

Physical activity in young adolescents

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Introduction

Physical activity includes any bodily movement, either as part of organised sports activities or everyday activities such as walking or cycling. Regular physical activity of medium to high intensity has a positive effect on many aspects of young adolescents' physical and mental health and contributes to their cognitive development.

This fact sheet presents a selection of the results of the Swiss HBSC Study 2022 on physical activity in 11- to 15-year-olds and 14- and 15-year-olds and their evolution over time.

Key figures 2022



17.9% of 11- to 15-year-olds reported having been **physically active for at least 60 minutes every day** in the last 7 days



92.0% of 11- to 15-year-olds do **sports outside of school at least 1x/week**



boys move more than **girls**

On the last full day of school...

~**32%** of 14- and 15-year-olds' physical activity took place during **sports outside of school** and ~**32%** in **PE class**



~**10%** of 14- and 15-year-olds' physical activity took place on the **way to school**



Daily physical activity guidelines for children and adolescents (5-17 years)

For children and adolescents aged 5 to 17, the Health and Physical Activity Network (hepa.ch) recommends **an average of at least 60 minutes per day of moderate-to-vigorous intensity, aerobic physical activity** (e.g. playing, running or everyday activities) **across the week**. Activities that strengthen muscles and bones should be integrated **at least three days a week** (e.g. jogging, fast cycling, intensive swimming, ball games). In addition, activities that promote **dexterity** and **mobility** should be integrated **several times a week** and time spent sedentary should be regularly interrupted (hepa.ch, 2023).



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.

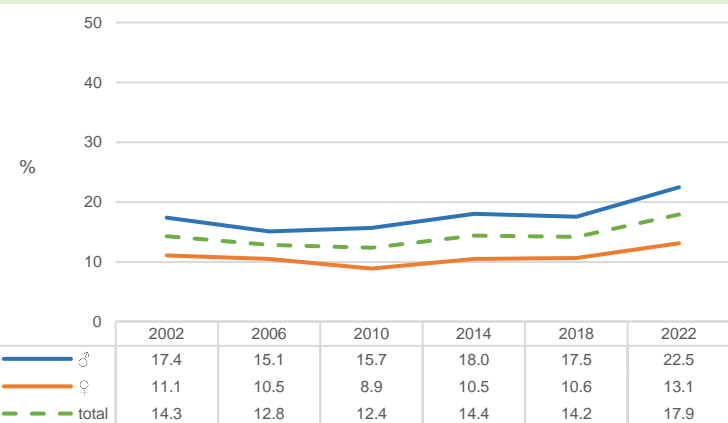
The sex/gender analyses are thus based on the international question 'Are you a boy or a girl?'. Therefore, it is not possible to know whether schoolchildren answered the question with reference to their sex assigned at birth or their gender identity.

⚠ 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.

Physical activity in the last 7 days

Figure I – Proportion of 11- to 15-year-olds who reported having been physically active for at least 60 minutes every day in the last 7 days (HBSC 2002-2022, in %)



Note: International HBSC question. The results are based on the schoolchildrens' statements and not on objective data (e.g. acceleration measures).

Question: «Over the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day?». Possible answers : «0 days», «1 day», «2 days», «3 days», «4 days», «5 days», «6 days», «7 days».

In 2022, **17.9%** of **11- to 15-year-olds** reported having been physically active^a for at least 60 minutes every day in the last 7 days and fulfilled the physical activity recommendation during that time period. This proportion is higher among boys than girls and decreases sharply between age groups (11 y.o.: 23.8%, 15 y.o.: 13.8%). Compared to 2018, the proportion has slightly increased after remaining rather stable between 2002 and 2018.

In 2022, **30.4%** of 11- to 15-year-olds were physically active for at least 60 minutes on 5-6 days in the last 7 days and **33.9%** did so on 3-4 days. Some young people may have been physically active for at least 420 minutes across fewer than 7 days and therefore also fulfilled the physical activity recommendation.

^a Defined as "any physical activity that raises your heart rate and leaves you temporarily out of breath".

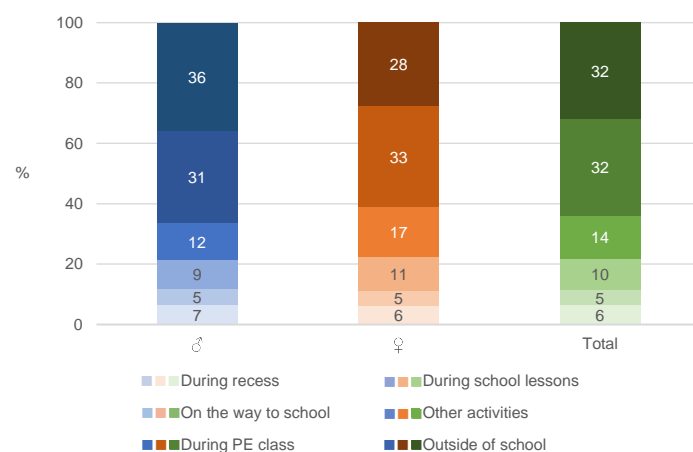
Movement and sport on the last full day of school

In 2022, the **14- and 15-year-olds** were asked for the first time in what **context they were physically active** on the last full day of school, using a set of questions adapted from the *Sport Schweiz* study^b.

According to the schoolchildrens' statements, the majority of physical activity took place in the context of **PE class (mandatory or optional; ~32%)** or **sports outside of school (~32%)** (Figure II). A small minority (~10%) of physical activity took place **on the way to school**. This is in line with the conclusions of the *Sport Schweiz 2020*^c study.

Considering all settings together, ~18% of the **14- and 15-year-olds** were physically active for a total of **1-2 hours** on the last full school day, while **~25%** were physically active for a total of **2-3 hours** and **~51%** for **more than 3 hours** (i.e. ~7% were active for less than 1 hour). Boys were more physically active than girls. In addition, boys spent more time doing sports outside of school, while girls spent slightly more time on other activities.

Figure II – Proportion of total time that 14- and 15-year-olds spent with physical activity in different settings on the last full day of school (HBSC 2022, in %)



Notes: Taken from the *Sport Schweiz* study, the question has been adapted^b for a paper-and-pencil questionnaire. The results are based on the schoolchildrens' statements and not on acceleration measures.

^b Endes, S., Kraft, E., & Steinmann, S. (2022). Instruments de recueil de données sur l'activité physique. Approches méthodologiques pour la pratique d'évaluation dans la promotion de la santé (62). Bern and Lausanne: Promotion Santé Suisse.

^c Lamprecht, M., Bürgi, R., Gebert, A., & Stamm, H. (2021): Sport Schweiz 2020. Kinder- und Jugendbericht. Magglingen: Bundesamt für Sport BASPO.

Sports outside school hours

In 2022, **92.0%** of **11- to 15-year-olds** reported **doing sports at least once a week outside school hours** (so that they "sweat or get out of breath"), boys (95.1%) more often than girls (88.7%) and 11-year-olds (96.0%) more often than 15-year-olds (87.2%). These proportions have remained rather stable since 2002.

39.9% of 11- to 15-year-olds **did sports outside school hours 2-3 times** a week and **41.3%** **at least 4 times** a week. Only a few 11- to 15-year-olds stated that they do sport outside school hours once a week (10.8%) or less than once a week (8.0%). Boys were more likely to exercise outside school hours **at least 4 times a week** and girls were more likely to do so less than once a week.

Correlates of physical activity

Among **11- to 15-year-olds**, for the number of days with ≥ 60 minutes of physical activity and the frequency of sports outside of school **weak positive correlations** with **self-assessed health status**, **life satisfaction** and **self-perceived family support** and **weak negative correlations** with the **frequency of feeling tired**, **perceived stress in the last month** and **problematic social media use** have been found.

For the same two indicators, for **14- and 15-year-olds**, additional **weak positive correlations** with the **satisfaction with ones' physical appearance** and the **desire to be more muscular** and **weak negative correlations** with the **desire to be skinnier** and (among gamers) **problematic gaming behaviour** have been found.

According to the international HBSC question on physical activity in the last 7 days, which tracks changes over the long term and allows comparisons between the participating countries, the majority of 11- to 15-year-olds don't do enough physical activity, especially girls and older schoolchildren. Nevertheless, the vast majority of 11- to 15-year-olds do sports \geq once a week outside school hours.

According to the set of questions^b derived and adapted from the *Sport Schweiz* study, which looks at physical activity in different settings, only ~7% of 14- and 15-year-olds were physically active for less than 1 hour on the last full day of school, if all settings are considered together.

This major difference in the results obtained by the two questions may very probably be explained to a large extent by their different wording. For example, it is very likely that the HBSC question underestimates the amount of time devoted to physical activity, whereas the adapted *Sport Schweiz* set of questions tends to overestimate it^d. In addition, it's probably much more difficult to be physically active for at least one hour a day on average over the whole week than on a single day, even if the time devoted to sport and movement can be very high on certain days.

^d Stamm, H., Bürgi, R. & Lamprecht, M. (2022). Schlussbericht Evaluation des GORILLA-Programms. Schlussbericht zuhanden Gesundheitsförderung Schweiz. Zürich: Lamprecht & Stamm Sozialforschung und Beratung AG (L&S).

Promoting sufficient and regular physical activity among young people is crucial for their current and future health. This includes the expansion of physical activity programs in and out of school, e.g. voluntary PE classes that are suitable and accessible to all, as well as measures to promote an exercise-friendly environment, e.g. by creating attractive and safe conditions for walking and cycling.

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

[International HBSC report](#)

Acknowledgements

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