

Press release**Universität Bayreuth****Anja-Maria Meister**

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Research results

Nutrition / healthcare / nursing, Social studies, Sport science, Teaching / education
transregional, national**Researchers Call for More Physical Education**

Children have become increasingly inactive over the past two decades, as shown by a long-term study involving 3,500 schoolchildren in Austria. Professor Dr Jan Wilke, a sports scientist at the University of Bayreuth, was involved in the project. He and his colleagues are calling for an expansion of sports activities, particularly in schools, as a way to reduce future strain on the healthcare system.

Physical activity and fitness are crucial, especially in childhood. Children who are more active tend to remain active throughout their lives, even into adulthood, and age more healthily due to maintaining a sporty lifestyle. Regular exercise not only promotes longevity and healthier living but also reduces the risk of many lifestyle-related illnesses, such as cancer and diabetes. Thus, physical inactivity and poor fitness impact not only personal health but also the healthcare system. Therefore, analysing trends in children's activity is essential for early intervention and concrete action recommendations.

Researchers from Klagenfurt, in collaboration with Prof. Dr Jan Wilke from the University of Bayreuth's Chair of Neuromotorics and Movement, studied the physical activity of over 3,500 pupils at Austrian sports schools – over nearly 20 years. At these sports schools, children receive more PE lessons per week than at regular schools. “What’s unique about our study is that we collected and analysed data on new school entrants consistently over eighteen years, allowing us to spot genuine trends. Previous studies often only compared individual years, such as 1990 and 2010,” explains Wilke.

To assess physical fitness, the children, around ten years old, participated in various tests, including sprints, jumps, medicine ball throws, measurements of reaction time and movement speed, an 8-minute endurance run, and an agility run. The sobering finding: performance has steadily declined over the years, with the exceptions of reaction time and endurance. The decline was particularly pronounced in strength measures. Children’s Body Mass Index (BMI) also increased. Even after adjusting BMI changes as well as age, and sex, fitness declines remained apparent.

“Possible explanations for the reduction in physical fitness include the growing dominance of sedentary lifestyles, increased use of digital media, and a lack of movement opportunities,” says Wilke. What’s particularly alarming: “We conducted our study with children at sports schools. The fact that even these children, who we’d expect to have a fundamentally high interest in physical activity, show a drop in performance is concerning. It’s likely that children who are less interested in sport and movement show an even steeper fitness decline. Therefore, we strongly recommend expanding physical activity programs in schools and for children, not treating school sports as an add-on, and making club sports more appealing,” Wilke states. Schools are one of the best places for intervention, as children can be directly reached through active breaks or a movement-friendly school environment, independent of home life, friendship circles, or living conditions.

The study was conducted in cooperation with the universities of Klagenfurt and Bayreuth, as well as the Austrian Association for Sports and Physical Culture (ASKÖ) and the Olympic Centre of Carinthia.

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