SDG 3, Good health and well- being: Promoting physical activity to improve quality of life, well-being, and the health of people of all ages (Denmark)

Achieving all sustainable development goals is strongly dependent on human health. A healthy society has more educational opportunities, is more productive in its work, and is ready to engage in social activities, including non-governmental organisations. Scientific research conducted over many years clearly indicates the enormous importance of physical activity for the well-being and physical and mental health of individuals. Regular moderate physical activity performed for at least 30 minutes a day, 5 days a week, helps prevent around 20 chronic conditions, such as stroke, coronary heart disease, type 2 diabetes, obesity, certain cancers, bone health and osteoporosis risk, and mental health problems (Ojiambo 2013). The benefits of moderate physical activity increase with the amount of activity. Activity lasting at least 30 minutes a day compared to no activity reduces the risk of all-cause mortality by 19% and extending the time to 1 hour a day lowers mortality by 24% (Woodcock et al. 2011; Ojiambo 2013).

Unfortunately, according to WHO data, 31% of adults and as many as 80% of adolescents do not meet the recommended level of physical activity. The most important cost associated with physical inactivity (the health cost) is borne by the individuals themselves, but it also translates into higher financial costs for public health care systems, which currently amount to approximately 27 billion dollars globally per year (300 billion dollars from 2020 to 2030) (WHO 2024). Loss of worker productivity also has a significant economic impact – work not performed due to health issues and employee absences due to sick leave. For example, the Polish Social Insurance Institution (ZUS) in its report on sickness absence states that 27.4 million medical certificates were issued in 2024. The costs of sickness absence financed by the Social Insurance Fund (59%) and by employers amounted to a total of 31,039.7 million PLN in 2024 (ZUS 2025).

Data on physical activity show a wide range of behaviours influenced by many factors, with age at the forefront. Scientific evidence indicates that increasing physical activity at any age, regardless of prior sedentary lifestyle and inactivity, provides health benefits (Gałuszka 2022). Therefore, many countries and organisations, including the United States, the European Union, and the World Health Organization (WHO), have developed plans to support physical

activity; so-called physical activity guidelines. These plans take into account the cultural conditions, customs, and environment of each country.

The approach to physical activity begins in primary school. Some EU countries, such as Spain, Portugal, Poland, and Austria, have introduced strategies and extensive initiatives aimed at promoting physical education and activity in primary schools. Spain, Sweden, Latvia, and Estonia have implemented qualitative and quantitative learning outcomes within the subject of physical education (PE) related to athletics, swimming, and hiking. In Scandinavian countries, students learn orientation in the field, for example, through the use of maps. In Poland, Norway, and Slovenia, the choice of forms of mandatory activity in schools is entirely or partially dictated by scientific research results. In most EU countries, while a onetime excuse from PE classes from parents is honoured, all other long-term exemptions require a doctor's note (WHO 2024). Countries such as the Czech Republic, Italy, Norway, Poland, Spain, and Turkey have formed the 'Sport for Life' partnership operating under the EU Erasmus+ program. The goals of this project are: improving the competencies of individuals involved in conducting sports activities, enhancing the quality and diversity of sports classes, exchanging experiences and working methods, and designing actions in which sport is a tool for integration and social and educational transformation (Erasmus+ Programme 2021).

Currently, trends in physical activity in European countries are unfortunately unfavourable. The country that stands out from the others by achieving an increase in physical activity in every age category is Denmark. Table 1 presents data on the average life expectancy and physical activity levels of Danish citizens, assessed based on WHO recommendations and presented in reports from 2018 and 2021.

Table 1. Average life expectancy and prevalence of sufficient physical activity level of Danish citizens (WHO, 2018; 2021)

	2018	**2021**
Total population (m)	5.75	5.84
Median age (years)	41.6	42.1
Life expectancy – males (years)	79.0	79.6
Life expectancy –females (years)	82.8	83.6
GDP per capita	45,800	48,150
Physical activity level 11–15 years (%)	14	26
Physical activity level 16–64 years (%)	71.2	71.2
Physical activity level >65 years (%)	68	73.6

In the data from 2018–2021, Denmark demonstrates a range of actions aimed at supporting sports and an active lifestyle. The following information comes from the *Denmark Physical Activity Factsheet 2021*. Firstly, the management of local sports and financial support for half of sports clubs and associations lies with large state organisations such as The Danish Gymnastics and Sports Association, the National Olympic Committee, or the Sports Confederation of Denmark. Through grants (*Folkeoplysningsloven*), young athletes under the age of 25 have facilitated access to state-owned sports facilities. In primary schools, physical education classes are mandatory every day for 45 minutes per day, and lessons are conducted by qualified staff who, as part of their bachelor's studies, have the opportunity to receive training in physical activity and its connection to health.

Schools run programs encouraging movement, such as '*Legepatrulien*' – older students organise activities, games, and competitions for younger students during breaks. The '*Sæt Skolen i Bevægelse*' ('Movement in school') program provided 45 additional minutes of physical activity for teachers and students by incorporating movement into other lessons (outside of physical education classes). Schools also promote walking and cycling. The average Dane spends about 6 minutes a day riding a bicycle.

Physical activity during leisure time outside of school and work is supported in Denmark by sports organisations and trade unions, and schools are even required to cooperate with external companies in this regard. Every year, one Danish workplace that best promotes commuting to work by bicycle among its employees receives a special award. The annual event 'Denmark's Healthiest Workplaces' (*Danmarks Sundeste Arbejdspladser*) summarises numerous projects concerning the health and activity of Danish workers (working-age people), such as 'Workplace Exercise Day' and 'Count Steps' (WHO 2018 2021).

Older people are also not overlooked – they declare the highest levels of physical activity among all age groups. In Denmark, family doctors recommend physical activity as a cure for numerous lifestyle-related diseases, both diagnosed and preventative. Furthermore, once a year, doctors are required to conduct a lifestyle and health consultation with each patient (European Union Working Group 'Sport & Health' 2008). A wide range of content promoting physical activity appears in mainstream media, and in 2018, the Danish Health Authority published a physical activity guide for people with dementia, addressed to older adults as well as their caregivers and therapists (WHO 2018, 2021).

Denmark's success – the growing physical activity of society – was interrupted by the COVID-19 pandemic. As in many other countries, isolation, quarantine, and lockdowns caused a decline in physical activity. Nevertheless, Denmark still remains at a relatively high level

when it comes to physical activity, and the latest studies show that the least active residents of Danish cities are immigrants and their descendants, not the native population (Schmidt et al. 2025).

Questions

1. Evaluate the impact of parents' physical activity on their children's approach to this issue.
2. What factors may reduce the physical activity of children, and what about adults? Propose actions that could engage both age groups.
3. Based on Table 1, assess the changes in physical activity across different age categories. Can the observed differences in the years 2018–2021 be linked to Denmark's economic development?
4. Assess why older Danish people show high levels of physical activity.
5. What local, regional, and national actions can be taken to increase the level of physical activity in your country?
6. Describe 'corrective' actions after the COVID-19 pandemic that you know of that contribute to improving fitness and increasing physical activity.
7. What impact can immigrants have on the level of activity in a given country? Can this effect be positive for the native population?

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