



Co-funded by the
Erasmus+ Programme
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**COMPREHENSIVE BOOKLET
ON HOLISTIC HEALTH AND
EDUCATION THROUGH SPORT**

PROPELLERS Manual



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Project consortium:

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CHAMPIONS FACTORY, Bulgaria

ASOCIACIA ZA RAZVITIE NA BULGARSKI SPORT, Bulgaria

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Introduction

“Professional and Personal Experience through Lifelong Learning and Regular Sport,” or more simply, PROPELLERS, is a project involving six partner countries, Poland, Italy, Bulgaria, Croatia, Greece, and Spain. It’s an ambitious initiative with the aim of promoting voluntary participation in sports activities together with awareness of the importance of health-enhancing physical activity in accordance with the holistic model of health among the general EU population, with a particular focus on disadvantaged categories (NEETs, people with disabilities). The benefits of engaging in sport are undisputable, and PROPELLERS not only strives to promote physical activity but also aims to raise awareness about the added value of sport and physical activity in relation to the personal, professional, and social development of individuals. In other words, the project supports a more biological-psychological-sociological model of health and its elements. By fostering bottom-up awareness and participation in sports activities, PROPELLERS also aims to pursue the objective of democracy in sporting bodies set in the “Principles of Good Governance in Sport,” a report elaborated by the Expert Group on Good Governance in the EU Work Plan for Sport 2011-2014.

The partners of the project envision the output to be a comprehensive booklet on holistic health and education through sport. The booklet will represent an informational and educational source targeted at the project end-user beneficiaries, children, youths, adults, and disadvantaged individuals, together with the wide spectrum of indirect project targets, including coaches and trainers engaged in working with the beneficiaries on a regular basis. This source will provide explicit information on the theoretical concepts related to holistic health and sports education and the connection between health and physical activities. There will also be an overview of all the activities implemented in every partner country.

The booklet will comprise three sections detailing background information, advice, and indications regarding sport and physical activity patterns enhancing personal health and wellbeing for each category of the target audience, children, youngsters (16-25), adults (25+), and disadvantaged individuals (NEETs, people with disabilities). The digital booklet will be translated into all partner languages and, on completion, uploaded on the project’s web platform and partners’ websites in both English and national languages.

Regarding dissemination, each partner must implement a mass media release, including national television and newspapers. This must happen within 14 days of the release of the booklet. It must also be diffused amongst the partners’ websites and promoted through partner social media accounts and amongst each partner’s stakeholder network at the local, regional, national, and European levels. The booklet will also be uploaded on the project’s web platform.



Holistic health concept

Pursuing holistic health is vital because, despite advancements in modern medicine, the approach is often siloed, looking at the body in sections of individual symptoms and pieces rather than the whole system that it is. In contrast, holistic health looks at the whole person and includes body, mind, and spirit. This kind of holistic healing often involves multiple complementary medicines and alternative healthcare practices that can overlap with modern-day western medicine but that will also go beyond the singular treatment of symptoms to support more than just the body.

The following are alternative holistic healthcare practices:

- Chiropractic medicine;
- Herbalism;
- Massage;
- Reiki – energy work;
- Therapy;
- Yoga and meditation;
- Acupuncture;
- Physical therapy;
- General western medicine;
- Nutrition;
- Personal training.

Despite the higher average life expectancy today, the percentage of people with stress, anxiety, depression, and other mental disorders is also very high. People also live with chronic diseases and many undiagnosable symptoms. In many cases, the modern healthcare system has failed these individuals. Now, more than ever is the time for a more holistic approach to health, a more whole-body solution. There are five aspects to holistic health, physical, emotional, social, spiritual, and mental. All five enable a person to truly live each day in the healthiest, happiest way possible, and if one area is compromised, most likely other areas will be as well.

Physical: physical health is what most people think about when they think of health. This is mostly because it is often the body that shows us physical signs and symptoms of either optimal or sub-optimal health. These physical signs and symptoms are also easier to track and measure than other non-physical signs and symptoms that can feel more abstract.

Emotional: while often overlooked, our emotional health is just as significant as our physical health, especially because our emotional health can affect our physical health if it is not prioritized.

Social: many researches have shown the happiest people on earth have deep connections with their friends, family, and community. We are social creatures and must exercise this natural characteristic of ours.

Spiritual: This does not mean that you have to become religious. Instead, your spiritual health should focus on how you are connecting with your inner soul and the greater world around you.

Mental: this often overlaps with both our emotional and physical health. The big distinction between our mental and emotional health, though, is that while our emotional health refers mostly to our daily moods and emotions, our mental health refers to the cognitive abilities that affect how our brain functions.



Education through sport (ETS)

The benefits that come from practicing any type of sport are unquestioned. Confidence, discipline, social integration, and networking are a few that come to mind, but probably the most important one is health. Health is wealth, and even though we know this, there is still an alarming statistic that shows that physical inactivity is the sixth leading risk factor for health in Europe. Approximately 63% of Europeans do not reach the minimum recommended level of physical activity per week. Only 40% say that they exercise regularly. The risk for people with lower incomes is even higher. There is a lot of room for improvement, and the promotion of sport should be a priority. Any sports group can turn into a learning community, and coaches can become teachers. That is why the approach of education through sport is needed.

Education through sport¹ is a methodology that uses sport and physical activity to unlock and develop key competencies. Sport will be used as sort of a vehicle to spread these values and competencies with the goal of improving a different aspect of the life of participants. Changes on personal and professional levels will be enhanced through the development of cultural, ethical, and moral competencies. The goal is to introduce education through sport as a type of non-formal education. This type of education includes any planned program targeting younger people and designed to improve a range of skills outside the formal educational system. It does not result in any certification but is rather practiced voluntarily. Participation in such events can also have economic benefits. Integration through sports can combat poverty, prevent crime, and reduce unemployment. Social networking can be enhanced, and significant relationships can be formed.

Education **THROUGH** sport should not be mistaken for education **FOR** or **BY** sport. While the latter two focus more on improving skills in a particular sport or on health benefits, respectively, education through sport is a deeper, more complex, and holistic methodology. Education for or by sport is, of course, still very important, but in ETS, the educational element comes first, and, as mentioned, sport is the vehicle that introduces physical activity as an educational tool to combat social issues and inspire long-lasting social transformation. In ETS, sport is secondary to educational goals. First, the educational needs are determined, then the educational sessions are introduced by using sport, and then an analysis is conducted on the personal development of the participants after the session. ETS covers topics including communication skills, social inclusion, motivation, teamwork, entrepreneurial skills, active citizenship, health and safety, raising the culture, and combating anti-social behavior. ETS first appeared on the horizon in 2004 during The European Year of Education through sport. Introduced by the European Union, the goal was stated as to promote the **better use of sport**

1 <https://www.moveandlearn.org/>

as an educational and socially inclusive tool. Member states took notice and started working together to disseminate the values of teamwork, fair play, and tolerance through sporting activities. A financial budget of 12.1 million euros was released and around 167 projects were co-financed out of nearly 1,643 applications. Since then, ETS has been the main priority of the European Union and the Erasmus + program.



Correlation between health and physical activity and promotion of #BeActive lifestyle

OVERALL CORRELATION BETWEEN HEALTH AND SPORT - INTRODUCTION

Physical inactivity and a sedentary lifestyle constitute a major societal problem in Europe that negatively impacts people's health and wellbeing, the economy, and healthcare systems. The importance and benefits of a physically active lifestyle have been well established for some time.

Scientific evidence shows that routine physical activity boosts health and wellbeing with reduced risk of cardiovascular and respiratory diseases, musculoskeletal and metabolic conditions, and psychological wellbeing. Not moving regularly, on the other hand, leads to ill health, particularly later in life.

Physical inactivity levels are rising across Europe, with major implications for the prevalence of non-communicable diseases and the general health of the population worldwide. The levels of physical inactivity throughout Europe are estimated to cause 600,000 deaths and a loss of 5.3 million years of healthy life every year due to early mortality and disability.

Educating people about the importance of getting adequate physical activity is vital, including encouraging them to lead healthy lifestyles and, thereby, safeguard their health.

Being active and adopting a healthy lifestyle can support immediate benefits such as reducing depression and anxiety risk or helping to sleep better. Also, it has a positive impact on the management of body weight, protects against cardiovascular disease, type 2 diabetes, and metabolic syndrome and prevents some cancer types.

It is generally understood that an active lifestyle can extend a lifespan by between three and seven years. In children and young people, physical activity has many beneficial health outcomes, including improved fitness (cardiorespiratory and muscle functions), cardiometabolic health (tension, dyslipidaemia, glucose, and insulin resistance), bone

health, cognitive outcomes (academic performance and executive function), mental health (lower presence of symptoms of depression), and lower adiposity.

In adults, physical activity is also beneficial for many health outcomes including improved all-cause mortality and cardiovascular mortality, the incidence of hypertension, the incidence of cancer in specific locations and incidence of type 2 diabetes, mental health (lower presence of symptoms of anxiety and depression), cognitive health, and sleep, along with possible improvement of adiposity measurements.

NEETs and persons with disabilities along with other groups of health-impaired people can obtain additional benefits from physical activity as follows:

- children with diseases or disorders that affect cognitive function like attention deficit hyperactivity disorder – better cognitive function;
- people with intellectual disabilities – improved physical function;
- adults with multiple sclerosis – improvements in physical function and the physical, mental, and social dimensions of a health-related quality of life;
- people with spinal cord injuries – improvements in leg motor function, muscle strength, and upper extremity function along with a higher health-related quality of life;
- people with diseases or disorders that affect cognitive function like Parkinson's disease or a history of strokes – an improvement in physical and cognitive functions;
- adults with schizophrenia – cognitive benefits and a possible improvement in quality of life;
- adults with intellectual disabilities – a possible improvement in physical function;
- adults with major depression – an improvement in quality of life.

CHILDREN

The health and wellbeing benefits for children of taking part in sport have been widely reported in the academic literature²:

- Increased physical activity in children is associated with improved mental health.
- Muscular fitness developed through sports participation is associated with decreased risk of cardiovascular disease and metabolic risk factors.
- Sport can support the emotional and social health of children because it generates mechanisms similar to those that appear in adult life (e.g., conflict, disappointment, failure, success, struggle, competition, and diversity).
- Team sport participation has been reported to have a strong inverse association with weight status.

² zEmmonds S., Weaving D., Lara-Bercial S., Till K., Youth sport participation trends in europe an output of Erasmus+ sport project ICOACHKIDS+ (2021).

- Sport participation during teenage years has been shown to be a protective factor against sedentary behaviour, risk of depression, and body esteem issues.
- Every European country promotes a healthy lifestyle, especially in schools, but despite this, children do less physical activity than they should; the percentage of six- to nine-year-old children who don't practice sports is 53.9% because they prefer to spend their time watching TV or playing on a computer³. Furthermore, the rate of childhood obesity in Europe is increasing due to unhealthy eating behaviours. The current rate of overweight and obese children and adolescents is over 30% in certain European countries⁴. Lastly, the sport participation rate of children drops in adolescence because of physical and psychosocial changes which may impact their capabilities and their perceived competency⁵.

YOUNG PEOPLE AND NEEDS

It's easily noticeable that the level of physical activity in people with intellectual disabilities is significantly lower when compared with that of the general population. What's more, they are not adequately active in achieving health benefits coming from engaging in sport.

People's state of health and returning health problems can lead to problems in daily functioning (disabilities). That's why regular physical activity is a good way of preventing and curing contagious diseases, hypertension, and excess weight and obesity. It can also prevent or slow down the progress of coronary artery disease, type 2 diabetes, osteoporosis, osteoarthritis, colon cancer, high blood pressure, lowered balance, decreased strength, fatigue, endurance, decreased physical fitness, decreased flexibility, spasticity, issues with weight, i.e., obesity, depression, urinary tract infections, lowered self-esteem, decreased ability of normal social interactions, and increased dependency on others. Physical activity also has a positive effect on mental health, quality of life, and wellbeing.

This demonstrates that having an active lifestyle for health and wellbeing reasons is probably even more crucial for disabled people than it is for the general population.

An overview of the literature and databases regarding effective factors of health promotion and methods of prophylaxis for disabled people confirms that interventions that promote physical activity should make it easier to maintain trends of long-term involvement in behaviours related to physical activity of any kind.

3 WHO, European Childhood Obesity Surveillance Initiative (COSI) - Report on the fourth round of data collection, 2015–2017 (2021).

4 Publications Office of the European Union, Mapping and zooming in on childhood obesity (2018).

5 Emmonds S., Weaving D., Lara-Bercial S., Till K., idem.

Polish guidelines related to disabled people's physical activity are the same as those of the World Health Organization (WHO) thus:

Children and youth with disabilities should, on average, partake in at least sixty minutes from moderate to high-intensity physical activity daily throughout an entire week, including high-intensity aerobic exercises and those that strengthen muscles and bones at least three times per week. However, it's worth noting that taking on any physical activity is better than none.

Guidelines for children and youth with disabilities:

- Even when disabled children and youth don't follow the suggestions presented below, any type of physical activity will be beneficial for their health.
- Children and youth with disabilities should start with a low quantity of physical activity, but with time, gradually increase its frequency, intensity, and the length of time they engage in it.
- Disabled children and youth should be involved in physical activity if it's appropriate for the current level of activity, health state, and physical fitness of an individual, and if the health benefits gained outweigh possible risks.
- Disabled children and youth can request consultations with health professionals or other specialists for physical activity and disabilities to get advice on the types and correct quantity of physical activity that could be a good fit for them.

Most significantly, children and youth with disabilities should limit the time spent in the sitting position, especially the time spent in front of screens for recreational purposes.

The NEET concept is an acronym for 'Not in Employment, Education or Training' and is used to describe the situation of youths aged 15-29 who are professionally inactive, i.e., they don't study, work, or partake in any self-development courses or courses that would allow them to acquire professional skills and competences. In the past, young people aged 15-24 were regarded as NEETs; however, as the process of education in college lengthened, the age barrier has been moved about five years. This age range has been prevalent in official studies run on this issue by Eurostat (the European Statistical Office) and the European Commission.

It's incredibly challenging to document exactly what factors determine youth's professional inactivity in both Poland and Europe. There is no advanced research or sizeable national reports.

For example, results of research run by Eurofund should be alarming because the researchers have demonstrated that poor education has a direct and negative effect on a person's chances of getting a job. Scientists have observed that the risk of becoming a NEET is tripled for individuals who have had only primary education compared with those who have received higher education. NEETs' lifestyles and professional and

social inactivity can lead to an increased risk of addiction to hazards, alcohol, narcotics, nicotine, aggression, violence, law-breaking, and pursuing early parenthood.

In 2021, 13.1% of youth in the EU were regarded as NEET. However, there are visible differences between member countries as several have already reached their goal for 2030. The highest values for NEET individuals in 2021 were noted for women in Romania and Italy (around 25%) and for men in Italy and Greece (around 20%). The lowest for women were in the Netherlands and Sweden (around 5%) and for men in the Netherlands and the Czech Republic (around 5%).

ADULTS

The main reasons why adults engage in physical activity are to promote their health, physical condition, appearance, or a combination of all three. Adults also play sports to relax and have fun. Within the research framework, three specific factors were considered: education, employment, and disability. While all three factors were found to be influential in the perception of individuals' general physical fitness, employment is the most relevant for the adult group.

When considering the relationship between employment and physical activity, adults tend to engage in less physical activity if they are employed. In most cases, the ability to perform "high" physical activity is impacted by being employed, especially when compared with non-active people. Lack of time is the main reason for neglecting sports activities.

When evaluating adults' physical state of health, the correlation between health, sport, and employment is significant. Sleeping problems are greater in those individuals who are unemployed compared with those who are employed. Similarly, a higher percentage of unemployed people have problems performing their usual activities compared with employed people.

Employment facilitates individuals to have clearer and more logical thinking with fewer memory problems compared with unemployed people.

Conversely, unemployment leads to a higher percentage of people with feelings of sadness, melancholia, depression, distress, and physical discomfort.

One significant difference is in the degree of vitality; a higher percentage of people out of work feel healthy and energetic.

PEOPLE WITH DISABILITIES

Disability is a multidimensional phenomenon and should be approached not only from a human rights perspective but also from a public health view. Disabled people constitute a vulnerable heterogeneous population group with different and specialized needs compared with the general population that is at direct risk of marginalization and social exclusion. Undoubtedly, people with disabilities suffer from stigma and prejudice, which have negative consequences for their health.

It is therefore clear that ensuring appropriate conditions for the full integration into society of disabled people and removing social exclusion to avoid or eliminate discrimination should be priorities in modern societies seeking equity.

It should not be overlooked that in recent decades there has been a remarkable shift towards eliminating the unequal treatment of disabled people. An important component in the design and implementation of interventions for people with disabilities is the **biopsychosocial model of health**. This was proposed by psychiatrist Engel and is a philosophical approach that assumes the importance and interaction of biological, psychological, and social factors in determining health.

The biopsychosocial model approaches disability from a medical-biological, social, and individual perspective. Within this model, disability is defined as ‘the result of the interactions between health conditions (diseases, syndromes, and impairments) and contextual factors. Contextual factors include external environmental factors (for example, social attitudes, legal and social structures, as well as climate, terrain, etc.) and internal personal factors, including gender, age, social background, education, occupation, past and present experience, behavioural patterns, character and other factors that influence the way in which the individual experiences disability’.

This approach was also adopted in the definition of disability in the UN Convention on the Rights of Persons with Disabilities (CRPD). Therefore, disability is not the same as illness per se but is an interaction of the individual’s health condition with their wider environment.

Sport for people with disabilities is not only fun, entertaining, and good exercise but is also a long and arduous process that contributes to rehabilitation and, above all, to the independence of the individual and their reintegration into society. Therefore, for people with disabilities, exercise is a significant means of personal development, rehabilitation, social integration, and solidarity.

People with disabilities face a variety of problems, mainly related to the non-implementation of reasonable accommodation measures in both physical and digital environments, resulting in, among others:

- Lack of accessibility (e.g., unimpeded physical access to public health and exercise facilities);
- Lack of sufficient and appropriate means of transport (e.g., public transport, transport to health and exercise facilities);
- Inadequate or low level of knowledge and education and stereotyped views among citizens about the specific needs and rights of persons with disabilities;
- Deficiencies in access to and information about scientific advances like access to electronic service systems and telemedicine etc., due to ineffective transfer or inadequate communication of necessary information to people with disabilities.
- The existence of legislation for the respect and protection of the guaranteed rights of people with disabilities does not automatically reverse entrenched social perceptions; however, it sets the conditions for the removal of inequalities. To further accomplish the elimination of inequalities requires concerted efforts, first, at the systematic state intervention level and subsequently, at the citizen level in the context of raising awareness of disability discrimination in society.





State-of-the-art in partner countries

The policies and practices in the PROPELLERS partner countries are defined in this chapter which will provide an important state-of-the-art view in Croatia, Greece, Italy, Poland, Spain, and Bulgaria.

CROATIA

Country	Croatia
National landscape	<p>The promotion of health-enhancing physical activity (HEPA) is covered by the Strategy for Science, Education and Technology 2015—2017. The strategy promotes the development of a sustainable, high-quality system to encourage sports and sporting activities, focusing primarily on promoting sports from an early age, creating conditions for equal participation, and outlining plans for the construction, renovation, and maintenance of sports facilities. Its implementation is envisaged through coordinating institutions and aligning the activities of various agencies.</p> <p>Currently, no formal coordination mechanism exists for physical activity in Croatia. However, the Croatian National Institute of Public Health has recently initiated a national program entitled <i>Living Healthy</i>, involving all stakeholders involved in HEPA promotion, and working groups have already been designated. The scope of work of the <i>Living Healthy</i> program includes physical activity in the workplace and public awareness campaigns to promote physical activity.</p> <p>Croatia’s participation in the WHO Europe Healthy Cities Network is coordinated by the Andrija Stampar School of Public Health. This academic institution provides extensive support, including administrative, technical, informational, organizational, and professional to the city- and county-based project teams across Croatia.</p>



<p>Children</p>	<p>In 2015 and 2016, the Republic of Croatia was included in a Childhood Obesity Surveillance Initiative (COSI) that conducted a survey in thirty-seven countries. The study, launched in 2006 by the European Office of the World Health Organization and thirteen member states was conducted in Croatia by the Croatian Institute of Public Health with the support of the Ministry of Health and Ministry of Science and Education.</p> <p>The COSI research in Croatia included all three questionnaires created by the study comprising school form, family form, and child form. The questionnaires were translated into the Croatian language.</p> <p>This research was conducted in 182 randomly selected second and third-grade classes from 164 main elementary schools. Of 7,150 students, a total of 5,664 children were measured. The remaining children did not have their parent's consent or were not present at school on the day the measurement was conducted. As four children actively declined to be measured, the response rate reached was 79.2%. Of the 7,150 distributed forms, a total of 5,903 parents/ guardians filled in the family form, which made the response rate 82.6%.</p> <p>According to the data collected in this research, 73.2% of boys and 81.7% of girls had normal body mass and less than 1% of children were underweight or severely underweight.</p> <p>According to anthropometric measurements, every third child, i.e., 34.9%, aged 8- to 8.9-years-old was overweight or obese.</p> <p>There were more overweight than obese boys at 21.5% and 17.2%, respectively. Among girls, 67.3% had a normal body mass index while 20.3% were overweight and 10.7% were obese. The share of thin children is under 1.5% overall comprising 0.4% of boys and 1.2% of girls.</p> <p>Regular physical activity, measured by participation in sports/ dance activities through membership in clubs is more frequent in boys than girls at 70.5% and 65.9%, respectively. Overall, the number of children participating in sport/ dance activities exceeded two-thirds of all eight-year-old children.</p> <p>On average, 51.5% of the children spent under three hours a week participating in physical activities within a sports or dance club, and the percentage of girls was higher than that of boys, at 61.3% and 41.6%, respectively. When looking at participation in physical activities within a sports or dance club for more than four hours, boys are more physically active than girls at 58.4% compared with 38.7%, respectively).</p> <ul style="list-style-type: none"> • In 2006 in Croatia, the Croatian School Sports Federation was established as a national association for the promotion and organization of various extracurricular sports activities based on the Sports Act; • PROGRAM "DEVELOPMENT OF SPORT SPECIFIC FOR A PARTICULAR LOCAL ENVIRONMENT." This program was implemented by the Croatian Olympic Committee aiming at more mass involvement of children in sports specific to a certain environment and further motivating athletes of all ages already involved throughout the year in different scopes and durations through presentations of individual sports from active athletes in different age categories. This was approached by hosting athletes at organized children's sports and educational playrooms, professional lectures for educators and teachers, and organized competitions in several sports.
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Young people (16-25) and NEETs

Data for young people, adults, and the elderly were obtained from the European Health Survey (EHIS) conducted in 2014/2015.

The publication *Life Habits* continues the publication published in 2016 entitled *European Health Survey in Croatia 2014-2015*.

This shows the state of nutrition, frequency of smoking and alcohol consumption, eating habits, and physical habits of the population, with the aim of evaluating, planning, and improving the health of the general population.

The first cycle of the European Health Intervju Survey (EHIS) was conducted from 2007 to 2010 in most European Union (EU) countries, and the Republic of Croatia joined the second cycle from 2013 to 2015. The research was conducted by the Croatian Institute for Public Health in cooperation with the public health institutes of the counties and the City Zagreb, the Central Bureau of Statistics, and the Ministry of Health.

The plan is to conduct the survey every five years in all EU member countries using the same methodology at the same time.

According to the age distribution, the largest share of respondents with a normal body mass are from 15 to 24, representing 72.5%.

Most women with normal body weight, 77%, are in the age group 15 to 24 and this decreases with age.

STRATEGIC PLAN FOR THE DEVELOPMENT OF SPORT AND THE OLYMPIC MOVEMENT (BY THE CROATIAN OLYMPIC COMMITTEE) -

The importance of sport is recognized in Croatia since its most significant documents, like the Sports Act and the National Health Development Strategy for the period 2012-2020 (Official Gazette 116/12), emphasize that physical activity is a fundamental way to improve peoples' physical and mental health. This is also stipulated in the National program "Healthy living" (Croatian Institute of Public Health), which includes a series of activities aimed at regular physical activity in the general population in line with WHO guidelines. Therefore, the National Sports Program deals with all organizational forms of sport. Hereafter, sport implies sports and physical activity that is beneficial to health.



Adults (25+)

As age increases, obesity decreases and is lowest in the 65 to 74 age group at 25.5%.

As the proportion of normal body weight reduces the number of subjects with excess body weight and bulk increases. The proportion of respondents with excessive body weight is highest between the ages of 65 and 74 at 47.8%, while most respondents with obesity are aged 55 to 64 at 26.4%. After 74 years of age, the share of overweight respondents decreases.

The proportion of men with obesity is highest in the 45 to 54 age group at 53.1% and 30.5%, respectively. The number of men with normal body weight decreases with age, while the proportion of those with excess body weight grows and this phenomenon is recorded from the lowest age groups to 45 to 54. After that age, a slight decline in the proportion of men with overweight and obesity is noted.

The fewest women with normal body weight are 65 to 74 at 27.8%. The proportion of overweight women increases with age, and it peaks at 65 to 74, with 44.1% of women being overweight. The proportion of women with obesity also increases with age with most aged between 55 and 64 at 26.2%, after which the share of women who are overweight slightly increases, and those with obesity slightly decreases.

The proportion of overweight people is almost equal in all age groups over 60 and averages 46.3%, while the proportion of people with obesity over the age of 60 decreases with increasing age from 26.6% from 60 to 74 to 10.4% in 85-year-olds and older.

According to the data on the frequency of weekly exercise, a total of 18.6% of respondents exercise, of which 52.9% exercise for more than 300 minutes a week, 24.3% exercise for 150-300 minutes a week, and 18% exercise for 60 to 150 minutes a week. Of the total respondents who exercise, 4.7% of them exercise less than 60 minutes a week.

Fitness or recreational activities lasting at least ten minutes are conducted by 21.6% of the respondents, while as many as 78.4% do not perform any physical activities.

- NATIONAL SPORTS PROGRAM 2019-2026

Sports activities are of special interest to the Republic of Croatia, and in accordance with the adoption of the National Sports Program, the basic planning and development act governing the development and improvement of the sports system in the Republic of Croatia, are urgently required. The National Sports Program has been adopted by the Croatian Parliament at the proposal of the Government of the Republic of Croatia for eight years, setting out the development objectives for sports, the measures and activities necessary for the implementation of these objectives, the responsible authorities and executors of the development, and the control measures for its implementation as defined by Article 2, Paragraph 1 of the Sports Act.

ACCORDING TO THE ACT, THE NATIONAL SPORTS PROGRAM MUST ENCOMPASS THE FOLLOWING:

- Programs creating conditions for sporting activities in the educational system.
- Programs creating conditions so Croatian athletes achieve high-level results in international competitions
- Programs creating conditions for recreational sports for all citizens of the Republic of Croatia to **protect and improve their health.**

Persons with disabilities

According to the records of the Croatian Institute of Public Health, in April 2017, 511,850 persons with disabilities lived in the Republic of Croatia, of which 60% are men and 40% women. People with disabilities in Croatia make up 11.9% of the population. Most persons with disabilities are aged 19 to 64, and the number of persons is 243,206 (48%). For several years there were 229,589 (45%) persons aged 65 with disabilities while there were 8% at ages 0 to 19. The greatest number of people with disabilities live in the Zagreb and Split-Dalmatia regions.

About 63% of people with disabilities have only primary education or none, about 28% have a high school diploma, and only 3% have a disability higher education. About 80% of people with disabilities live with their families while 17% live alone.

The most common causes of disability are damage to the locomotor system and mental disorders.

Research shows that between 77 and 88% of adults with disabilities do not exercise actively or at least not in measures sufficient to prevent hypokinetic disorders and even the death syndrome caused by sitting or physical inactivity.

There are a relatively small number of empirical studies of this type in Croatia.

According to the Croatian Paralympic Committee, there are currently approximately 1,500 athletes in Croatia, of which 941 are registered athletes.

National Strategy for Equalization of Opportunities for Persons with Disabilities from 2017 to 2020 plans to:

- develop, implement, and monitor programs of extracurricular sports and other activities that will improve the inclusion of children and youth with disabilities
- implement sports programs and other activities that will improve the inclusion of children with disabilities and people with disabilities
- provide and adapt playgrounds, sports fields, and parks for children with disabilities.

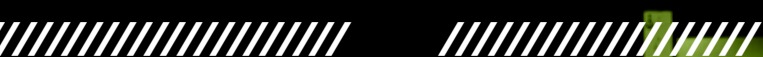
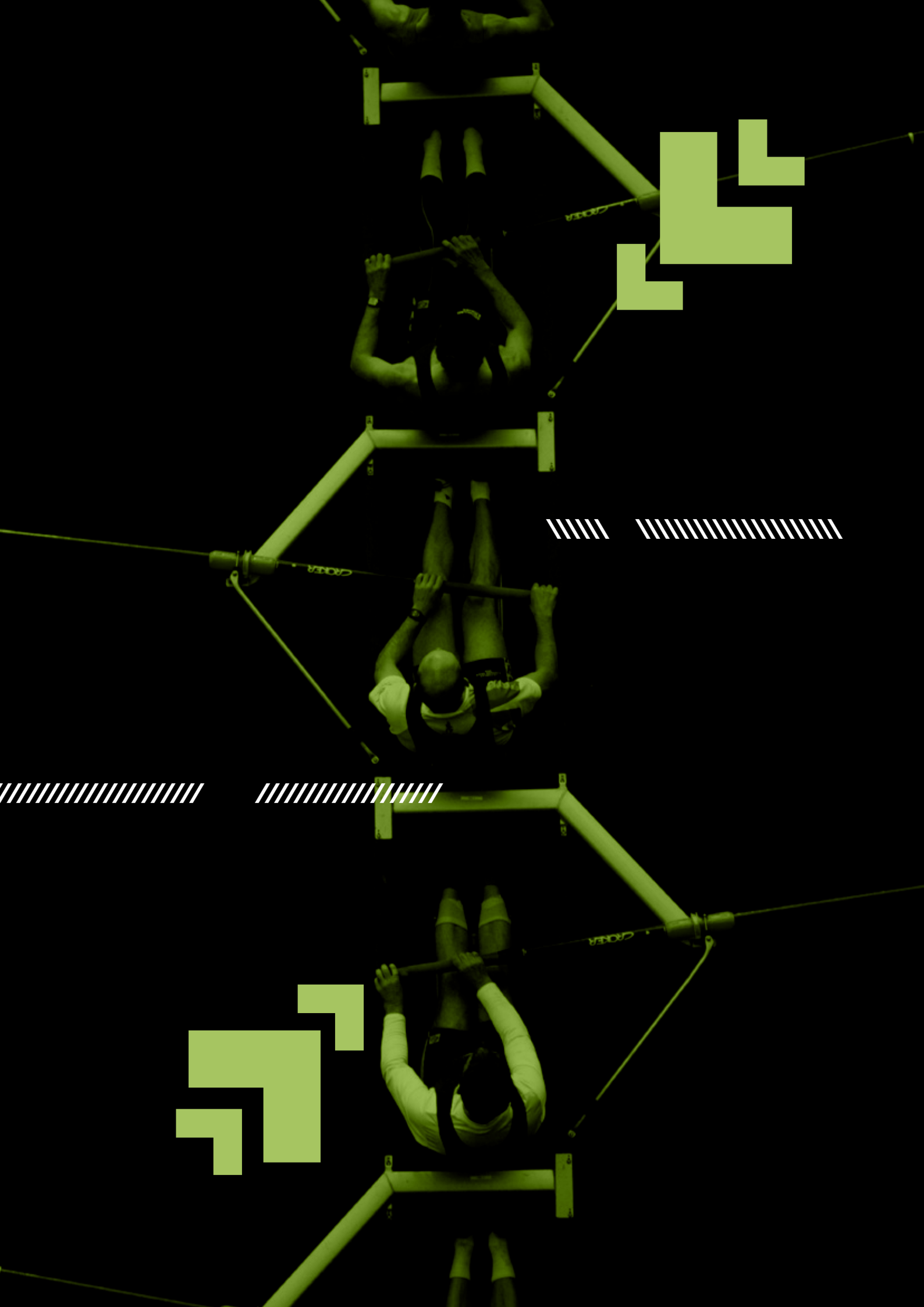


<p>Recommendations for improvement</p>	<p>Croatia has, thus far, not adopted any national guidelines or recommendations on physical activity. Materials have been developed and included in the draft version of the country’s health promotion and noncommunicable disease (NCD) prevention action plan (2015 - 2020), which is currently in the process of being officially approved by the Croatian government. The national recommendations on physical activity for health, which will target the whole population, are based on WHO’s global recommendations on physical activity for health (2010). Croatia is expected to implement national guidelines by 2018.</p> <p><i>Additional Information on Actions in Key Areas</i></p> <p>Health Sector</p> <p>A postgraduate course entitled “Prescribing exercise and physical activity in medical practice” is available to medical doctors in Croatia. Organized by the Andrija Stampar School of Public Health (part of the Medical School University of Zagreb), the course covers physical activity and health, the importance of the epidemiological transition, counseling in medical practice, medical examination and assessment prior to intervention, approaches to determining medical fitness, and an action guide for doctors and health professionals. The course also involves practical demonstrations.</p> <p>Sport in schools</p> <p>Funding for school sporting activities is provided from the state budget and allocated to the Croatian School Sports Association and the Croatian Academic Sports Federation. These bodies are responsible for delivering sports activities that encourage health-oriented training of young children and students and providing resources and facilities for sports competitions, which can encourage the uptake of recreational and amateur sporting activities outside education settings.</p>
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Sources:

1. Eurostat. Your key to European statistics [online database]. Luxembourg: Statistical Office of the European Union; 2015 (June update) <http://ec.europa.eu/eurostat/data/database>, accessed 6 July 2015.
2. Global status report on noncommunicable diseases 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/148114/1/9789241564854_eng.pdf?ua=1, accessed 18 July 2015).
3. HBSC. Health behaviour in school-aged children. Publications: international reports [website]. St Andrews: University of St Andrews Child and Adolescent Health Research Unit (HBSC International Coordinating Centre); 2015 (<http://www.hbsc.org/publications/international/>, accessed 2 July 2015).
4. National Reform Programme 2015. Zagreb: Government of the Republic of Croatia; 2015 (http://ec.europa.eu/europe2020/pdf/csr2015/nrp2015_croatia_en.pdf, accessed 18 July 2015).
5. Global recommendations on physical activity for health. Geneva: World Health Organization; 2010 (http://whqlibdoc.who.int/publications/2010/9789241599979_eng.pdf, accessed 15 July 2015).
History [website]. Zagreb: Andrija Stampar School of Public Health; 2005 (http://www.snz.unizg.hr/test/test4/history_det.php?hist_kat=2&hist_tekstPage=2, accessed 3 July 2015).
6. Škorić S, Bartoluci M, Čustonja Z. Public financing in Croatian sport. Financial theory and practice 2012;36(2):179–197 (<http://www.fintp.hr/upload/files/ftp/2012/2/skoric-bartoluci-custonja.pdf>, accessed 16 July 2015).
7. Croatian Academic Sports Federation [website]. Rijeka: Rijeka University Sports Association; 2015 (http://opatija2015.uniri.hr/?page_id=266, accessed 3 July 2015).
8. The health systems and policy monitor. Croatia [website]. Brussels: European Observatory on Health Systems and Policies; 2014 (<http://www.hspm.org/countries/croatia30062014/countrypage.aspx>, accessed 3 July 2015).
9. WHO European Healthy Cities Network [website]. Copenhagen: WHO Regional Office for Europe; 2015 (<http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/activities/healthy-cities/who-european-healthy-cities-network>, accessed 16 July 2015).



Children

Greece is among the world leaders in childhood obesity, with one in three obese infants and one in two obese children becoming obese adults. Every hour of watching TV or playing video games at age five increases the risk of being obese as a young adult by 7%. The message should be that lifelong exercise is one of the best drugs a modern citizen could buy.

The Ministry of Health is proposing and implementing policies for children with a focus on PA and health. Cooperation between the Ministry of Health, the Ministry of Education, and the General Secretariat for Sport, along with the participation of local municipal authorities, are prerequisites. Actions include:

- Implementing the “Active Healthy Kids Global Alliance,” an international network aiming at a global registry of PA report cards for children from 38 countries around the world;
- Issuing an “athlete’s health card” to children who regularly participate in sporting activities through their school or through a recognized sports club. Pilot implementation in areas with a higher ratio of sports clubs per child (e.g., Piraeus, Thessaloniki, etc.). The pilot application provides valuable data on the level of sports activities of children in Greece;
- Implementing, strengthening, and developing the Healthy Schools Network in Greece (‘SYE Network’ - ‘Schools for Health in Europe’). Schools participating in the network incorporate specific health education programs and health promotion activities a) to reduce childhood obesity, b) to prevent, control and stop smoking among children, and c) to promote PA;
- Informative talks by experts on nutrition-related topics. Extension of healthy food dissemination programs to all schools participating in the Schools for Health in Europe network;
- Safe road access to school and the creation of cycle paths for safe travel. Providing children with the opportunity to participate in safe cycling courses, in cooperation with the local police department.



**Young people
(16-25) and
NEETs**

Physical activity (PA) is an important protective factor for young people's health, both in the short and long terms. A consistently high level of PA and moderate PA contribute to healthy body development in adolescents and young people, including the strengthening of bones and muscles, the development of movement skills, and self-esteem and positive body image. In Greece, a recent survey found that one in three young people often do PA during the week. Men are much more active (42.2%) compared with women (24.4%). Also, the proportion of young people reporting frequent physical activity decreases significantly with increasing age. At the same time, one in six young people, mostly women, report PA at most once a week.

All the actions of the National Public Health Organization respond to the human need for movement and PA and are linked to the basic values and principles of European health policy. The objective is a national cross-sectoral coordination framework by the NPHH and will include as partners various ministries that can contribute to improving the conditions for increasing mobility and PA, like the Ministries of Education & Culture, the Ministry of Health, the Ministry of Transport, Communications and Works, various sports organizations, and local government.

For example, the Municipal Utility Company:

- provides both structured and unstructured free exercise programs (“Sport and Youth”) emphasizing cooperation and socialization. More specifically, considering the interests of young people, their participation, the trends of the time, and the emerging needs mixed or pure classes are formed, and fitness programs are implemented to improve physical fitness (Pilates, power fitness, yoga, fitball), therapeutic gymnastics (orthosis), and specialized sports (ballet, tennis, modern dance);
- undertakes the promotion of sports activities at local level (organizing distance races, hikes to nearby destinations in the area, etc.);
- coordinates the cooperation of adolescents and young people with local cultural and educational associations to organize physical exercise and recreational programs, like traditional dances, games, etc;
- organizes day trips to clean up open spaces (e.g, paths) and create forest firebreaks in cooperation with the local fire brigade.

Adults (25+)

Hypomobility is a modern scourge for the 21st century Greek citizen, as 50% of Greeks are not sufficiently physically active to enjoy the many concomitant benefits of exercise on their physical and mental health. Systematic physical activity contributes decisively to the prevention of chronic diseases, to delaying the progression or even reversing a disease, to reducing the clinical manifestations of the disease, and to improving the quality of life.

In this direction, the General Secretariat for Sports has designed programs for all citizens over 25, aiming to improve the biological level of sportsmen and women and cultivate sportsmanship and sports awareness and the use of leisure time and recreation of citizens. The aforementioned programs are implemented under the central responsibility of the Ministry of Culture and Sports in cooperation with the Local Authorities and other bodies, like sports federations, sports clubs, educational associations, cultural associations, and sports centres. More specifically, the Public Benefit Corporation of each municipality, having developed significant activity in the field of sport in recent years, provides high-quality sports programs for adults, for example:

- **Adult gymnastics** (includes ABS with dumbbells, strengthening with resistance bands and Pilates balls, and table tennis);
- **Sport and woman** (include Zumba, Pilates, ABS, yoga, aerial yoga, aerobics, aquarobics, self-defence, pregnancy and exercise);
- **Exercise in the Third Age** for people over 65 (includes gymnastics, traditional dances, and swimming).

The number of athletes per section ranges from 13-25 people, except for the sections that are dedicated to learning sports which require a smaller number of people. In particular, the number of participants per section for the 'exercise in old age' programs ranges from 8 to 20 persons. The duration of the daily exercise for each class is 60 minutes, and the weekly frequency of exercise is three times a week, on different days.

Finally, in the same philosophy as the above programs, the majority of municipalities implement sporting activities under the name of 'Sporting Events for All.' The aim of these events is to give citizens the opportunity to participate in sporting and recreational activities throughout the year.



<p>Persons with disabilities</p>	<p>Special education is a broad yet neglected field that requires special treatment and attention from the state. Depending on the type and degree of disability, we distinguish between people with intellectual disabilities, people with physical and motor disabilities, and people with learning difficulties. It is important that we all realize that these people, regardless of the specificity they may have, can be trainable and exercisable with significant benefits for their personal health and quality of life.</p> <p>For people with specific physical or mental disabilities, sport is an important means of personal development, rehabilitation, social integration, and solidarity, thus it should be encouraged! An action that is being implemented for the first time, in accordance with the guidelines of the United Nations, is the National Action Plan for the Rights of Persons with Disabilities under the responsibility of the Minister of State. The European Convention on Human Rights and the field-specific Convention on the Rights of Persons with Disabilities (CRPD) have been considered in this National Action Plan. In accordance with the plan, the Ministry of the Interior undertook to ensure unhindered physical accessibility to sports venues. More specifically, it procured and installed appropriate equipment to upgrade the country’s municipalities with infrastructure for persons with disabilities within the framework of “Smart Cities” actions. In addition, in cooperation with the General Secretariat for Sports and the Ministry of Digital Governance, tools were created for the development of sports for people with disabilities as follows:</p> <ul style="list-style-type: none"> • the Disabled Fan Card; • the Disabled Athletes’ Card; • a register of athletes with disabilities was created through the registers of sports organizations; • a register of coaches specializing in specialized physical education was created; • proposed legislation to improve the institutional framework of the sports for people with disabilities. <p>The Ministry of Education and Religious Affairs is also planning pilot programs to increase the number of hours of physical education lessons. Finally, the Ministry of Health is cooperating with the country’s medical associations to inform and raise awareness of the medical community of the importance of PA and recreation in the lives of people with disabilities.</p>
<p>Recommendations for improvement</p>	<p>We inform society through targeted actions and accessible digital applications including:</p> <ul style="list-style-type: none"> • design and implement accessible social messages (audiovisual and written); • implement the digital accessibility of the website of the Sports Sector of the Sports Council; • implement the Sport Sector of the Ministry of Culture • design and implement seminars.
<p>Sources:</p>	<p>https://kidswithspecialskills.weebly.com/</p> <p>https://primeminister.gr/wp-content/uploads/2020/12/2020-ethniko-sxedio-drasis-amea.pdf</p> <p>https://gga.gov.gr/2012-12-04-14-48-48</p> <p>file:///C:/Users/user/AppData/Local/Temp/%CE%95%CE%98%CE%9D%CE%99%CE%9A%CE%9F%20%CE%A3%CE%A7%CE%95%CE%94%CE%99%CE%9F%20%CE%93%CE%99%CE%91%20%CE%A4%CE%97%20%CE%94%CE%97%CE%9C%20%CE%A-5%CE%93%CE%95%CE%99%CE%91%2031%205%2019%20teliko.pdf</p> <p>https://gga.gov.gr/images/%CE%9F%CE%A1%CE%93%CE%91%CE%9D%CE%A9%CE%A4%CE%99%CE%9A%CE%9F_%CE%A0%CE%9B%CE%91%CE%99%CE%A3%CE%99%CE%9F_2020.pdf</p>



ITALY

Country	Italy
<p>National landscape</p>	<p>In 2019, a “Working Table for the promotion of physical activity and the protection of health in sports activities” was established with the participation of representatives of central administrations like the Department of Sport, the Ministry of Health, the Ministry of Education, the Department of Sport, Regions, CONI, CIP (Italian Paralympic Committee) and experts. The most recent results of the coordination table are guidelines for fitness for competitive sports in non-professional athletes who are COVID-19 positive and in athletes with symptoms of COVID-19 in the absence of a diagnosis of SARS-COV-2.</p> <p>In April 2020, the Minister for Youth Policy and Sport issued a Guideline Act for the three-year period 2020-2022 that defines public policies in the field of the promotion of sport and the objectives of the Società Sport e Salute. The Act is based on the binomial “sport – health,” and identifies young people, women, and all those who are at a disadvantage as the main beneficiaries of any government action.</p> <ol style="list-style-type: none"> 1. National Prevention Plans (2014–2019 and new 2020–2025). 2. Gaining Health Program (GUADAGNARE SALUTE 2007). 3. National Recommendations Guidelines on Physical Activity. 4. Class Sports Project (SPORT DI CLASSE).
<p>Children</p>	<p>The National Prevention Plan 2020-2025. The plan is based on the vision that good health is associated with a balanced and sustainable development between humans, nature, and the environment (One Health). Further, it promotes a life-course approach to strengthening preventive interventions that lead to positive health outcomes throughout an individual’s lifetime and for whole communities. The approach is to reduce risk factors for people’s health and provide access to healthy environments and choices that encourage a healthy lifestyle. The plan will implement preventive actions that start from the period between conception and the first two years of a child’s life.</p> <p>The class sports project ensures the continuity of physical activity and sports education for primary school children (6–10 years) during the COVID-19 health emergency. It supports educational institutions in providing activities to guarantee compliance with safety regulations at school and training in digital technology. It also provides activities for the whole family to encourage physical movement and games. The program is promoted and led by the Ministry of Sports and Health and the Ministry of Education.</p> <p>Two hours of PE per week are compulsory in Italian primary and secondary schools. Active transport to school is encouraged, using the PIEDIBUS scheme. This “walking bus” allows students to travel to school on foot, accompanied by adult volunteers, in an organized fashion.</p>
<p>Young people (16-25) and NEETs</p>	<p>The project “School open to sport” is aimed at high schools and realized in collaboration with the National Sports Federations. It aims at fostering physical activities, discovering new sports, promoting the educational values of sport, and offering specific know-how and tools.</p> <p>The Youth Apprenticeship Program (alternanza scuola lavoro), compulsory for all students during the last three years of high school, is one of the innovations introduced by law 107/2015. It is an educational experience, aimed at offering students training opportunities through work experience in a host facility.</p>

<p>Adults (25+)</p>	<p>Community interventions to promote physical activity among older adults are referred to in the “Recommendations on physical activity 2019 and are main objectives of the National Prevention Plan. The National Olympic Committee and the Associations for Sports and PA promotion (as the Italian Union for Sports for All) propose several programs for physical activity for adults and older adults.</p>
<p>Persons with disabilities</p>	<p>The National Sport Educational Centre (CSEN) has adopted a sports for all policy entitled “Integrated sports,” addressing both disabled and able-bodied individuals and aiming to create a cohesive group that, through sports, develops and promotes the culture of integration, solidarity, and acceptance of diversity at all levels. The program aims to affirm the value of human diversity as a source of richness, not as a handicap.</p> <p>“SportHabile Project” promotes amateur competitive sports among people with disabilities to improve rehabilitation outcomes and strengthen their socialization and integration in the community.</p> <p>“InformHabile” is an independent program that provides information on sports opportunities and awareness campaigns to advance the practice of sports in this group.</p> <p>“Superabile” is a scheme organized jointly by the Italian Paralympic Committee (Comitato Paralimpico (CIP) and the National Institute for Insurance against Accidents at Work (Istituto Nazionale per L’Assicurazione Contro Gli Infortuni Sul Lavoro (INAIL). The scheme uses sports as an integral component of the rehabilitation and reintegration program for disabled workers.</p>
<p>Recommendations for improvement</p>	<p>Italy has national recommendations on physical activity and health for young people and older adults based on the recommendations of the CDC and the ACSM. This entail ensuring that adults carry out at least 30 minutes of moderate-intensity physical activity on most, if not all, days and that children and adolescents aged 5—17 years engage in at least 60 minutes of moderate- to vigorous-intensity physical activity (MVPA) daily.</p> <p>The Ministry of Health and Italian Regions adopted National recommendations on physical activity for different age groups in 2019 with reference to physiological and pathophysiological situations and specific population subgroups. The recommendations are a policy document and an operational tool for implementation of the National Prevention Plan 2020–2025 and in particular for the program “Active communities,” which promotes physical activity for the prevention of chronic non-communicable diseases.</p>



Sources:

<https://national-policies.eacea.ec.europa.eu/youthwiki/chapters/italy/73-sport-youth-fitness-and-physical-activity>

<http://chrodis.eu/wp-content/uploads/2017/03/gaining-health-making-health-choices-easier.pdf>

https://www.euro.who.int/__data/assets/pdf_file/0006/288267/ITALY-Physical-Activity-Factsheet.pdf

La Sorveglianza PASSI. Rome: National Centre for Epidemiology, Surveillance and Health Promotion (CNESPS) of the Italian National Health Institute (ISS); 2013. Available online: <http://www.epicentro.iss.it/passi/rapporto2013/AttivitaFisica.asp> (accessed on 8 July 2015).

Global recommendations on physical activity for health. Geneva: World Health Organization; 2010 (http://whqlibdoc.who.int/publications/2010/9789241599979_eng.pdf, accessed 15 July 2015).

Sport di Classe. Educazione fisica nella scuole primaria [Class sport. Physical education in primary schools] [website]. Rome: Italian National Olympic Committee (CONI); 2013 (in Italian) (<http://www.progettosportdiclasse.it/>, accessed 9 July 2015, accessed 22 July 2015).

SportIntegrato Portale [Integrated sport portal] [website]. Rome: CSEN National Project Office; 2015 (in Italian) (<http://www.sportintegrato.it/>, accessed 9 July 2015).

Presentato il progetto “Exercise is medicine” [Project presentation “Exercise is medicine”] [website]. Rome: CONI School of Sport; 2014 (in Italian) (<http://www.coni.it/it/news/primo-piano/8859-presentato-il-progetto-exerciseis-medicine.html>, 9 July 2015)

https://www.euro.who.int/__data/assets/pdf_file/0009/513756/Physical-activity-2021-Italy-eng.pdf

Promozione della salute e della crescita sana nei bambini della scuola primaria [Promotion of health and growth among primary school-aged children] [website]. Rome: National Centre for Epidemiology, Surveillance and Health Promotion (CNESPS) of the Italian National Health Institute (ISS); 2015 (in Italian) (<http://www.epicentro.iss.it/okkioallasalute/>, accessed 22 July 2015).





POLAND

Country	Poland
<p>National landscape</p>	<p>Physical activity in Poland was analysed using the latest report of The Public Health Committee of the Polish Academy of Sciences (2021) to see what risks and challenges are present for public health in the country. The authors confirmed right at the start of the document that one of the most significant factors influencing a person's health and lifespan is physical activity, which in itself is a strong biological stimulator and belongs to one of the few main determinants of a person's physical and mental health.</p> <p>The authors addressed the World Health Organization and European Commission which unanimously emphasize that regular physical activity is a necessary component for an effective formation of health potential and the prevention of numerous diseases. At the turn of the 20th and 21st centuries, Poland had one of the least active societies in the whole of Europe. Still, despite a noticeable improvement since then, subsequent studies still indicate an unsatisfactory level of regular physical activity in at least 50% of adult Poles and Poland is in a very low position in polls that compare it with other European countries. That's why, in March 2019, The Public Health Committee of the Polish Academy of Sciences decided to appoint a new commission responsible for the development of guidelines regarding an improvement in physical activity levels in Poland. The main question was, "How can we increase the level of regular physical activity by Poles?"</p> <p>There are already numerous intervention and research programs, social campaigns, and epidemiologic studies from Poland that result in health's improvement and an increase in physical activity e.g., The Polish 400 Cities Project, Poland Media Program 'Pamiętaj o Sercu', International Campaign of Physical Health 'Postaw Serce na Nogi', epidemiologic studies: WOBASZ, NATPOL, POLSENIOR and addressed to children and youth: HBSC study under the patronage of WHO, COSI program but also the creation of 'Network of Schools Promoting Health' that has been functioning now for over 20 years. What's more, during the last 20 years there's been an increase in new, modern sports facilities built in Poland. To give just one example, within the 'Moje Boisko Orlik 2021' program, about 2,600 multifunctional sports facilities were created in more than 1,600 municipalities in the country that now are being used mainly by children and youth. Also, the Ministry of Education and Science work at improving children's and youth's physical activity levels in multiple ways. For example, 'Stop zwolnieniom z WF-u', 'Lekcja WF z mistrzem', 'WF z Klasą' have the shared goal of making PE lessons more attractive and at the same time are already quite popular among children and youth.</p>

Children

During each stage of a human's life, and especially during childhood and adolescence, physical activity is extraordinarily important. For these age groups, it's natural and characteristic that they just need to move. Children usually take on physical activity willingly and with enthusiasm, but also, typically for this stage of development, an ability to quickly acquire new motor skills. The most analysed indicator of physical activity intensity is the Metabolic Equivalent of Task (MET) and the level of physical activity is shown with a moderate-to-vigorous physical activity (MPVA) indicator. Polish studies and the physical activity analysis were based mainly on the World Health Organization (2020, 2019). It's a new approach, i.e., the so-called 24-hourly recommendations that consist of different kinds of activities (MVPA, VPA, sedentary classes, sleep) that allow the daily energy investment associated with a child's physical activity to be gauged. These analyses should also be enriched with the number of steps made by an individual.

The biggest recent studies of preschool children were run by the Institute of Mother and Child in 2018. These recommend physical activity (MVPA, number of steps), time spent in front of screens (sedentary) and sleep time for children and youth in the 0-17 age range. Shockingly, 85% of studied children attending kindergarten don't meet the recommended minimum of physical activity despite that around half the parents (47.2%) claim their child participates in sport lessons. Another group of almost 400 preschool children (5-6 years old) were also studied in the southern regions of Poland. The conclusion was that only 26% of kids meet the minimum 60-minute requirement of the MVPA indicator and only 6% of them reached the minimum number of steps (12,000). What's more, the time spent sitting was ten hours on average.

From the latest studies on children from the lower primary school grades (8-year-olds) that were organized within the Childhood Obesity Surveillance Initiative (COSI) in 2016, 2,800 Polish children from 140 schools were monitored by the Institute of Mother and Child within the National Health Program agenda. Less than once a day or not at all from Monday to Friday is spent actively by them. During days off, this is true for almost every tenth child. Boys usually designate more time for physical activity during their time off than girls do.

From other studies on children's health behaviours HBSC (Health Behaviour in School-aged Children) during the school year 2017/2018, we learn that in the entire studied group, the percentage that met the criterion of MVPA=7 days was reduced from 2014-2018 from 24.9% to 17.2%.

**Young people
(16-25) and
NEETs**

Physical activity of the right kind has a key role in the formation of physical development and physical ability in children and youth, and promotion of physical and mental health that can be understood in multiple ways. Currently, it can be easily observed that the frequency of youth having excess weight and obesity in Poland is dramatically increasing, while the level of physical activity is steadily dropping.

According to the WOBASZ research, which is regarded as one of the most prevalent standard showcases of Polish epidemiology studies, people of ages 16-25 are associated with a physical activity level of about 60%. However, it's worth noting that a lack of any physical activity rarely trended among students. Also, one of the biggest studies that trails an increase in recreational physical activity noted in recent years is survey research that was aided with a tool, IPAQ (2019). The IPAQ questionnaires were completed by the respondents alone, so they could end up in a great overestimation of the results.

It's been concluded that the physical activity levels of youngsters stepping into adulthood is not enough. Also, that their state of health and their awareness of it is insufficient. The latest scientific reports state that people belonging to this age range have low physical activity levels, as most of them exercise only once a week which is not adhering to the WHO's recommendations (2020).

Those seen as most likely to join the passive generation are those with chronic and serious health problems, but the disabled are also included, along with NEETs. When it comes to this social group, the risk of health disorders increases by about 40%. Thus, recommendations regarding physical activity, for as long as it is possible, are the same as for those who are healthy.



<p>Adults (25+)</p>	<p>According to a report by the World Health Organization (WHO) from 2018, a lack of physical activity prevails in almost 80% of adults in our population.</p> <p>Recommendations regarding physical activity in Poland are compatible with those of World Health Organization (WHO) where healthy adults (18-64 years old) should engage in physical activity comprising moderate-at least 150 min/week, or intense-at least 75 min/week, or a combination of moderate and intensive activities with a proper adjustment of time to the overall intensity.</p> <p>The assessment of physical activity in Poland compared with other countries is shown in the results of an international assessment project of 23 health indicators that took place in 2015 with 28 participating EU countries. From the report, recommendations in Poland regarding moderate physical activity ≥ 30 min/day for five days a week (150 min/week) or five days per week of high-intensity physical activity (75 min/week) are followed by only 18% of the inhabitants who are 15 or older.</p> <p>The largest amount of recent data on the physical activity of adults will be found in the Polish research projects of WOBASZ (2003-2005) and WOBASZ II (2014-2015) that were a complex assessment of the presence of risk indicators and of health behaviours. Subjects who participated in these studies, more than 5,500 people aged 20-74, gave the researchers a solid basis to confirm an existence of a negative trend in physical activity of those born from 2005-2015.</p> <p>In 2010-2020 in Poland, a series of scientific studies were run to gauge physical activity levels mainly with the use of questionnaires like IPAQ, QHOQOL - - BREF, and the Health Monitor Questionnaire. The results indicate that nearly 2/3 of men and 3/4 of women in Poland declare a lack of regular physical activity. From other studies presented in 2018 by the Polish Ministry of Sport and Tourism it's known that about 60.4% of Poles above 15 regularly engage in physical activity of some kind, including biking, running, and walking.</p> <p>Today, there's not enough quality research in Poland to allow for the setting up of barriers regarding the development of physical activity in the population, its conditions, and the designation of the most effective educational and intervention programs at the national and regional levels.</p>
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NEETs and persons with disabilities

In Poland, we distinguish between two camps that aim to encourage participation in any type of physical activity, but that are also engaged in doing sports with people with disabilities. These include the Special Olympics, where contenders are people with intellectual and multiple disabilities, and the Paralympic games (colloq. Paralympiad) that mainly brings together players with motor disabilities, including people with motor dysfunctions, limb amputations, sight loss, and cerebral palsy.

All those with a disability related to, for example, multiple sclerosis, spinal cord injury, intellectual disability, Parkinson's disease, stroke, schizophrenia, and ADHD should engage in regular physical activity.

Physical activity is seen as safe and beneficial. Recommendations on physical activity, for as long as it is possible, are the same as those for healthy individuals. What's more, people with disabilities should put even more emphasis on undergoing rehabilitation and exercises to improve their overall state of health. It's key that they'd stay under supervision of a doctor or a specialist. This group requires an appropriate therapy and control of medical services.

Recommendations on physical activity:

People with chronic diseases or disabilities, if they can, should participate in aerobic exercises of medium intensity (from 150 min. to 300 min. weekly) or of high intensity (from 75 min. to 150 min. weekly). Optionally, it's equivalently effective to connect exercises of medium and high intensity. However, it would be best if physical activity is spread out evenly throughout an entire week. Those individuals who can should do exercises that strengthen their muscles (endurance training) that are at least of medium intensity, but that also involve all the main muscle groups on two or more days a week. Although, if they can't engage in physical activity at the recommended level, they should do physical activity regularly where they don't exceed their abilities and generally try to avoid physical inactivity. Considering the specificity of medical conditions and disabilities, it's recommended to consult a specialist on types and intensities of physical activities. These recommendations are in accordance with those recently created by the World Health Organization (2020).



Recommendations for improvement

Recommendations for physical activity by healthy adults, children, and youth:

Adults should do at least 30 minutes of moderate aerobic activity five days a week that in totals 150 minutes/week or at least 25 minutes high-intensity physical activity done three times a week that totals 75 minutes/week and resistance training of intensity varying from medium to high, done at least twice a week while ensuring that it is not done successively.

Preschool children (3-5 years old) should be physically active all day long in accordance with typical behavioural patterns associated with their age group, but not less than three hours daily.

School children and youth should do at least 60 minutes of medium to high-intensity physical activity daily that consists of endurance training, flexibility, balance, and muscular endurance forming exercises.

These recommendations are laid out in accordance with the recent guidelines of the World Health Organization (2020).

In the recommendations related to physical activity types of exercises, the frequency of partaking in them, and their intensity and length must be included. While pointing at different sports, it's advised to put emphasis on participating in dynamic, resistance, and static exercises. One's training should also be enriched in exercises that improve the individual's flexibility and balance abilities.

A low level of physical activity in children and youth shows a need to run informational campaigns that will educate parents on how important it is for their child's physical and intellectual development to stimulate a willingness to partake in physical activities in them by reducing the time that they spend on passive recreation, encouraging them to participate in movement games, and instilling the habit of exercise in them from their early years.



Sources:

- <http://femp.femp.es/files/566-933-archivo/LIBRO-PLAN-AD.pdf>
- https://www.aesan.gob.es/AECOSAN/web/nutricion/seccion/estrategia_naos.htm
- <https://www.boe.es/boe/dias/2011/07/06/pdfs/BOE-A-2011-11604.pdf>
- <https://www.boe.es/boe/dias/2020/12/30/pdfs/BOE-A-2020-17264.pdf>
- https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Tabla_resumen_Recomendaciones_ActivFisica.pdf
- https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Dame10_Completo.pdf
- https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/UDA_Completo.pdf
- https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/GuiaAF_3_6anos_docentes.pdf
- <https://www.msrebs.gob.es/ciudadanos/proteccionSalud/adultos/activFisica/guiaActivFisica.htm>
- <https://apps.who.int/iris/bitstream/handle/10665/337004/9789240014817-spa.pdf>
- https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Tabla_resumen_Recomendaciones_ActivFisica.pdf
- https://www.msrebs.gob.es/ciudadanos/proteccionSalud/adolescencia/actividad_fisica.htm
- https://www.imserso.es/InterPresent2/groups/imserso/documents/binario/8088_8089libroblancoenv.pdf
- <https://aepsad.culturaydeporte.gob.es/actualidad/2020/marzo/20200321-recomendaciones-cronicos-mayores-covid.html>
- https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Recomendaciones_ActivFisica_para_la_Salud.pdf





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17



SPAIN

Country	Spain
<p>National landscape</p>	<p>There is a National Plan for physical activity and sport. It contains actions and projects related to different factors and develops, in a concrete way, the one that is most linked to people's daily lives and is for citizens of all ages. It is the extension of sports practice.</p> <p>The plan has been created by considering the criteria and guidelines of international organizations that have legislated or developed norms on the subject. Thus, the plan considers, in a rigorous and, at the same time, innovative way, the guidelines of the European Union and the recommendations of the World Health Organization. The plan is the outcome of a long and intense process of participation.</p> <p>The plan is an instrument created by the Higher Sports Council to guarantee the Spanish population universal access to quality sports practice, thus helping to avoid high levels of sedentary lifestyles and obesity and promote active and healthy lifestyle habits.</p> <p>There is an increasingly evident and scientifically proven association between physical activity and sports practice and health, understood in a broad concept beyond the mere absence of disease.</p> <p>This link between physical activity and health does not mean that sport does not have enough attractiveness and the necessary values to be considered an end in itself, but it is important that, with the objectives of generalizing the practice of physical activity and sport, it is associated with the health of the community. Also, that this association be assumed and interiorized by all professionals, especially the education and health sectors.</p> <p>The recommendations on physical activity for both adults, children, and adolescents refer to the importance of exercise of at least moderate-intensity.</p> <p>A moderate-intensity activity session can be maintained for many minutes and does not cause extreme fatigue or exhaustion in healthy people when carried out for an extended period.</p> <p>There is also the Strategy for Nutrition, Physical Activity and Prevention of Obesity (NAOS). This is a health strategy that, following the line of the policies set by international health organizations (World Health Organization, European Union, etc.), aims to reverse the trend of the prevalence of obesity by promoting healthy diets and the practice of physical activity and, thus, substantially reducing the high morbidity and mortality rates attributable to noncommunicable diseases.</p> <p>The launch was in 2005 and in 2011, the NAOS Strategy was consolidated and promoted by Law 17/2011, of July 5, on food security and nutrition.</p> <p>Its motto is „EAT HEALTHY AND MOVE!“ as an inseparable binomial to prevent overweight and obesity and contribute to changes in our lifestyles.</p>

<p>Children</p>	<p>In relation to children, Organic Law 3/2020, of 29 December, amending Organic Law 2/2006, of 3 May, on education, refers to the provision of physical activity and healthy eating.</p> <p>Educational administrations will adopt measures so that physical activity and healthy eating are part of children’s and youth’s behaviour. With the aim of promoting and consolidating healthy lifestyle habits, these administrations will promote the daily practice of sport and physical exercise by students during the school day, under the terms and conditions that, following the recommendations of the competent bodies, guarantee an adequate development to favour a healthy and autonomous life, promote healthy eating habits and active mobility, and reduce a sedentary lifestyle. The centres will promote the development of teaching activities in open spaces and natural environments. The design, coordination, and supervision of the measures adopted for this purpose will be assumed by teachers with adequate qualifications or specialization in these areas.</p> <p>There are also various national programs to promote physical activity related to health in children, including:</p> <ul style="list-style-type: none"> • Breaking sedentary attitudes in school through “active breaks” - DAME 10; • Increasing the intensity of physical activities carried out in the subject of Physical Education through “Active Didactic Units” – UDAs; • Strengthening competencies on early motor stimulation in early childhood; • Physical Activity in Childhood and Adolescence: <i>Guide for all people involved in their education.</i>
<p>Young people (16-25) and NEETs</p>	<p>The WHO guidelines are followed for young people. This involves performing at least an average of 60 minutes of daily, mainly aerobic, physical activity of moderate- to vigorous-intensity throughout the week. Aerobic activities of vigorous-intensity and activities that strengthen muscles and bones at least three days a week should be incorporated.</p> <p>Good practices recommend:</p> <ul style="list-style-type: none"> • Doing some physical activity is better than staying totally inactive; • If the recommendations are not met, doing some physical activity will be beneficial for your health; • You should start with small doses of physical activity, to gradually increase its duration, frequency, and intensity; • It is important to provide and encourage all children and adolescents to participate in safe and equitable opportunities to participate in physical activities that are pleasurable, varied, and appropriate for their age and ability. <p>For young people, a greater sedentary lifestyle is associated with the following poor health outcomes: higher adiposity, worse cardiometabolic health, fitness and prosocial behaviour/behaviour, and shorter sleep duration. Therefore, the time they dedicate to sedentary activities should be limited, especially the leisure time they spend in front of a screen.</p> <p>That is why there are some specific recommendations on <i>Physical Activity, Sedentary Lifestyle and Screen Time</i> in Spain.</p>

Adults (25+)

For adults, the below WHO guidelines are followed.

All adults should engage in regular physical activity. Adults should accumulate a minimum of 150 to 300 minutes of moderate-intensity aerobic physical activity throughout the week, or a minimum of 75 to 150 minutes of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity activities, to obtain significant health benefits.

Adults should also perform muscle-strengthening activities of moderate or higher intensity to work all large muscle groups two or more days a week, as this brings additional health benefits.

Adults can exceed 300 minutes of moderate-intensity aerobic physical activity, or 150 minutes of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity activities each week, to reap greater health benefits.

Good practices recommend:

- Doing some physical activity is better than staying totally inactive;
- If adults do not comply with these recommendations, doing some physical activity will be beneficial for their health;
- Adults should start with small doses of physical activity to gradually increase its duration, frequency, and intensity.

Adults should limit the time they spend on sedentary activities. Replacing sedentary time with physical activity of any intensity (even mild) translates into health benefits.

To reduce the adverse health effects of high levels of sedentary lifestyle, adults should seek more moderate- to vigorous-intensity physical activity than recommended.

That is why there are some specific recommendations in Spain:

- *Physical Activity, Sedentary Lifestyle and Screen Time;*
- *Physical Activity and Health. Parent's Guide.*



NEETs and Persons with disabilities

For this population, the WHO guidelines are followed.

Children and adolescents with disabilities should engage in at least an average of 60 minutes of moderate- to vigorous-intensity mainly aerobic physical activity daily throughout the week. Vigorous-intensity aerobic activities and muscle- and bone-strengthening activities should be incorporated at least three days a week. Children and adolescents with disabilities should limit the time they spend on sedentary activities, especially the leisure time they spend in front of a screen.

Good practices recommend:

- Doing some physical activity is better than staying totally inactive;
- If children and adolescents with disabilities do not meet these recommendations, doing some physical activity will be beneficial for their health;
- Children and adolescents with disabilities should start with small doses of physical activity, to gradually increase its duration, frequency, and intensity;
- Physical activity in children and adolescents with disabilities does not carry an increased risk if it corresponds to the person's current level of activity, their state of health and physical function, and if the health benefits obtained outweigh the risks;
- Children and adolescents with disabilities may need to consult a medical professional or physical activity and disability specialist to help determine the most appropriate type and amount of activity in their case.

Adults with disabilities should accumulate a minimum of 150 to 300 minutes of moderate-intensity aerobic physical activity throughout the week, or a minimum of 75 to 150 minutes of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity activities to obtain remarkable health benefits.

Adults with disabilities should also perform muscle-strengthening activities of moderate or higher intensity to work all large muscle groups two or more days a week, as this brings additional health benefits.

Within their weekly physical activity, older people with disabilities should perform varied multicomponent physical activities that prioritize functional balance and moderate or higher intensity strength training three or more days a week to improve their functional capacity and avoid falls.

Adults with disabilities can exceed 300 minutes of moderate-intensity aerobic physical activity, or 150 minutes of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate-intensity and vigorous activities throughout the week to obtain greater health benefits.

Adults with disabilities should limit the time they spend on sedentary activities. Replacing sedentary time with physical activity of any intensity (even mild) translates into health benefits.

Good practices recommend:

- Doing some physical activity is better than staying totally inactive;
- If adults with disabilities do not meet these recommendations, doing some physical activity will be beneficial to their health;
- Adults with disabilities should start with small doses of physical activity, to gradually increase its duration, frequency, and intensity;
- Physical activity in adults with disabilities carries no increased risk if it corresponds to the person's current level of activity, their state of health and their physical function, and if the health benefits obtained outweigh the risks;

	<ul style="list-style-type: none"> Adults with disabilities may need to see a medical professional or physical activity and disability specialist to help them determine the type and amount of activity most appropriate for them. <p>Due to the pandemic situation, there are some specific recommendations in Spain:</p> <ul style="list-style-type: none"> <i>Recommendations for the physical activity of chronically ill and elderly during the state of alarm.</i>
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Recommendations for improvement	<p>Establish national recommendations for physical activity for health and a reduction of sedentary lifestyles and screen time adapted to the population reality of our environment. Until now, there were no national recommendations and those of the WHO were mainly used, which did not include children under five years of age. It is therefore a fundamental step to establish these national recommendations agreed between the two ministries for all age groups. For the recommendations to be effective, other actions that promote physical activity are also necessary; in this regard, the recommendations are reinforced by other interventions selected for action under the strategy.</p> <p>On the other hand, intersectoral recommendations are planned to favour the realization of physical activity and promote environments that facilitate the choice of healthier options and lifestyles, thus contributing to achieving the recommendations and improving health.</p>
Sources:	<p>http://femp.femp.es/files/566-933-archivo/LIBRO-PLAN-AD.pdf</p> <p>https://www.aesan.gob.es/AECOSAN/web/nutricion/seccion/estrategia_naos.htm</p> <p>https://www.boe.es/boe/dias/2011/07/06/pdfs/BOE-A-2011-11604.pdf</p> <p>https://www.boe.es/boe/dias/2020/12/30/pdfs/BOE-A-2020-17264.pdf</p> <p>https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Tabla_resumen_Recomendaciones_ActivFisica.pdf</p> <p>https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Dame10_Completo.pdf</p> <p>https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/UDA_Completo.pdf</p> <p>https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/GuiaAF_3_6anos_docentes.pdf</p> <p>https://www.msrebs.gob.es/ciudadanos/proteccionSalud/adultos/activFisica/guiaActivFisica.htm</p> <p>https://apps.who.int/iris/bitstream/handle/10665/337004/9789240014817-spa.pdf</p> <p>https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Tabla_resumen_Recomendaciones_ActivFisica.pdf</p> <p>https://www.msrebs.gob.es/ciudadanos/proteccionSalud/adolescencia/actividad_fisica.htm</p> <p>https://www.imsero.es/InterPresent2/groups/imsero/documents/binario/8088_8089libroblancoenv.pdf</p> <p>https://aepsad.culturaydeporte.gob.es/actualidad/2020/marzo/20200321-recomendaciones-cronicos-mayores-covid.html</p> <p>https://www.msrebs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Recomendaciones_ActivFisica_para_la_Salud.pdf</p>



BULGARIA

Country	Bulgaria
National landscape	<p>National research from 2007 shows that less than half (42.3%) of the adult population aged 25–64 years carried out vigorous-intensity physical activity in a standard week. The proportion was lower among females (34.7%) than males (50.0%). Moreover, one in seven participants, regardless of gender, reported engaging in vigorous-intensity physical activity two to three times per week and 21.6% reported being vigorously active on four to five or more occasions per week, whereby the proportion of males active in this capacity was twice (29.4%) that of females (14.0%). The proportion of adults engaging in moderate-intensity physical activity in the week was 52.4%, with females being significantly less active (47.7%) than males (57.3%).</p>
Children	<p>Data from national research carried out in 2011 regarding the nutritional intake and eating habits of pupils in Bulgaria shows that 19.5% of Bulgarian children aged 7–9 reached the recommended levels of physical activity for health. Boys were found to be much more physically active (22.3%) than girls (16.5%). Among adolescents aged 10–18, physical activity levels tend to drop with age, with the proportions of youth meeting the recommended physical activity levels for health being 25.7% for adolescents aged 10–13 and 19.0% for those aged 14–18. Across all age groups, boys are much more active than girls, but among the older adolescents, the gap between genders is doubled.</p> <p>The WHO GHO 2010 estimates for Bulgarian adolescents, defined as 11–17 in relation to WHO data, show that 25.9% are reaching the WHO recommended physical activity levels for health. Boys engage in more physical activity than girls, with a higher proportion of them meeting the recommended physical activity levels (31.7% boys vs. 20.1% girls).</p>



Young people (16-25) and NEETs

Table 1 presents results from Bulgaria’s 2018 Report Card. As a post-communist country with high regard for competitive sport, we see high levels of youth’s participation in organized sport (grade C+) in Bulgaria. The proportion of youth who participate two or more times per week in organized sport is 70% both in and out of school. Conversely, only 30% of Bulgarian youth (15-25) meet the recommended daily minimum of 60 minutes of moderate- to vigorous-intensity physical activity, while 70% of the students spend more than two hours in front of a recreational screen. Specific groups including youth from ethnic minorities or those with financial difficulties demonstrate higher levels of inactivity and sedentary behaviour.

Table 1: Grades and rationales for Bulgaria’s 2018 Report Card:

Indicator	Grade	Rationale
Overall physical activity	D+	Approximately one-third (30%) of children and youth aged 15 to 25 meet the recommended daily minimum of 60 minutes of physical activity. If the five percent declaring engaging in such activity for at least six days a week is added, the total proportion of children and youth meeting the guidelines will be approaching 35%.
Organized sport participation	C+	60% of children and youth participate in organized sports at school while 56% engage in organized sports out of school. The proportion of children and youth engaging in organized sports at least three or more times a week is almost similar in and out of school (27% and 29%, respectively). The proportion of Bulgarian children and youth meeting the LISPA Group recommendations is 70%.
Active plan	C+	55% of children aged 15-25 have outdoor activities for three or more days weekly, and the proportion is higher (63%) when considering only those aged between 15 and 20.
Active transportation	B-	53% of youth reported walking, biking, or skating, etc. to school and back. The Bulgarian Active Youth Survey considered two aspects, means of transportation and time to school, of the active transportation of children and youth. Since we found that for approximately 16% it takes less than five minutes to get to school, when evaluating the active transportation, we took a conservative approach and excluded this group. If this group were to be included in the evaluation, the proportion increases to 64%. Grade B was awarded because the research does not consider other locations that can be reached using active transportation.
Sedentary behaviors	D	Approximately 70% of young people in Bulgaria spend two or more hours sitting in front of a recreational screen or tablet, and 75% reported spending two hours or more on other sedentary activities. Only 16% of youngsters spend less than one hour in front of a recreational screen, while 15% spend more than six hours seated. Another 40% of youth spend over five hours a day in the two types of sedentary behavior.
Physical fitness	INC	There was not sufficient data to grade this indicator.
Family and peers	D	Approximately 25% of Bulgarian families practice sports two or more times a week. One-third of the families report that they have sports facilities and/ or other sports equipment at home. Almost a third of families finances sporting activities for their children, while about a third of families report that they never exercise. Only 9% of children indicate that all their friends practice some sport, while another one-third declare this for about half of their friends. The proportion of students whose friends engage in sports two or more times a week is 43%.
School	C	This indicator was graded based on the youth and their parents’ assessment of the quality of teachers and classes on physical education and sport, formal requirements, content of curricula, and duration of hours. Expert opinion was also used. 50% of parents and youth firmly assess their school’s sport hall and facilities as very good. 55% declare that the sport hall facilities were renovated during the last two years. Based on this overall positive assessment of sporting equipment and outdoor facilities that encourage physical activities at the schools, as well as expert opinion, the indicator was assigned grade C.
Community and environment	C	A conservative approach was used. About 65% of youth declare that they have easy access to the nearest playground and 63% to parks with sports facilities. The assessments of the other elements of a supportive community environment are significantly lower at 41% for bicycle paths, 33% for running grounds, and 30% for swimming pools. The overall positive assessment of the state of these facilities is 45%, and the various aspects of their safety is between 50 and 60%.
Government	INC	Invitations and questionnaires were sent to different government officials in local municipal, regional, and national levels to the Ministry of Youth and Sport, but no official answers were returned. Because of our failure to obtain information, this indicator was assigned an incomplete grade.

Adults (25+)

National research from 2007 shows that less than half (42.3%) of the adult population (aged 25–64) carried out vigorous-intensity physical activity in a standard week. The proportion was lower among females (34.7%) than males (50.0%). Moreover, one in seven participants, regardless of gender, reported engaging in vigorous-intensity physical activity two to three times a week and 21.6% reported being vigorously active on four to five or more occasions a week, whereby the proportion of males active in this capacity was twice (29.4%) that of females (14.0%). The proportion of adults engaging in moderate-intensity physical activity in the week was 52.4%, with females being significantly less active (47.7%) than males (57.3%)

Among the individuals that reported carrying out vigorous-intensity physical activity, only 3.1% of males and 3.8% of females did so for 31–60 minutes, while 32.1% were active for over 60 minutes, again with males being more active (40.1%) than females (24.3%). When comparing moderate-intensity physical activity levels, 3.5% of males and 3.7% of females were moderately active for 31–60 minutes, while 42.4% indicated that they carried out moderate-intensity physical activity for a period longer than 60 minutes. The WHO Global Health Observatory (GHO) data from 2010 for the Bulgarian adult population aged 18+ years (4) show that 77.0% of Bulgarians meet the WHO recommended physical activity levels for health, with males being more likely (81.0%) to meet the recommended levels than females (73.3%).



Persons with disabilities

In the area of accessibility to sport, the Ministry of Youth and Sports (MYS) implements programs for the promotion of sports among people with disabilities set out in the National Programme for the Promotion of Physical Education and Sports in the Republic of Bulgaria from 2013 to 2016 in line with one of the main priorities of the ministry, namely to encourage children and youth to practice physical activity and sport as a means to a healthy lifestyle and physical and spiritual development. Using current best practice in this area, the programs create conditions to promote social integration, adaptation, and full realization in public life of people and children with disabilities by creating conditions and opportunities for their involvement in free sports activities to improve their quality of life and physical and mental fitness. The programs are updated and further developed annually, creating opportunities for a broader range of people with disabilities and access to sport. The Ministry of Youth and Sports annually funds school games for students at specialized schools which are organized by the Bulgarian Paralympic Association (BPA) and the Bulgarian Deaf Sports Federation (BDSF). School games for children with impaired hearing, impaired vision, physical disabilities, and disabilities of the central nervous system enable personal expression in sport for children and students with special educational needs, as well as entitlement to a one-year scholarship to gifted children classified under the program of measures for gifted children for the calendar year. Through project financing, the Ministry of Youth and Sports supports educational training and competition activities carried out by licensed sports organisations developing sports activities for people with disabilities.

MEASURES

- To ensure conditions and opportunities at sports clubs across the country expand the scope of persons with disabilities to participate in sports activities to improve their physical abilities, making full use of leisure time and their social integration;
- To ensure opportunities depending on the disability and health status to obtain initial skills, habits, and knowledge to practice a preferred sport;
- To develop social functions and charitable specialized sports organisations and institutions by increasing and diversifying the sports services for people with disabilities;
- To form lasting interest among people with disabilities to participate in systematic sports activities and to allow coaches in sports clubs to select practitioners of paralympic sports to take part in competitions in the domestic and international sports calendar;
- To ensure opportunities for inclusion in sporting activities of sports professionals with qualifications in the field of adapted physical activity, sport and physical therapy adapted for people with disabilities.

Recommendations for improvement

The Ministry of Youth and Sports organizes the European Week of Sport in Bulgaria each year, with strong communication in the mass media and the involvement of famous athletes. Bulgaria implements the European campaign NowWeMove Bulgaria through the BGBeActive organization. The campaign is based on three principles: raise awareness about the benefits of physical activity; encourage regular practice of sport and physical activity; and improve access to sports and physical activity. The campaign includes move week, no elevators day, European school sports day, European fitness day, MOVEment prescriptions, training, and workshops. On children's day on 1 June 2020, a national initiative "Play sports with the President" was launched to build a network of partnerships with schools, sports organizations, institutions, and parents and to stimulate the practice of sports to improve the health and the development of motor skills and social communication among young people.

The current National Strategy for Development of the Physical Education and Sport in the Republic of Bulgaria 2012-2022 was adopted by the National Assembly in November 2011. The main strategic aim of the document is the establishment of physical education, sport, and social tourism as means to improve the health and physical abilities of the population, maximum involvement of the population in organized sport for all from different social groups, and elevate the sport prestige of the nation at a global level. The strategy envisions two sub-aims: the modernization of the sport infrastructure, and the improvement of the National System for Physical Education and Sport. In terms of finances, the strategy envisions sport to be 0.5% of the GDP by 2022. Together with the strategy, there is an active National Programme for Development of the Physical Education and Sport 2018-2020. Its vision is to establish and develop a functioning system for Physical Education and Sport in the Republic of Bulgaria to promote physical activity and sport participation, as well as sport tourism, of the public as a factor of achieving a significant social effect, and in the meantime to also support the development of high-performance sport and elevate the sport prestige of the nation. The operational goals of the program are: development of youth sport and physical activity and sport in preschool, secondary, and higher education systems; establishment of secondary sport schools as institutions for the preparation of high-performance sport reserves; scientific and medical provision of sports; development of high-performance sports; development of sport for all; improvement of sports facilities in schools and multifunctional sport facilities; combating the use of doping.

<p>Sources:</p>	<ol style="list-style-type: none"> 1. Eurostat. Your key to European statistics [online database]. Luxembourg: Statistical Office of the European Union; 2015 (June update) (http://ec.europa.eu/eurostat/data/database, accessed 3 July 2015). 2. Global recommendations on physical activity for health. Geneva: World Health Organization; 2010 (http://whqlibdoc.who.int/publications/2010/9789241599979_eng.pdf, accessed 15 July 2015). 3. National behavioral risk factor survey among population aged 25–61, 2007. Bulgarian Journal of Public Health 2009;1(3):1–42 (http://ncpha.government.bg/files/Priloj_br3_NacionProuzvane.pdf, accessed 18 July 2015). 4. Global status report on noncommunicable diseases 2010. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44579/1/9789240686458_eng.pdf, accessed 18 July 2015). 5. National strategy for physical education and sports development 2012–2022. Sofia: Ministry of Youth and Sports; 2011 (in Bulgarian) (http://mpes.government.bg/Documents/Documents/Strategii/Strategia_2012-2022.pdf, accessed 18 July 2015). 6. National programme for the development of physical education and sports 2013–2016. Sofia: Ministry of Youth and Sports; 2013 (in Bulgarian) (http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=713, accessed 18 July 2015). 7. Conception for promoting the development of sports for all. Sofia: Ministry of Youth and Sports; 2014 (http://mpes.government.bg/Pages/Documents/Concepts/default.aspx, accessed 18 August 2015). 8. Government programme for the sustainable development of the Republic of Bulgaria for the period 2014–2018. Sofia: Government of Bulgaria; 2015 (in Bulgarian) (http://www.government.bg/fce/001/0211/files/Government%20programme%202014-2018_13.02.2015.pdf, accessed 18 August 2015). 9. https://www.activehealthykids.org/bulgaria/ 10. https://www.euro.who.int/__data/assets/pdf_file/0003/513741/Physical-activity-2021-Bulgaria-eng.pdf 11. https://www.essa-sport.eu/wp-content/uploads/2020/01/ESSA_Sport_National_Report_Bulgaria.pdf
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Sport and physical activity patterns enhancing health and well being

CHILDREN

LEARNING NEEDS WITH FOCUS ON THE BIO-PSYCHO-SOCIAL MODEL OF HEALTH (CONNECTING THE PHYSICAL, PSYCHOLOGICAL, AND SOCIAL DIMENSIONS OF THE HEALTH CONCEPT)

According to the World Health Organization (WHO), the number of overweight or obese infants and young children (aged 0 to 5) increased from 31 million globally in 1990 to 42 million in 2013. The vast majority of overweight or obese children live in developing countries, where the rate of increase was more than 30% higher than that of developed countries. Without intervention, obese infants and young children will likely continue to be obese during childhood, adolescence, and adulthood and are more likely to develop a variety of health problems. The most effective way to prevent childhood obesity is to raise awareness among families about importance of a healthy diet and to engage children at an early age in regular physical activity.

The goal is to stimulate children, first those who are obese, overweight, and with low physical activity, and their parents to embrace this new kind of lifestyle as a routine, and then transfer the acquired healthy habits in later age. Children engaged in sports activities at a very young age are more likely to remain active later in life and are less likely to become obese or suffer from linked chronic diseases.

LIMITATIONS

The body mass index (BMI) (body mass divided by the square of height) is a good indicator for obesity diagnosis and prognosis that uses a mathematical formula and a findings interpretation table that situates the value in the associated parameters (WHO, 2004).

Individually speaking, the main cause of this global issue is the discrepancy between calories consumed and calories expended. Societally speaking, we face changes in our

means of transportation, and increasing urbanization, agriculture, environment, food-processing, distribution and marketing, and education. (WHO, 2004)

As a definition, physical activity is body movement with the help of skeletal muscles. In children aged 0-5, the main source of activity comes from basic movements like playing, moving to music, and other simplified adult activities. After the age of five, activities can diversify and parents can introduce new active sessions for their children that include different kinds of individual and team sports. Children need to do physical activity because this period is a fundamental development stage in their growth and physical activity is also associated with good psychological development and helps to improve control of depression and anxiety. (Dylan P. Cliff, John J. Reilly c, & Anthony D., 2008).

For children who can't be normally active, physical activities should be adapted to their needs. Some activities that such toddlers can do is spend time playing on the floor, grasp objects, and pull, push, or play with other people. Specialists also recommend "parent and child" swimming sessions.

For children who can walk, everyday activities should include running, chasing games, riding a bike, and walking to a friend's house or a park. Overall, the benefits of performing such activities are improved cardiovascular health, bone health, contribution to healthy weight and movement coordination support as well as improved social and cognitive skills (Chief Medical Officers, 2011).

TIPS AND TRICKS FOR SPORT OPERATORS (COACHES AND TRAINERS)

As an important agent in combating the issue discussed, a parent or caregiver can promote appropriate activity for their child by following different pathways. The first activity found in the literature is playing. This can take place in class breaks or after-school programs. The next step is to provide proper models to follow with positive feedback such as praise, rewards, and encouragement that support an active lifestyle. The efficiency stands in also making these activities safe and graduated over time using appropriate rules and equipment. The last barrier to cross is setting a basis for the child's lifetime like including them in team or individual sports that appeals to them and that they will keep doing long term (Leavitt, 2008).

Promotion of physical activities actions:

- Make exercise a family habit-variety of exercises is important;
- Play together;
- Set family fitness goals;
- Exchange screen time for active time;
- Have family walks/ brisk walks.

YOUNG PEOPLE (16-25) AND NEETS

LEARNING NEEDS WITH FOCUS ON THE BIO-PSYCHO-SOCIAL MODEL OF HEALTH (CONNECTING THE PHYSICAL, PSYCHOLOGICAL, AND SOCIAL DIMENSIONS OF THE HEALTH CONCEPT)

Regular physical activity promotes growth and development and has multiple benefits for physical, mental, and psychosocial health that undoubtedly contribute to learning.

Specifically, physical activity reduces the risk of heart disease, diabetes mellitus, osteoporosis, high blood pressure, obesity, and metabolic syndrome, improves various other aspects of health and fitness, including aerobic capacity, muscle and bone strength, flexibility, insulin sensitivity, and lipid profiles, and reduces stress, anxiety, and depression.

Physical activity can improve mental health by decreasing and preventing conditions like anxiety and depression, as well as improving mood and other aspects of wellbeing.

Physical activity programming specifically designed to do so can improve psychosocial outcomes like self-concept, social behaviours, goal orientation, and, most notably, self-efficacy. These attributes in turn are important determinants of current and future participation in physical activity.

Sedentary behaviours like sitting and television viewing contribute to health risks both because of and independently of their impact on physical activity.

Health-related behaviours and disease risk factors track from childhood to adulthood, indicating that early and ongoing opportunities for physical activity are needed for maximum health benefit.

To be effective, physical activity programming must align with the predictable developmental changes in young people's exercise capacity and motor skills, which affect the activities in which they can successfully engage.

Frequent bouts of physical activity throughout the day yield short-term benefits for mental and cognitive health while also providing opportunities to practice skills and build confidence that promotes ongoing engagement in physical activity.

Distinct types of physical activity address unique health concerns and contribute in distinct ways to young people's health, suggesting that a varied regimen including aerobic and resistance exercise, structured and unstructured opportunities, and both longer and shorter sessions will likely confer the greatest benefit.

LIMITATIONS:

- To give schools the support they need to promote good health, both in school and in the local community;
- The areas covered in the scheme comprise the curriculum, links with the wider community, a smoke-free school, healthy food choices, physical activity, responsibility for health, health promoting workplace, environment and equal opportunities, and access to health;
- To establish positive eating and physical activity patterns and behavioural goals
- To decrease salt and saturated fat intake and increase intake of complex carbohydrates;
- To increase levels of physical activity;
- To favourably modify the population distributions of risk factors for coronary heart disease and cancer through diet;
- To examine the travel patterns and aspirations of young people on their home-to-school journey;
- To inform ways of reducing the number of cars taking young people to school;
- To investigate factors associated with the motivations to exercise;
- To work out ways to encourage young people to participate in physical activity, especially those with lower activity levels;
- To explore young people's attitudes, views, and beliefs with respect to health, fitness, and exercise;
- To explore whether perceptions vary based on age and gender;
- To examine the interrelationships between self-esteem, motivation for and barriers to sports, and exercise participation;
- To assess the extent of conflicts or ambiguities between perceptions of femininity and a commitment to an active lifestyle;
- To assess differences in relation to the above according to dance and sports;
- To explore what constitutes physical activity and beliefs about physical activity, referred activities, both physical and non-physical, relationships between physical activity and other health behaviours the role of friends and gender differences in perception and participation, and the role of parents and the community.

TIPS AND TRICKS FOR SPORT OPERATORS (COACHES AND TRAINERS):

Change your mindset. If you are busy, think of movement as an opportunity, not an inconvenience. For example, try to walk or cycle instead of using a car, or take the stairs instead of using the lift.

If you can't choose a physical activity do something you enjoyed as a child.

Exercise with a friend or family members.

Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount.

Set goals to keep focused and motivated.

Be active on most, preferably all, days in the week.

If you are finding it difficult to make time, look for ways to be more active throughout the day. Don't make excuses for housework – vacuuming, gardening, or washing the car can burn kilojoules!

Minimize the amount of time you spend sitting for long periods – break it up as much as you can.

Research your options – you may like to join a health or fitness centre or get help from a personal trainer.

Get help drawing up an exercise program tailored to suit your needs and fitness level.

Try not to make excuses – you may feel flat before you start but will have more energy when you finish.

Limit screen time for entertainment to no more than one hour a day for children aged two to five and two hours a day for children over five, teenagers, and adults.

Parents or carers – encourage children to have a positive experience when using screen-based devices. Screen time can be healthy if it is balanced throughout the day with physical activities, socializing, and creative play.

ADULTS

LEARNING NEEDS WITH FOCUS ON THE BIO-PSYCHO-SOCIAL MODEL OF HEALTH (CONNECTING THE PHYSICAL, PSYCHOLOGICAL, AND SOCIAL DIMENSIONS OF THE HEALTH CONCEPT)

The learning needs of adults in the context of sport and physical activity patterns have been identified in relation to the correlation between health and sport for adults, with particular focus on the differences between employed and unemployed adults. Learning needs include, among others, the integration of sport as a necessary tool to develop a healthy life-work balance, create regular sleeping patterns, decrease distress, improve memory, and improve the ability to perform daily tasks. Moreover, learning needs include the understanding and risks related to a sedentary lifestyle, resulting from long working hours and/or the inability to practice sport due to lack of time for personal and work-related obligations. This same learning need applies to unemployed adults, as factors related to stress, depression, loss of

memory, and irregular sleep patterns can increase when facing financial uncertainties. Sport can be an integral part of developing a healthy routine and improving these.

LIMITATIONS

Limitations relate to resources. Time has been identified as a factor influencing the ability to perform sport activities. If this is perceived as a problem, it might pose a limitation to the implementation of the curriculum for adults across socio-economic dimensions. Moreover, the lack of adequate space to practice sport, or the lack of financial resources to have a membership to a fitness centre or sport club can also pose a limitation.

TIPS AND TRICKS FOR SPORT OPERATORS (COACHES AND TRAINERS)

A tip could be to tailor a curriculum and engage participants in sport activities that are adequate to their specific situation. Thinking in terms of health and sport activities which require little time (e.g., can be performed at home, after working hours, or after searching for a job) can have a broader impact and ensure follow up. Moreover, some activities are more costly than others in terms of membership, equipment required to participate in the activity, or cost-related to reaching a specific location. For unemployed adults, it could be more encouraging to think in terms of affordable activities, ensuring they will follow up with these and create habits that can be integrated in their specific situation and context.

PEOPLE WITH DISSABILITES

LEARNING NEEDS WITH FOCUS ON THE BIO-PSYCHO-SOCIAL MODEL OF HEALTH (CONNECTING THE PHYSICAL, PSYCHOLOGICAL, AND SOCIAL DIMENSIONS OF THE HEALTH CONCEPT)

The biopsychosocial model is a modern humanistic and holistic view of the human being in health sciences. Currently, many researchers think the biopsychosocial model should be expanded to include the spiritual dimension. However, “spiritual” is an open and fluid concept that can refer to many different things. The biopsychosocial model stresses the importance of a holistic approach. It considers factors outside the biological process of illness when trying to understand health and disease.

When it comes to people with disabilities, four elements promote their health needs:

- The promotion of healthy lifestyles and a healthy environment;
- The prevention of health complications (medical secondary conditions) and further disabling conditions;

- The preparation of people with disabilities to understand and monitor their own health and health care needs;
- The promotion of opportunities for participation in community-held life activities.

There are two different types of health promotion programs for addressing these needs: focusing on physical activity and focusing on holistic health through exercise, nutrition, and a healthy lifestyle. When we combine these two, we can maximize the effects of the biopsychosocial model.

LIMITATIONS

The biopsychosocial model does not consider health to be a deviance from some constant physiological state. Hence, the biopsychosocial approach does not treat health just from the physiological point of view, but concentrates on having healthy all-around development, cure, and maintenance of all three factors. If the health needs of people with disabilities mentioned above are not met it would limit the development of their holistic health. Mistakes in one aspect of the biopsychosocial method will not propel the model and its application on disadvantaged individuals.

TIPS AND TRICKS FOR SPORT OPERATORS (COACHES AND TRAINERS)

Sport and exercise medicine clinicians sometimes fall into the trap of focusing solely on a patient's musculoskeletal problem as a source of their pain. But a patient's problem will not be solved by addressing musculoskeletal pathology alone. Physicians and coaches often focus on biomedical aspects of injuries and complaints and rarely try to integrate different understandings of health. The consequence is that relevant factors in the genesis of injuries and complaints are ignored. A multi-perspective analysis of the state of health seems, therefore, highly important for health management strategies. Participation statistics tell us that there is still much work to be done to support disabled people in sport. The number of disabled people taking part in sport or physical activity is significantly lower across all age groups than the overall population. And the proportion of disabled people receiving tuition or coaching is lower than the overall population. Inspire and motivate disabled people to continue to play sport and take part in physical activity with the help of this advice:

- Involve disabled people in all your sessions;
- Recognize a disabled athlete as an individual, not an impairment.
- Have a shared vision with your participants in terms of coaching goals and expectations; communicate and work together to achieve them;
- Talk to your disabled participants about their impairment to plan effective coaching sessions and adapt practices;
- Know the sport you coach; have the passion to develop yourself as a coach.



Conclusions

Sport participation during childhood and adolescence has been shown to have long-term, favourable impacts on physical activity. Furthermore, sports people are frequently more active and fit than non-sport physical activity participants; however, these benefits of sport participation can wane with puberty, particularly for girls. As a result, initiatives are required to keep children and adolescents involved in sports for the sake of their health, not just physically but also psychologically and socially. Sport participation during childhood and adolescence has been shown to have a long-term favourable impact on physical activity.

As a result, there is a clear need to consider measures to keep more teenagers involved in sports and physical exercise. Rather than urging specific sports to boost participation, it is suggested that sport policy focuses on total involvement across sports using a longitudinal track approach, which considers the sampling and specialization phenomena that naturally occur.

Sport plays an important social role regarding inclusion, since sport for all involves the participation of all citizens, regardless of their physical, cognitive, psychological, or socio-economic characteristics, by developing and strengthening social cohesion. National organizations, and their actions towards persons with disabilities, are expected to provide their citizens with the necessary access to active and regular recreational and sporting participation to respect the principles of equity and equal opportunities.

When it comes to the holistic health approach, cost-effective, population-wide initiatives must be implemented, and public-private partnerships must be formed across different sectors, including the ministries of health, agriculture, food & nutrition, sports, and housing. The ministry of human resources and development will play a critical role in introducing holistic health education approaches like yoga, meditation, breathing exercises, sports activities, and functional food snacks and meals in tobacco-free and alcohol-free atmospheres. In this perspective, modifying school health services by implementing the below holistic health education methods could be one of the most serious approaches to training future generations in holistic health.



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