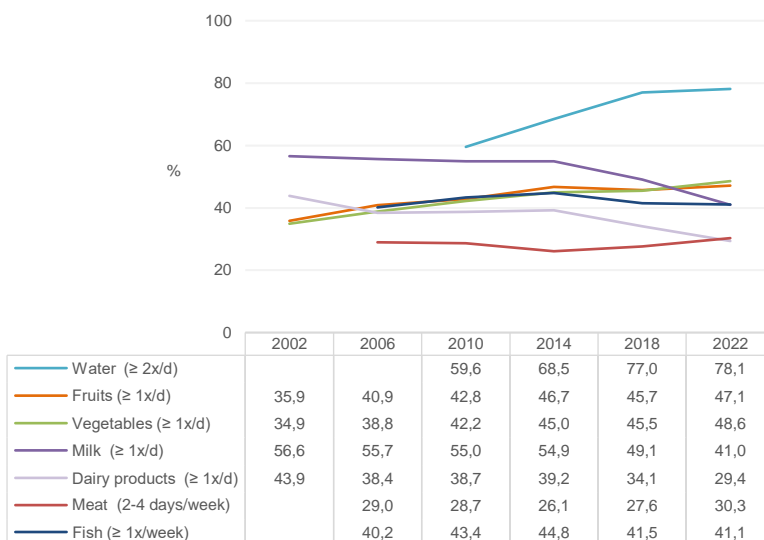
**Plant-based meat alternatives** (e.g. tofu, seitan and quorn®)<sup>b</sup>, which were included in the HBSC questionnaire for the first time in 2022, were eaten **2-4 days a week** by 5.4% of 11-15-year-olds and **at least 5 days a week** by 3.8%.

Among 11- to 15-year-olds, some habits were more common among girls (**daily** consumption of **fruits, vegetables** and **water/other unsweetened drinks several times a day**), while others are more common among boys (e.g. **daily** consumption of **milk** or **other dairy products** and **fish at least once a week**).

Age differences varied depending on the food or drink in question.

<sup>b</sup> Some students may have included ultra-processed foods (high in salt and fat, some of which can be considered fast foods), which should be eaten only occasionally.

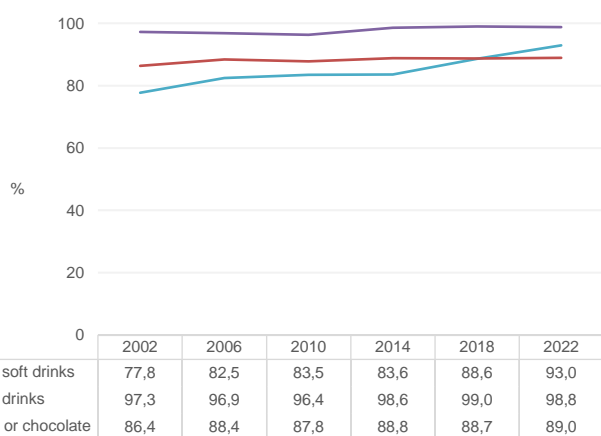
Figure I – Trends in consumption frequency of recommended foods and drinks among 11- to 15-year-olds (HBSC, in %)



Notes: Meat: The question did not specify the types of meat products covered by this term. Students may or may not have included poultry and charcuterie. It is recommended to eat meat three times a week.

## Foods and drinks to be consumed occasionally<sup>c</sup>

Figure II – Trends in consumption frequency of foods and drinks 'maximum 1x/day' that should be consumed occasionally by 11- to 15-year-olds (HBSC, in %)



Notes: Sugar-sweetened drinks (including Coke): the question does not indicate whether any students included so-called 'light' or 'diet' soft drinks.

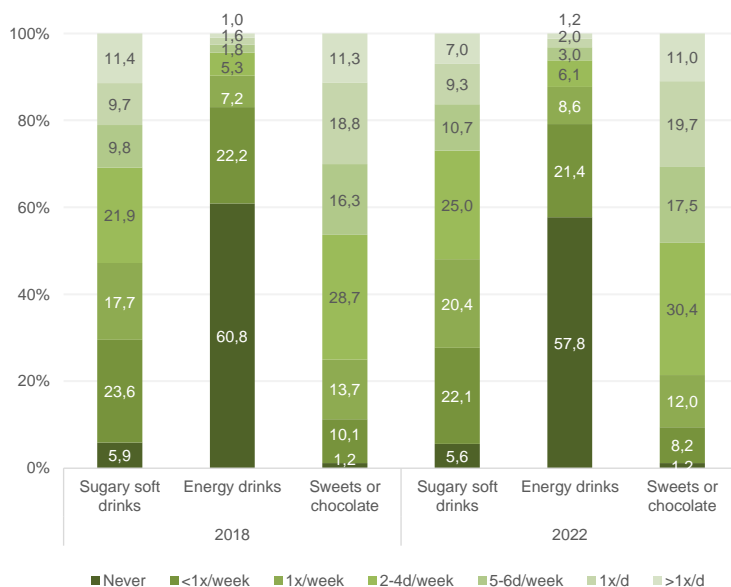
<sup>c</sup> It is recommended to not consume more than one serving of sweets, salty snacks, sweetened or diet soft drinks per day. The latter, as well as energy drinks, should only be consumed occasionally due to their high sugar and caffeine content and their acidity, which can damage tooth enamel.

Between 2018 and 2022, the consumption of **sugary soft drinks maximum 1x/day** increased among 11- to 15-year-olds (Figure II), while the consumption of **1x/day<sup>d</sup>** remained stable (Figure III). Compared to 2018, these drinks were consumed slightly less often in 2022, the most common frequency being **2-4 days/week** (25.0%).

Consumption of **energy drinks maximum 1x/day** has not changed compared to 2018, nor has consumption frequency of **1x/day<sup>d</sup>**. In 2022, the majority of 11- to 15-year-olds never consumed energy drinks (57.8%).

Consumption of **sweets or chocolate maximum 1x/day** and **1x/day<sup>d</sup>** stagnated between 2018 and 2022. The most common frequency was **2 to 4 days/week** (30.4%).

Figure III – 2018-2022 comparison of consumption frequency of foods and drinks that should be consumed occasionally by 11- to 15-year-olds (HBSC, in %)



In 2022, **96.7%** of 11- to 15-year-olds ate **salty snacks<sup>e</sup> maximum 1x/day<sup>d</sup>**. Consumption **1x/day<sup>d</sup>** was 7.4%. In addition, **85.5%** of 11-15-year-olds ate **fast foods<sup>e</sup>** (hamburgers, hot dogs, chips, veggie burgers, etc.) **maximum 1x/week**.

In the 11-15 age group, there was little difference between girls and boys in the frequency of '**maximum 1x/day**', which decreased little or not at all between the 11- and 15-year-olds, depending on the food or drink in question.

Notes: <sup>d</sup> Only refers to the response option "once a day" whilst "maximum once a day" refers to all response options from "never" to (and including) "once a day"; <sup>e</sup> Questions asked for the first time in 2022.

The results of the HBSC 2022 study suggest that, despite some slight improvements, there is a significant gap between certain dietary behaviours and dietary recommendations among 11- to 15-year-olds, especially among older students. This highlights the need to continue and intensify efforts to promote a balanced diet that meets the needs of young adolescents at several levels: strengthening the nutritional competences of parents and young people, and structural measures to increase the availability and accessibility of healthy foods.

## More results

Delgrande Jordan M., Vorlet, J., Balsiger, N. & Schmidhauser, V. (2024). Comportements en matière d'alimentation et d'activité physique des 11 à 15 ans en Suisse – Situation en 2022, évolution dans le temps et corrélats – Résultats de l'étude Health Behaviour in School-aged Children (HBSC) (rapport de recherche No 163). Lausanne: Addiction Switzerland.

Statistical standard tables on the website [www.hbsc.ch](http://www.hbsc.ch)

[International HBSC report](#)

## Acknowledgements

Special thanks go to the students (as well as their parents and teachers) who, by agreeing to participate in the survey, contributed to a very important part of this research project.

## The Method in short

The international study Health Behaviour in School-aged Children (HBSC) is conducted every four years under the aegis of the World Health Organisation (WHO-Europe). In Switzerland, the study has been conducted by Addiction Switzerland since 1986 and is funded by the Federal Office of Public Health (FOPH) and most of the cantons.

It is a nationally representative monitoring study of health and health behaviours in adolescents aged 11 to 15. In 2022, 857 classes in 5th to 9th grades (7th to 11th year HarmoS) were randomly selected in Switzerland, and 636 classes participated in the survey (9'345 schoolchildren aged 11 to 15), which equals a participation rate of 74.2%.

The survey is based on a standardized self-administered paper questionnaire, completed in the classroom between March and June 2022. Participation was voluntary (with parental consent) and answers were strictly confidential.

The sex/gender analyses are thus based on the international question 'Are you a boy or a girl?'. Therefore, it is not possible to know whether schoolchildren answered the question with reference to their sex assigned at birth or their gender identity.

⚠ Given the cross-sectional nature of the HBSC study, a statistical association between two indicators does not allow us to conclude that one influences the other (or vice versa) in the sense of a cause-effect relationship.

Figures are based on weighted data according to the sex/gender and age structure of the Swiss permanent resident population.

