2025–2030

A Strategy for Health-Enhancing Physical Activity

2025

GOVERNMENT OF MALTA
MINISTRY FOR HEALTH
AND ACTIVE AGEING

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Vision

The Vision of the *Strategy for Health-Enhancing Physical Activity (HEPA) 2025-2030* is for every Maltese resident to have the knowledge, the awareness, the best possible opportunities, and an enabling social, cultural, and physical environment for health-enhancing physical activity across the life course and in all life settings.

Every person, including children, adolescents, adults and older persons, will have the opportunity to engage in health-enhancing physical activity and reap the health benefits that daily physical activity confers.

The strategy seeks to promote health-enhancing physical activity in all life settings including the places where people live, play, learn and work. These settings include community life, neighbourhoods, schools and educational settings, and the workplace. Physical activity is one of eight priority areas for action in the Non-Communicable Diseases Prevention Framework.

The strategy will adopt a whole-of-government and a whole-of-society approach to promoting health-enhancing physical activity, recognising the role that all stakeholders play to promote health-enhancing physical activity and ensure the best possible health outcomes for people in Malta.

Foreword

Hon. Jo-Etienne Abela
Minister for Health and Active Ageing

The promotion of health-enhancing physical activity has tremendous benefits to the physical and mental health and well-being of the people, and to the sustainability of the health system. The benefits of physical activity are spread across the life course of a person and are intrinsically linked with the concepts of a healthy lifestyle and active ageing. For these reasons, the strategy promotes the implementation of policies that promote physical activity in all life settings where people play, socialise, work and live. As an integral component of the good life, physical activity will be promoted by taking a whole-of-government and whole-of-society approach, where all stakeholders promote physical activity within their sphere of influence.

Physical activity can be promoted both in structured and unstructured settings. Structured settings include opportunities for organised sports, gym facilities, sports club membership, and the availability of sports facilities, among others. Unstructured settings include the places where people live, work and play, and includes enabling and appealing environments for people to walk, cycle and play, safely. The strategy lays emphasis on the promotion of physical activity in both settings which are recognised as being equally important.

The environment in which we live is also an important determinant of health and wellbeing. The strategy takes cognisance of the fact that the pursuit of active mobility will additionally secure cleaner air and quieter neighbourhoods, and will reduce greenhouse gas emissions from the transport sector. The promotion of enabling and connecting infrastructure for people to walk and cycle, and the strengthening of public and collective transport, is a core component of the strategy. This is because the promotion of physical activity alongside the promotion of clean and green environments is beneficial to health and wellbeing on multiple fronts.

In addition to taking a life-course approach, the strategy also integrates the concept of equity as a cross-cutting guiding principle in the strategy. It is paramount that the promotion of physical activity addresses the diverse needs, abilities, and capabilities of all persons in Maltese society.

Introduction

Prof Charmaine Gauci
Superintendent of Public Health

Physical activity behaviour is an integral part of a healthy lifestyle and contributes directly to physical, social and mental health and wellbeing. People of all ages and of diverse abilities should have the awareness, knowledge and an enabling environment that supports physical activity behaviour. Malta has high rates of obesity and physical inactivity in childhood and adulthood. Lack of physical activity has also been associated with non-communicable diseases such as heart disease.

For this reason, the Superintendence of Public Health has embarked on the development of a health enhancing physical activity strategy. The strategy encompasses the more traditional aspects of health education in all life settings together with the need to develop enabling and appealing environments for people to take up physical activity in unstructured settings. Enabling environments for physical activity are also conducive to clean air and low noise, and tend to promote low carbon mobility, with direct and indirect corollary benefits to health.

Since the promotion of physical activity behaviour is a shared responsibility, the strategy takes a whole-of-government and a whole-of-society approach. Indeed, the strategy was developed with the feedback and contribution of several stakeholders including ministerial entities, authorities, councils and academia from diverse sectors such as transport, education, local government, environment and health.

The success of the strategy will depend on the vigour with which physical activity is championed by each stakeholder within its respective area of responsibility and implementation. The strategy will serve as a critical window of opportunity for everybody to take action that would ensure that, by 2030, every Maltese resident will have the knowledge, the awareness, the best possible opportunities, and an enabling socio-cultural and physical environment for health-enhancing physical activity across the life course and in all life settings.

1.0 Background

1.1 Physical activity: a global public health challenge

Globally, more than a quarter of the adult population and more than 80% of adolescents are insufficiently physically active. Around 1 in 3 women and 1 in 4 men do not undertake enough physical activity to stay healthy and protect themselves against overweight/obesity and chronic diseases.[1]

Physical activity behaviour varies by age and gender. Sedentary activity increases with age, while females tend to be less physically active than their male counterparts. Moreover, disparities exist in the prevalence of physical inactivity between countries.[2] Levels of inactivity are twice as high in high-income countries compared with low-income countries. Low or decreasing physical activity levels often correspond to a high or rising gross national product.[3]

Technology and digital communications have influenced the way people work, study, travel, and spend leisure-time. This technological innovation and transition towards more sedentary lifestyles, combined with the increasing use of personal motorised transport, is contributing to changing patterns of physical activity, reduced opportunities for physical activity, and increased sedentary behaviour.[4]

Physical inactivity has increasingly negative impacts on health systems, economic development, community well-being and quality of life.[5] This is explicitly recognised in the Hamburg Declaration (2021) where a lack of physical activity is associated with an increase in Non-Communicable Diseases (such as heart disease and stroke), morbidity and mortality, and is additionally recognised to worsen quality of life and to represent an economic burden on society.[6] A lack of an enabling environment which promotes physical activity has environmental health implications (e.g. cardio-respiratory illness from air pollution) because it disincentivises people from choosing environmentally friendly mobility such as walking and cycling. Physical inactivity is one of the leading risk factors for developing non-communicable

diseases (NCDs), which are responsible for nearly 70% of all global deaths. These include hypertension, heart disease, stroke, diabetes, some cancer types, and mental illness.[7] Being physically inactive is associated with a 20% to 30% increased risk of death, and up to 5 million premature deaths could be avoided yearly if the global population was more active.[8] It is estimated that globally, 7.2% of all-cause deaths and 7.6% of cardiovascular disease deaths are attributable to physical inactivity. While the relative non-communicable disease burden is greatest in high-income countries, middle-income countries have the greatest number of people affected by physical inactivity due to the larger size of their populations.[9]

Given that the worldwide prevalence of physical inactivity remains high, and the health burden associated with physical inactivity is substantial, physical inactivity is considered a global public health challenge. Moreover, evidence shows that higher amounts of sedentary behaviour are associated with poor health outcomes, including weight gain and increased risk of non-communicable diseases. Regular physical activity provides significant benefits for health. It improves muscular and cardiorespiratory fitness and bone health, reduces the risk of falls, reduces the risk of hypertension, cardiovascular diseases, diabetes, certain cancers including breast and colon, and overall mortality, improves mental health, lowers the risk of dementia, and helps to maintain a healthy body weight.[10] Research also shows that physical activity can improve sexual health and well-being in women[11] and in men.[12] A collective effort, at both national and locality level and across different sectors and disciplines, is required to promote, enable, and encourage more physical activity.

1.1.1 Global and European initiatives to promote physical activity

Public health attention to physical activity has evolved rapidly over the past two decades as evidenced by key landmark documents and efforts at a global and European level to promote physical activity. These efforts have been essential in raising international awareness of the benefits of physical activity and the adverse effects associated with inactivity, as well as the role of enabling environments in promoting physical activity. An increase in the recognition that multiple stakeholders play a role in promoting physical activity led to the advocacy for the adoption of whole-of-government, whole-of-society, and whole-of-system approaches to enhancing physical activity. Understanding the different needs for physical activity across the life course and in specific settings, the World Health Organization (WHO) promotes a life course approach and the promotion of opportunities to specific sub-populations such as pregnant and post-partum mothers as well as people with NCDs and disability.

These global and European initiatives include

- the WHO Global Strategy on Diet, Physical Activity and Health (2004)[13],
- European Charter on Counteracting Obesity (2006)[14],
- A Strategy for Europe on Nutrition, Overweight and Obesity-related Health Issues (2007)[15],
- Steps to Health: A European Framework to Promote Physical Activity for Health (2007)[16],
- WHO 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Non-Communicable Diseases[17],
- Toronto Charter for Physical Activity: A Global Call for Action (2010)[18],
- WHO Global Recommendations on Physical Activity for Health (2010)[19],

- Action Plan for Implementation of the European Strategy for the Prevention and Control of Non-Communicable Diseases (2012–2016)[20],
- Health 2020 – A European Policy Framework and Strategy for the 21st century (2013)[21],
- EU Council Recommendation on Promoting Health-enhancing Physical Activity across Sectors (2013)[22],
- WHO Global Action Plan for the Prevention and Control of Non-Communicable diseases (2013-2020)[23],
- Vienna Declaration on Nutrition and Non-Communicable Diseases in the Context of Health 2020 (2013)[24],
- EU Action Plan on Childhood Obesity (2014-2020)[25],
- Physical Activity Strategy for the WHO European Region (2016-2025)[26],
- Ostrava Declaration adopted at the Sixth Ministerial Conference on Environment and Health in 2017[27],
- Budapest Declaration adopted at the Seventh Ministerial Conference on Environment and Health in 2023,
- WHO Global Action Plan on Physical Activity 2018-2030: More Active People for A Healthier World[28],
- WHO Guidelines on Physical Activity and Sedentary Behaviour (2020)[29],
- EU Work Plan for Sport (2021-2024)[30],
- Vienna Declaration "Building forward better by transforming to new, clean, safe, healthy and inclusive mobility and transport" (2021)[31],
- The Hamburg Declaration (2021)[32],
- WHO European Regional Obesity Report (2022)[33], and
- WHO Global Status Report on Physical Activity 2022[34].

Further details about these documents may be found in Annex 1.

1.2 The concept of physical activity

This section will describe the terms used in the literature relating to physical activity and will define the concept of health-enhancing physical activity. Terms such as sport, exercise, moderate-intensity physical activity, vigorous-intensity physical activity, sedentary behaviour, screen time, and active living will be briefly described.

Physical activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure. It can be performed at a variety of intensities, as part of work, domestic chores, mobility, or during leisure time, or when participating in exercise or sport activities.[35] Physical activity may be undertaken in different ways. This includes walking, cycling, sports, and active forms of recreation, such as dance, yoga, and tai chi. It includes work-related activities, such as lifting, carrying or other active tasks, and activities related to domestic tasks around the house, such as cleaning, carrying and care duties.[36]

Health-enhancing physical activity (HEPA) is a term utilised to denote the health benefits derived from physical activity. It refers to any form of physical activity that benefits health and functional capacity without undue harm or risk.[37] In general, health-enhancing physical activity comprises activities that are of at least moderate intensity[38], although recent evidence shows that any physical activity, even in small amounts, may be beneficial to health.[39]

Exercise and sport can be considered as subsets of physical activity. Exercise refers to a subcategory of physical activity that is planned, structured, repetitive, and purposeful, in that the objective is to improve or maintain physical fitness. Sport covers a range of activities performed within a set of rules and undertaken as part of leisure or competition. Sport activities involve physical activity carried out individually or as a team and may be governed by sport organisations.[40]

Physical activity can vary widely in intensity, which refers to the amount of effort made by an individual. Intensity varies according to the type of activity and the physical capacity of the individual. For example, running is usually of a higher intensity than strolling, and a fit person is likely to walk at a given pace more easily than a less fit person.[41] The following is a categorisation of moderate and vigorous-intensity physical activity.

Moderate-intensity physical activity increases the body's metabolism to 3-6 times the resting level (3-6 metabolic equivalents (METs)). Examples include brisk walking, fast walking, and slow jogging.[42] On a scale relative to an individual's personal capacity, moderate-intensity physical activity is usually a 5 or 6 on a scale of 0-10.[43]

Vigorous-intensity physical activity raises the body's metabolism to at least six times its resting level (6 or more METs). Examples include running and fast cycling.[44] On a scale relative to an individual's personal capacity, vigorous-intensity physical activity is usually a 7 or 8 on a scale of 0-10.[45]

Sedentary behaviour refers to any waking behaviour characterised by a low energy expenditure of 1.5 METs or less, such as sitting, reclining, or lying down. Sedentary behaviours include desk-based office work, reading, driving a car, watching television, or using a computer.[46],[47] Recreational screen time refers to the time spent watching screens (television, computer, mobile devices) for purposes other than those related to education, study, or work. Sedentary screen time refers to the time spent passively watching screen-based entertainment and does not include active screen-based games where physical activity or movement is required.[48]

Active living is a lifestyle choice whereby individuals or groups incorporate physical activity into their daily routines. The goal of active living is to at least meet the global recommendations of physical activity through different practices such as walking, cycling, playing, gardening and other activities that can be considered as physical activity.[49] Furthermore, low intensity physical activity is especially relevant for active living among older persons and persons with a disability.

This strategy specifically concerns 'health-enhancing physical activity' – exercise, sport, or other – of moderate-to-vigorous intensity without the risk of undue harm or injury, that benefits physical health, mental health, and functional capacity, and which is undertaken as part of active living. The following section expands on the multiple benefits of physical activity to physical, mental, and social health.

1.3 The benefits of daily physical activity

Physical activity confers a multitude of health benefits and is essential to lead a healthy and a happy life. It is well recognised that regular physical activity protects against chronic diseases, such as high blood pressure, coronary heart disease, stroke, type 2 diabetes, various types of cancer, and mental illness. Moreover, being physically active improves bone

and functional health, and helps to maintain energy balance and a healthy body weight, reduces overweight and obesity, and promotes mental wellbeing.[50]

Regular physical activity must be integrated into people's daily lives from walking age to older age. Some physical activity, even if it does not meet the recommended levels in international guidelines, is better than none.[51] Physical activity is crucial for children to achieve normal growth and development of muscle strength and motor skills. Weight-bearing activities, such as running, jumping, and walking are of great importance for the development of strong and healthy bones from a young age. An inactive lifestyle leads to thin bones, low mineral content, and reduced strength.[52] Moreover, in children and adolescents, physical activity improves physical fitness, that is cardiorespiratory and muscular fitness; cardiometabolic health, including blood pressure, dyslipidaemia, glucose, and insulin resistance; cognitive outcomes including better academic performance; mental health, in particular reducing the risk of depression; and reduced adiposity (weight gain).[53]

The health benefits associated with higher levels of physical activity among adults and older persons are various and include a reduced risk of all-cause mortality and cardiovascular disease mortality; reduced incidence of hypertension, type 2 diabetes, and site-specific cancers, such as breast and colon; improved mental health, in particular reducing symptoms of anxiety and depression; better cognitive functioning; improved sleep; and improved measures of adiposity.[54] Participating in physical activity in later life may also improve sexual activity, which in turn may protect against a range of mental and physical health problems.[55] Additionally, physical activity in pregnancy reduces the risk of complications during delivery and in the newborn. In older persons, regular physical activity, in particular activity which emphasises functional balance and strength, helps to prevent falls and subsequent fractures.[56] Engaging in physical activity can also provide older persons, people with disability, and people with mental illness, among others, with opportunities for social interaction, reducing the risk of social isolation and loneliness.

Investing in actions to increase physical activity contributes towards achieving the 2030 Sustainable Development Goals (SDGs). In fact, good nutrition and active lifestyles has been identified as one of the strategic objectives for the implementation of Malta's Sustainable Development Strategy for 2050 under Strategic Goal 5 Ensuring healthy lives and wellbeing for all. The Strategy also sets a target to increasing the regularity and the intensity of physical activity in which the Maltese population is engaging by 2030. Beyond the health benefits, physical activity has multiplicative social, environmental, and economic benefits. Active modes of travel such as walking, cycling and public transport use result in less energy use, lower greenhouse gas emissions, less traffic congestion, improved air quality, and lower noise levels[57], as also described in the National Strategy for the Environment 2050 for Malta.[58] Enabling environments for active mobility have tremendous human health benefits in terms of both enhanced opportunities for physical activity but also, importantly, as agents of clean air, quiet neighbourhoods, and climate mitigation, all of which are key environmental determinants of health. Furthermore, walking and cycling nurture positive social values and an increased sense of community.[59] The National Transport Master Plan 2025 identifies a lack of awareness regarding the impact of travel behaviour on health and environmental issues and their resulting economic benefits.[60] The economic returns of investing in public transport,

along with promoting active mobility, are huge. As estimated in the study carried out by the Institute for Climate Change and Sustainable Development at the University of Malta, the external costs of transport in Malta in 2012 in terms of the negative effects of air pollution, noise pollution, road traffic accidents, climate change and congestion amounted to no less than €274 million annually.[61] The projected cost of congestion alone has been estimated to be over €1.2 billion per year by 2050, equating to a loss of 8.2% of Malta's GDP.[62]

1.4 Factors influencing physical activity behaviour

Understanding the factors that influence people's choice to be physically active or inactive is essential to devise evidence-based interventions that target barriers and enablers known to contribute to a sedentary lifestyle and to promote active living. The settings in which people live, work, and engage in leisure-time activities, as well as individual and interpersonal factors, have an impact on the level of physical activity carried out.[63]

The built and natural environments

The physical environment, both built and natural, can influence opportunities for participation in physical activity. The built environment refers to the physical spaces and buildings that have been created for and modified by people, including schools, workplaces, transport systems, neighbourhoods, houses, and playgrounds. Natural environments comprise green space, that is, publicly available open space with a high proportion of green cover, and blue space, that is, space that includes, among others, coastal areas.[64] Although falling outside the direct remit of the health system, aspects of the built environment, such as urban design, mobility infrastructure and land-use planning, and population density have all been shown to influence physical activity behaviour. Integrating nature-based solutions in urban design is key.[65] This includes for example introducing standards that reduce the use of rubber and plastic flooring, and increase more natural materials. Among individuals of all ages, physical activity levels related to active transport and leisure-time activity tend to be higher when living in communities or neighbourhoods that promote greater walkability, have mixed land-use (residential, commercial, parks), and are supported by a stronger active transport infrastructure (for example the availability and accessibility of walking and biking paths, access to public transport, and street connectivity).[66] The concept of a 15-minute city, where all essential amenities are available on foot within a 15-minute walking radius is especially apt. Research show that people are in general willing to walk around 17 minutes even if they own a car for certain trips.[67] Aesthetic features and perceived safety of a neighbourhood are also important determinants of physical activity behaviour.[68] High volume and speed of traffic contributes to a perception of unsafe streets which acts as a barrier to active travel.[69] Moreover, the increased reliance on personal car transport contributes to reduced opportunities for active mobility and promotes a more sedentary lifestyle.[70] Healthier built environments, which can be achieved by implementing health-promoting urban design and planning principles, can promote substantial improvements in physical activity levels at a population level through active transport and active recreation, and also bring climate and environmental benefits, for example by reducing greenhouse gas emissions, traffic congestion, air pollution and background noise pollution.[71] Strengthening road safety through the presence of footpaths, adequately accessible pavements, bike lanes, traffic

lights, speed limits, crosswalks, and reduced road car density; improving access to open green and blue spaces; and walking and cycling networks would encourage more active lifestyles at all ages.[72],[73]

The work environment

The predominance of jobs requiring less occupational activity have resulted in sedentary work environments, which when combined with the high amounts of sedentary screen time at home, have contributed to a decline in physical activity among younger and middle-aged adults.[74],[75] Working-age adults may face additional barriers to being physically active and exercising regularly, including being tired after a long working day, and other responsibilities such as caregiving for children or ageing parents, second jobs, or other obligations, leaving little time for physical activity.[76] In addition, workplaces may lack the facilities to encourage physical activity, such as showers/changing rooms. Adults spend a large proportion of their waking hours at work and simple measures such as active workstations, active breaks, and using stairs instead of elevators may help to increase physical activity.[77] Additional effective measures may be incentives which promote active mobility, flexible work hours, the introduction of frequent short breaks from sitting, as well as 'protected time' for physical activity.[78] One randomised controlled trial found that taking short breaks (1-2 minutes every half hour) was more effective than taking longer breaks (two 15-minute breaks in a workday) in reducing the time spent sitting at work.[79] However, there is currently insufficient evidence to make recommendations on the frequency and duration of breaks to interrupt sedentary behaviour.[80] Furthermore, the availability of showers and bike storage facilities, combined with improved safety and accessibility of walking and cycling routes, would encourage active commuting to work.[81]

The educational setting

Schools provide a unique opportunity for the implementation of healthy behaviours because children and youth spend a considerable amount of time in school. The literature shows that increasing academic demands may reduce the time allocated for physical and active play. Since the daily recommended 60 minutes or more of moderate or vigorous-intensity physical activity might not be met during physical education classes, opportunities might need to be identified within the school setting to increase physical activity engagement.[82] Moreover, lack of staffing and staff training, in addition to a lack of adequate facilities (including showers and changing rooms) and equipment, are also recognised barriers. Schools have the potential to influence the physical activity behaviours of school-aged children through whole-of-school programmes which provide opportunities for physical activity across the school day. This includes classroom-based activity breaks; adequate recess periods as a complement to but not a replacement for physical education; safe, supervised environments with ample recreational equipment; activities held on school grounds outside the classroom; sports programmes; and school or community-based after-school programmes. Additionally, a variety of initiatives are known to increase the proportion of children who walk or cycle to school, such as proximity of homes to school; provision of sidewalks, pedestrian crossings, traffic lights, and bike paths; enforcement of car speed limits to enhance road safety; teaching pedestrian skills in the classroom; and other initiatives such as the 'walking school bus' whereby adults escort a group of children to and from school[83] and the 'daily mile'.

The school setting is also a workplace for many. Staff members can be positive role models for school children by engaging in physical activity with students, providing opportunities for students to be active, and engaging in activities in the school that support physical activity. This may include involvement in school employee wellness programmes, which would also bring about health benefits for the staff members.[84] It should be emphasised that the importance of the educational setting in cultivating healthy habits complements, and does not replace, the critical role of parents in fostering a physical activity mindset.

The use of technology

Leisure-time physical activity behaviour is being adversely influenced by access to screen-based forms of entertainment, especially among younger age groups.[85] Recreational facilities and open and green spaces in children's neighbourhoods encourage play.[86] When combined with regular physical activity and outdoor play, digital media tools such as active video games might improve physical activity behaviours and reduce sedentary behaviour in children.[87] In adolescents, active video games can serve to promote physical activity engagement while fostering friendship and social cohesion with their peers.[88] Wearable activity trackers also appear to promote physical activity across different age groups.[89] More research needs to be carried out to understand better how technology can promote physical activity taking into account the physical, social, mental and emotional dimensions of health and wellbeing. The use of technology for integrating micro-mobility choices is also an avenue to be explored.

Individual factors

Physical activity levels are dependent on certain personal attributes such as age, gender, health status, ability or inability to perform physical activity, self-efficacy, and motivation.[90] It also depends on cultural characteristics which are becoming increasingly important given the significant proportion of foreign-born residents and migrants, and their associated beliefs and attitudes towards physical activity.[91]

a) Life events throughout the life course

Across the life course, people go through certain phases that may impact their level of physical activity. In young people, such life events include the transition from childhood to adulthood, changing schools, first employment, and changing preferences. Among adults and older persons, significant life changes comprise a change in employment status such as changing jobs, unemployment or retirement, a change in place of residence or going into care, an altered health status due to illness, injury or disability, and changes in relationships and family structure like becoming an informal carer, loss of partners or family members, and parenthood.[92] Moreover, women frequently reduce their physical activity levels during pregnancy and such levels remain low in the year following childbirth, often combined with unhealthy diets.[93] This may in part result from the increasing demands of motherhood, resulting in fatigue and exhaustion. These life events represent key points in people's lives when encouragement, support and interventions are particularly needed to sustain adequate physical activity levels.

b) Gender and age

There exist differences in physical activity levels among persons of different ages and gender. Inactivity rises with increasing age, while women are generally less active than men.[94],[95] A paper published in The Lancet Public Health reported that the physical activity gap between boys and girls begins early. Children are exposed to gender norms around boys' versus girls' activities and this shapes their attitudes towards physical activity into adulthood. Many women are put off by certain physical activities over concerns about stereotypes, insecurities around body image, or feeling constrained by cultural acceptability. Women and girls' sport generally receives less investment at grassroots level. Moreover, many women juggle childcare, housework, and employment, and this results in less leisure time and time for physical activity.[96] Additionally, women may also be entrusted with the care of elderly or unwell relatives.

c) Self-esteem, motivation, and perceived barriers

An individual's personal cost-benefit equation may not be sufficiently motivating to engage in physical activity. Motivational and personality factors include attitudes and beliefs towards physical activity, educational level and culture, self-perception in terms of confidence and abilities, and support systems that may help an individual maintain a healthy lifestyle.[97] According to the latest Eurobarometer survey on sport and physical activity (2022), improving health and fitness are the main motivators for European Union (EU) citizens to engage in sport or physical activity. Other commonly cited reasons for engaging in sport or physical activity were relaxation, to have fun, and to improve physical performance. A range of other reasons were given relating to weight control, personal image, and social interaction.[98] An individual may perceive certain barriers that may impede the adoption of a more active lifestyle. These may include time constraints, lack of motivation or interest, self-esteem, a lack of awareness of opportunities, having a disability or illness, cost, personal preferences, fear of the risk of injuries, having no friends to be physically active with, cultural barriers, and lack of access to facilities or adequate infrastructure.[99],[100] Lack of time was the main reason given by EU citizens for not practicing sports more regularly, followed by a lack of motivation or interest.[101]

d) Economic socio-cultural economic status

Physical activity levels may vary depending on the economic socio-cultural status (ESCS) of the individual, particularly when considering the different domains of physical activity. Research shows that individuals of higher ESCS tend to participate more frequently in leisure-time physical activity, especially organised activity which is often costly. Low ESCS individuals more often have physically demanding occupations and longer working hours; thus, they would have less energy and leisure time to participate in physical activity.[102] Moreover, people of low ESCS often have less access to safe and appropriate spaces to be physically active.[103] However, evidence shows that although individuals of lower ESCS have fewer resources and opportunities to engage in leisure-time activities, they are more physically active than has been thought when other physical activity domains, for example occupational physical activity and active transport are taken into consideration.[104]

1.5 Recommended physical activity levels

The following recommendations, based on the WHO Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age (2019)[105] and the WHO Guidelines on physical activity and sedentary behaviour (2020)[106], outline the extent of physical activity required for health enhancement and health risk mitigation.

1.5.1 Guidelines for children under 5 years of age

Infants less than 1 year of age should be physically active several times a day in a variety of ways, particularly through interactive floor-based play. This includes at least 30 minutes in prone position (tummy time) for those not yet mobile. Infants should not be restrained for more than 1 hour at a time and sedentary screen time is not recommended.

Children between the ages of 1 and 2 years should spend at least 180 minutes per day in a variety of physical activities at any intensity. They should not be restrained for more than 1 hour at a time or sit for extended periods of time. Sedentary screen time is not recommended for children less than 2 years of age, while for 2-year-olds, sedentary screen time should not exceed 1 hour (less is better).

Children between the ages of 3 and 4 years should spend at least 180 minutes per day in a variety of physical activities at any intensity, of which at least 60 minutes should be moderate-to-vigorous intensity activity. They should not be restrained for more than 1 hour at a time or sit for extended periods of time, and sedentary screen time should not exceed 1 hour (less is better).[107]

1.5.2 Guidelines for children and adolescents aged 5–17 years

Children and adolescents should do at least an average of 60 minutes per day of moderate-to-vigorous intensity physical activity across the week. Most of this physical activity should be aerobic.

Vigorous-intensity aerobic activities, as well as activities that strengthen muscle and bone, should be included on at least 3 days per week.

Children and adolescents should limit the amount of time spent being sedentary, particularly the amount of recreational screen time.[108]

For children and adolescents, physical activity can be undertaken as part of recreation and leisure, which includes play, games, sports, or planned exercise; physical education; active transport including walking and cycling; or household chores, in the context of school,

home, and community settings. Bone-loading activities, such as running and jumping, can be performed as part of playing games.

Any amount of physical activity is associated with improved health outcomes, even among children and adolescents who do not meet the WHO recommendations. All children and adolescents should be provided with safe and equitable opportunities and encouragement to participate in a variety of physical activities that are enjoyable and appropriate for their age and abilities. Children and adolescents with a disability should seek professional advice to determine the type and amount of activity appropriate for them. Less time spent in sedentary behaviour, particularly recreational screen time, is associated with better health outcomes.[109]

1.5.3 Guidelines for adults aged 18–64 years

All adults should undertake regular physical activity.

Adults aged 18–64 years should do at least 150-300 minutes of moderate-intensity aerobic physical activity or at least 75-150 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity. Muscle-strengthening activities at moderate or greater intensity and involving all major muscle groups should be done on 2 or more days per week.

For additional health benefits, adults may increase moderate-intensity aerobic physical activity to more than 300 minutes or do more than 150 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity.

Adults should limit the amount of time spent being sedentary and replace this with physical activity of any intensity.[110]

For adults, physical activity can be carried out as part of recreation and leisure, which includes sports or planned exercise; active mobility including walking and cycling; work or household chores, in the context of daily occupational, educational, home, and community settings.

Adults who do not meet the recommendations would still benefit from favourable health outcomes if engaging in any physical activity. There is evidence that any level and intensity of physical activity is associated with a lower risk of all-cause and cardiovascular disease mortality, as well as reduced incidence of hypertension, cardiovascular disease, and type 2 diabetes, although meeting the recommendations confers greater health benefits.

Individuals who suffer from chronic diseases, such as cardiovascular disease and diabetes, may need to take extra precautions and seek professional guidance before striving to achieve the recommended levels of physical activity. Where possible, adults living with disability are enabled to meet the above recommendations, after seeking professional advice from a doctor or physical activity specialist to determine the type and amount of activity appropriate for them.[111]

1.5.4 Guidelines for older persons aged 65 years and over

All older persons should undertake regular physical activity.

Older persons (65+ years) should do at least 150-300 minutes of moderate-intensity aerobic physical activity or at least 75-150 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity.

Muscle-strengthening activities at moderate or greater intensity and involving all major muscle groups should be done on 2 or more days per week.

As part of their weekly physical activity, older persons should do varied multicomponent physical activity that emphasises balance and strength training at moderate or greater intensity on 3 or more days per week. This will enhance functional capacity and prevent falls.

For additional health benefits, older persons may increase moderate-intensity aerobic physical activity to more than 300 minutes or do more than 150 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity.

Older persons should limit the amount of time spent being sedentary and replace this with physical activity of any intensity.[112]

For older persons, physical activity can be carried out as part of recreation and leisure, which includes games, sports or planned exercise; active mobility including walking and cycling; work or household chores, in the context of daily occupational, home and community settings.

If older persons are not meeting the above recommendations, engaging in some physical activity will still benefit their health. Certain health conditions may impede older adults from achieving the recommended physical activity levels. In such cases, they should strive to be as physically active as their abilities and health condition allow and adjust their level of physical effort to their fitness level. Individuals with chronic conditions, such as cardiovascular disease and diabetes, may need to take extra precautions and seek medical advice before striving to achieve the recommended levels of physical activity.

Where possible, older adults with disabilities should try to meet the above recommendations, although professional advice may need to be sought to determine the type and amount of activity appropriate for them.[113]

2.0 Situation analysis

2.1 Epidemiological situation in Malta

2.1.1 Physical activity levels

Adults

The Special Eurobarometer on Sport and Physical Activity 2022 showed that 31% of adults – defined as persons aged 15 years and over – in Malta never carry out exercise (defined as any form of physical activity done in a sport context or sport-related setting) or play sport, and an additional 37% rarely carry out such activity (Figure 1). Women and older adults were more likely to report never or rarely exercising or playing sport. Moreover, only 7% reported exercising or playing sport on a regular basis (EU average: 6%). With regards to engagement in other physical activities outside of sport, that is, physical activity for recreational or non-sport-related reasons, including activities such as cycling, dancing, or gardening, 35% and an additional 39% reported never or rarely carrying out such activities, respectively (Figure 1). Malta was the only country where the majority of respondents (39%) said they seldom engage in recreational or non-sport-related physical activity. Women were more likely to report never or rarely carrying out such physical activities. Moreover, only 4% of respondents reported engaging in such activities regularly, the lowest proportion in the EU. When asked about the level of engagement in vigorous physical activity, the majority (57%) reported having done vigorous physical activity on one to three of the previous 7 days, while 28% had not done any vigorous physical activity. With regards to moderate physical activity, the majority (57%) reported having done moderate physical activity on one to three of the previous 7 days, while 26% had not done any moderate physical activity. Of those who reported having done any physical activity in the previous 7 days, the majority reported spending 60 minutes or less per day. In comparison with other EU countries, Maltese adults walk less and spend more time sitting and sedentarism has increased since 2017.[114,115]

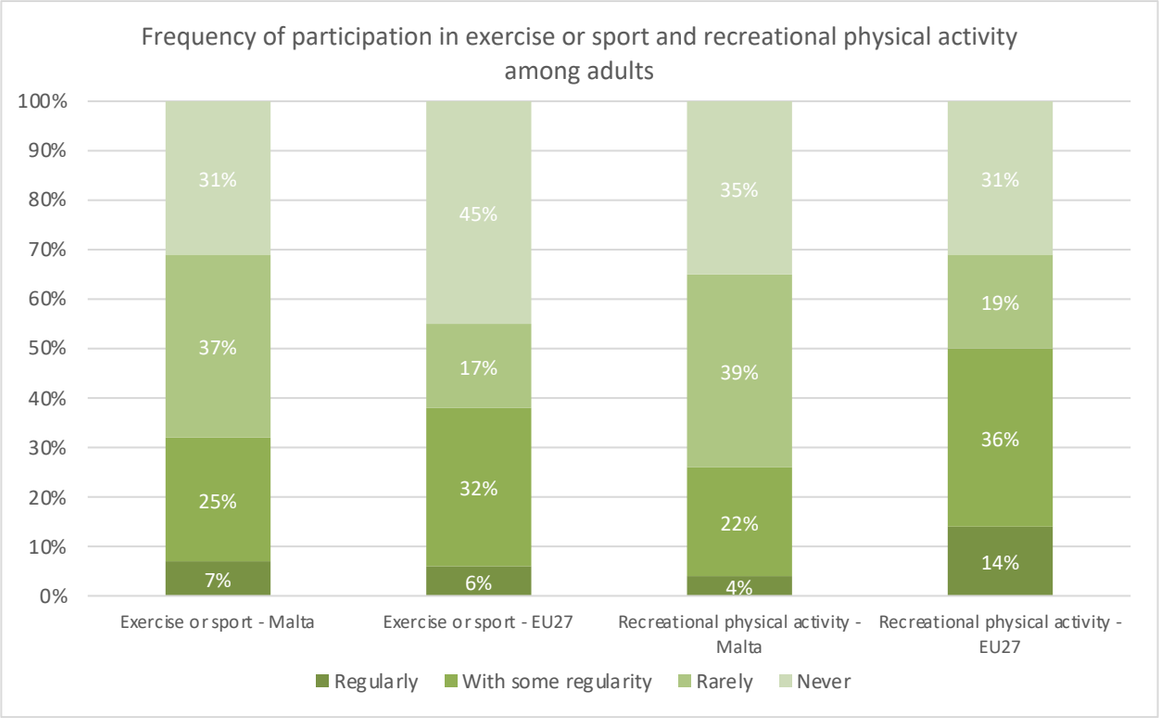

Figure 1. Frequency of participation in exercise or sport and recreational/non-sport-related physical activity among adults in Malta compared with the EU average (Eurobarometer survey 2022)

Children and adolescents

The Health Behaviour in School-aged Children (HBSC), a WHO collaborative cross-national survey, provides information about health behaviours of 11-, 13- and 15-year-old adolescents, including the amount of physical activity carried out. HBSC 2021/2022 survey data for Malta showed that less than 1 in 4 11-, 13-, and 15-year-olds are achieving the recommended 60 minutes of moderate-to-vigorous physical activity (MVPA) daily. The proportion of adolescents reaching the recommended levels decreased with increasing age, while boys generally perform more physical activity than girls. The proportion of Maltese adolescents engaging in daily physical activity was lower than the HBSC average in most cases, especially conspicuous with 15-year-olds, showing a comparative decline in rates of physical activity with increasing age when compared to the HBSC average.[116] Participation in daily physical activity decreased in all cohorts in 2022 when compared with 2018 (Figures 2 and 3), except for 15-year-old boys, whereby a slight increase in proportion of adolescents reaching recommendations was noted.[117],[118]

The WHO European Childhood Obesity Surveillance Initiative (COSI) measures trends in overweight and obesity among primary school-aged children across the WHO European Region and collects information on determinants of childhood overweight and obesity, including school environments, and diet and physical activity habits. COSI 2019 data for Malta showed that 70.7% of 7-year-old children spend at least 1 hour daily actively or vigorously playing, lower than the COSI average (87%). Furthermore, almost 43% of Maltese children spend at least 2 hours daily in front of a screen (watching television or using electronic devices), particularly on weekends.[119]

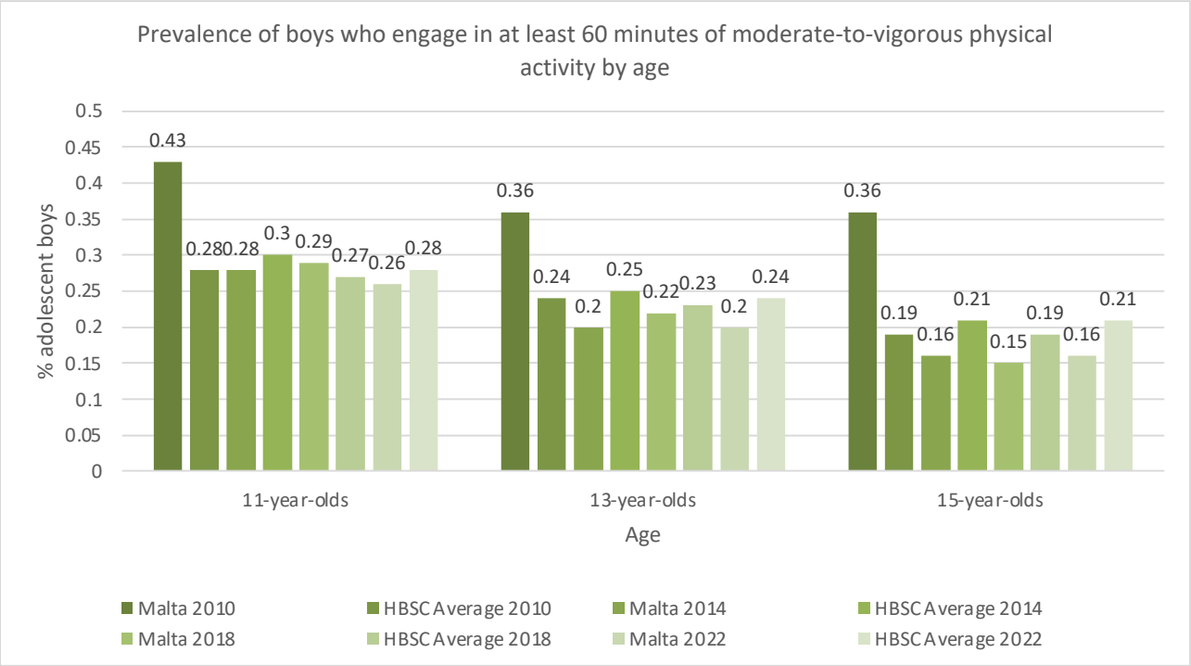

Figure 2. Prevalence of boys who engage in at least 60 minutes of moderate-to-vigorous physical activity daily in Malta compared with the HBSC average (HBSC surveys 2010, 2014, 2018, and 2022)

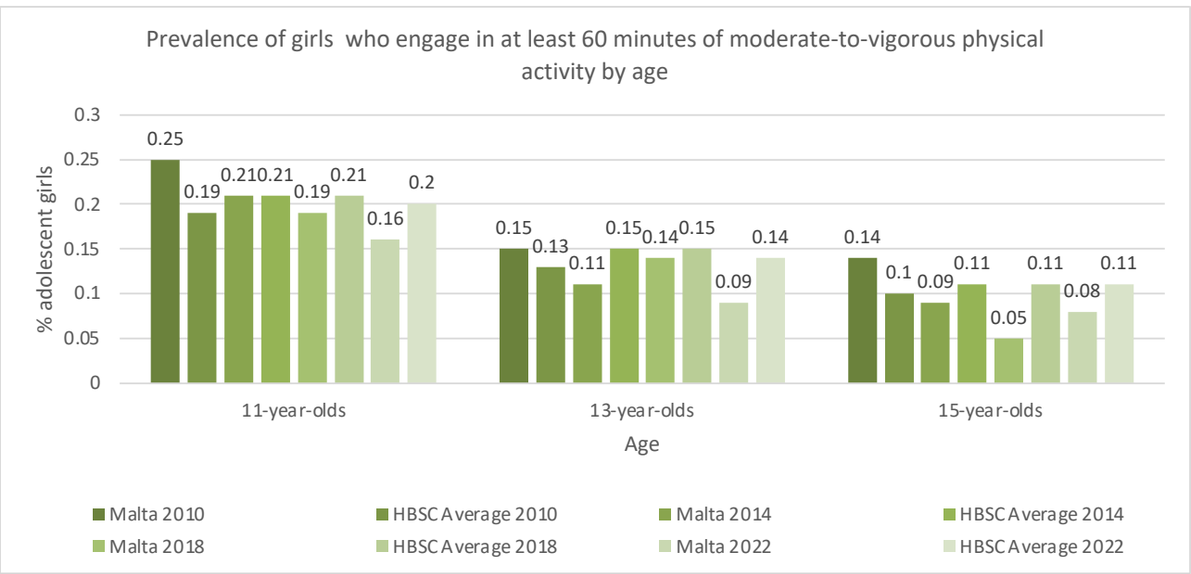

Figure 3. Prevalence of girls who engage in at least 60 minutes of moderate-to-vigorous physical activity daily in Malta compared with the HBSC average (HBSC surveys 2010, 2014, 2018, and 2022)

2.1.2 Overweight and obesity rates

Adults

Data from the most recent European Health Interview Survey (EHIS), carried out in 2019/2020, revealed that 28.7% of the Maltese adult population aged 15 years and over is obese, that is, having a body mass index (BMI) of 30kg/m^2 and over. This was the highest recorded prevalence of obese adults within the European Union. A further 36.1% are pre-obese/overweight, having a BMI between 25 and 29.9kg/m^2, thus 64.8% of the Maltese population was found to have a BMI exceeding the standard range of 18.5-24.9kg/m^2. Males have higher overweight and obesity rates than females (Figure 4).[120]

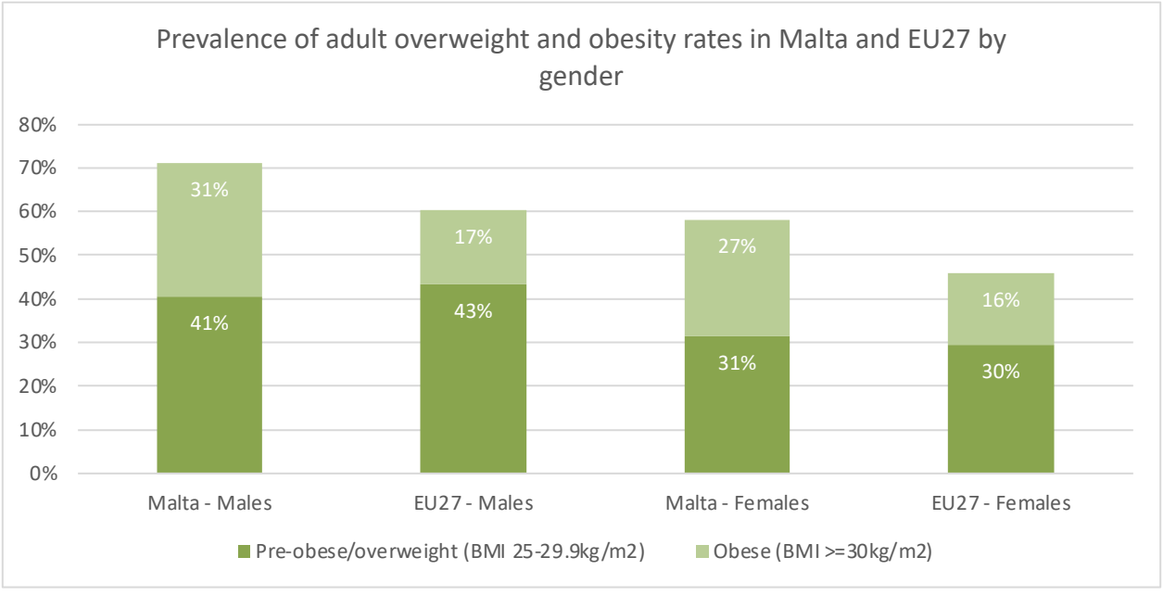

Figure 4. Prevalence of overweight and obesity among Maltese adults aged 15 years and over compared with the EU average (EHIS 2019)

Children and adolescents

COSI data from 2019 showed that 31% (35% in 2017) of 7-year-old girls were overweight (including obesity) and 12% (15% in 2017) were obese, while 35% (37% in 2017) of 7-year-old boys were overweight (including obesity), with 17.5% (18% in 2017) reportedly being obese.[121],[122]

Figures 5 and 6 display overweight and obesity rates among adolescents aged 11, 13 and 15 years based on self-reported weight and height from the 2010, 2014 and 2018 HBSC surveys.[123],[124],[125] In 2018, Malta had the highest prevalence of overweight and obesity among all participating countries and in all cohorts except 13-year-old boys (second highest percentage). There is an increasing trend between 2014 and 2018 in overweight and obesity rates in Malta as well as in the HBSC countries. However, the trend is more pronounced in Malta and the absolute proportion of overweight and obesity rates in Maltese is staggeringly higher than the HBSC average.[126],[127]

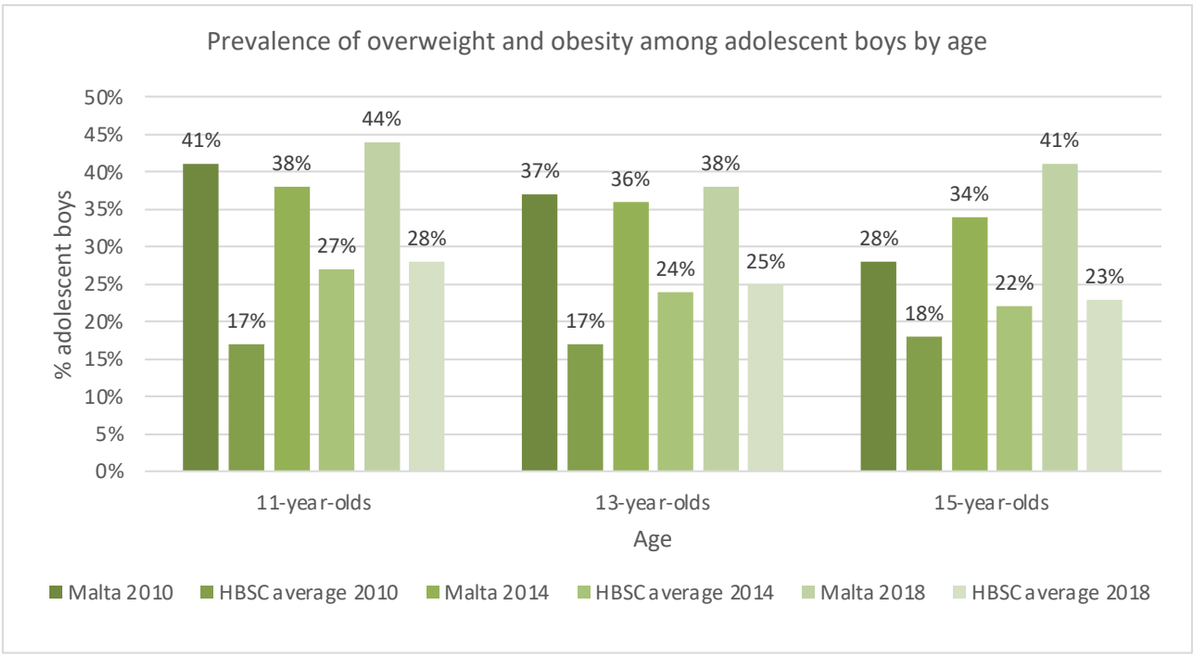

Figure 5. Prevalence of overweight and obesity among Maltese adolescent boys compared with the HBSC average (HBSC surveys 2010, 2014, and 2018)

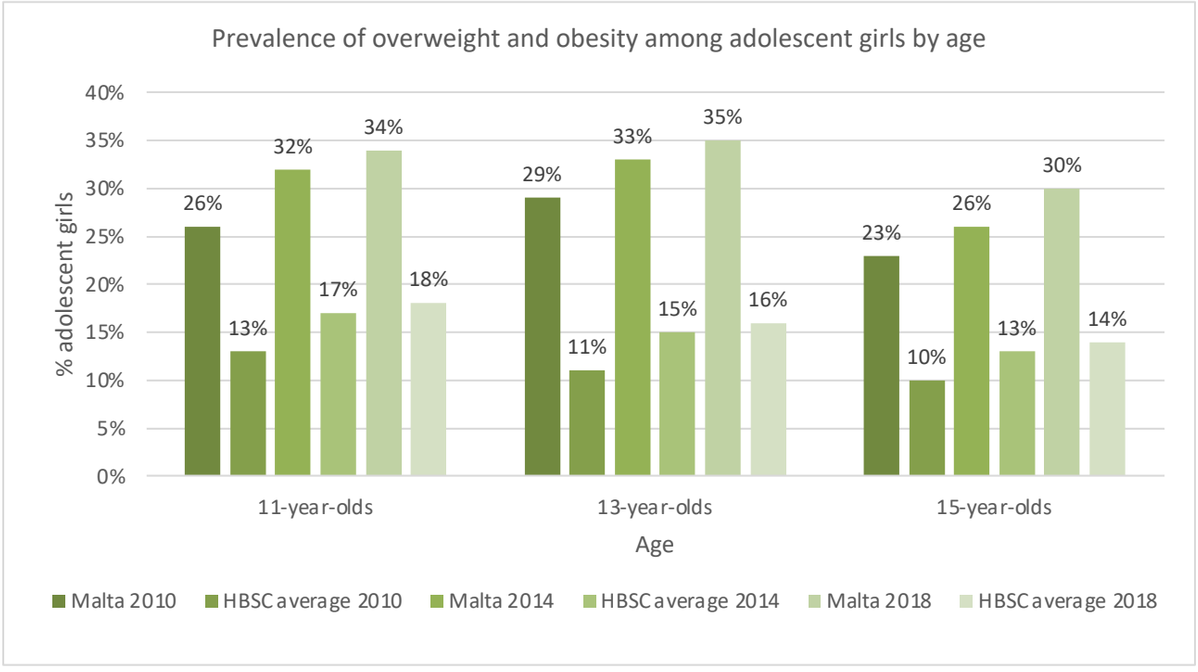

Figure 6. Prevalence of overweight and obesity among Maltese adolescent girls compared with the HBSC average (HBSC surveys 2010, 2014, and 2018)

2.1.3 Non-Communicable diseases related to physical inactivity

Diseases of the circulatory system, diabetes, and cancer, which are major non-communicable diseases accounting for the majority of premature NCD deaths globally[128] pose a huge burden also on the Maltese population. Deaths from cardiovascular diseases and cancer have decreased substantially in recent decades, although they remain the leading causes of death in Malta. Deaths from diabetes remain high, especially in comparison with the rest of the EU countries. This is partly attributable to the high prevalence of overweight and obesity in Malta.[129] Physical inactivity is a major risk factor for the development of these chronic diseases.[130]

Diseases of the circulatory system

Diseases of the circulatory system accounted for 33.8% of total deaths in 2019 and were the leading cause of death. The major contributors to this group of diseases were ischaemic heart disease, cerebrovascular diseases, and other heart diseases including heart failure.[131]

Diabetes

The self-reported lifetime prevalence of diabetes in the Maltese population aged 15 years and over as reported in the European Health Interview Survey 2019/2020 is 7.5%. Prevalence increases with increasing age.[132] As the EHIS provides self-reported statistics, the prevalence is likely to be higher due to undiagnosed individuals. The Saħħtek study, which was a health examination survey aimed at updating the prevalence of type 2 diabetes mellitus (the commonest type of diabetes) in Malta, and was carried out in 2014-2016, estimated a prevalence of 10.3% in adults, with only 6.3% being aware of their condition.[133] Furthermore, the International Diabetes Federation (IDF) estimated a prevalence of 11.2% among adults aged 20-79 years in 2021, compared with 9.2% for the IDF Europe region.[134]

Deaths attributable to diabetes (50.8 per 100 000 population) were the third highest in the EU in 2018, which is partly linked to Malta's high prevalence of obesity.[135]

Evidence shows that individuals who engage in regular physical activity have a reduced risk of developing type 2 diabetes mellitus. Furthermore, in those individuals who have already been diagnosed with diabetes, regular physical activity reduces the risk of progression of their condition and improves glycated haemoglobin (HbA1c), blood pressure, blood lipids, and body mass index, as well as reducing the risk of cardiovascular mortality. Physical activity also improves their quality of life and physical function, hence reducing healthcare costs.[136]

Cancer

In 2020, an estimated 2,392 individuals were diagnosed with cancer, with 1,281 new cases in males and 1,111 new cases in females. Age-standardised incidence rates (rates of new cancer cases per 100,000 population) for Malta were lower than the EU average in both genders. The most commonly diagnosed cancers were testicular cancer in young males (0-44 years), prostate cancer in older males (45 years and over), and breast cancer in women of all ages.[137]

Cancer incidence is expected to continue rising. Notwithstanding this, the survival rates of many cancers have improved.[138] Of the total deaths among Maltese residents in 2019, 26% were due to malignant neoplasms, with most cancer-related deaths seen in men. Most cancer deaths were attributable to lung cancer, followed by colorectal, pancreatic, breast, and prostate cancer. Cancer of the bronchus and lung was the commonest cause of cancer deaths in men, while breast cancer was the commonest in women.[139] The highest proportion of cancer-related deaths over all deaths occurred in the 45 to 64 years age group.[140]

Current evidence demonstrates that regular physical activity is associated with a lower incidence of various cancers, including bladder, breast, colon, endometrium, oesophagus, kidney, stomach, and lung cancer. Furthermore, for people with certain cancers, such as colorectal cancer and breast cancer in women, greater amounts of physical activity are associated with a reduced risk of cancer-related mortality.[141]

2.2 National legislation, policies, and strategies with a focus on physical activity

In line with the values and principles set out in international documents, the Maltese government is committed to improving the health of Maltese residents by adopting legislative measures, strategies and policies that are conducive to health-enhancing physical activity.

Strategic objectives aimed at enhancing physical activity among Maltese residents have been realised within the context of the following documents: Health Vision 2000[142],[143], Re-Shaping Sport: Towards Personal Development, Health and Success (2007)[144], Performance Audit: Physical Education and Sport in State Primary and Secondary Schools (2010)[145], A Strategy for the Prevention and Control of Non-Communicable Diseases in Malta (2010)[146], The National Cancer Plan (2011-2015)[147], A Healthy Weight for Life: A National Strategy for Malta (2012-2020)[148], National Environment Policy (2012)[149], National Health Systems Strategy for Malta (2014-2020)[150], Strategic Plan for Environment and Development (SPED) (2015)[151], National Strategic Policy for Active Ageing: Malta (2023-2030)[152], Road Safety Strategy Malta (2014-2024)[153], A Whole School Approach to a Healthy Lifestyle: Healthy Eating and Physical Activity Policy (2015)[154], A National Policy for Sport in Malta & Gozo (2017-2027)[155], Aiming Higher: National Strategy for Sport and Physical Activity in Malta (2019)[156], National Transport Master Plan 2025[157] and National Transport Strategy 2050[158], and the National Strategy for the Environment 2050[159]. Further details about these documents may be found in Annex 2.

Some budgetary measures which the Maltese government has implemented in line with its commitment to increase physical activity levels include the rebate on the purchase of bicycles, the addition to and improvement of existing public sports amenities, the reduction of taxable income for parents whose children attend sporting activities approved by the Malta Sports Council, and the provision of free school transport and public transport.

2.3 Enablers, barriers, and environments conducive to physical activity

It is widely acknowledged that physical activity should be integrated in all life settings where people live, work, and play.[160] This includes community-wide, educational institutions, and workplace interventions, among others.

Community-wide interventions comprising information dissemination, education, and community support have been shown to achieve population-level increases in physical activity in the long-term. Behavioural and social approaches include creation of buddy systems and physical activity support groups. Community physical activity classes offered free in public places, such as school yards, community centres, worksites, youth clubs, band clubs, church facilities, football grounds and sports facilities, provide social support and may reduce social and health disparities by providing physical activity opportunities for lower socioeconomic status individuals, older persons, and in areas lacking recreational facilities.[161]

Evidence favours multi-component interventions in promoting physical activity among children and adolescents at school. Measures which have been proven effective include increasing the number and quality of physical education lessons, staff training and capacity building, embedding more physical activity into the curriculum including integrating short bouts of physical activity into the routine (active breaks), after-school programmes, supportive school environments with adequate playgrounds and availability of equipment, active commuting to school, and community and peer involvement.[162] School-based interventions were shown to be effective in increasing physical activity levels among children from socio-economically disadvantaged groups[163] and in encouraging participation of the least active.[164] Indeed, the National Action Plan for a Child Guarantee (2022-2030) aims to lift children and families out of poverty, by among others, developing specific programmes targeting physical activity and physical education in children. Interventions comprising a structured physical activity programme together with adequate play time have been shown to have a positive effect on physical activity behaviour in children attending childcare. Moreover, parental involvement is crucial in both childcare and school settings. Parents also play a key role in the family and home setting, whereby parental encouragement, together with availability of equipment, may increase physical activity levels and reduce sedentary behaviour in children.[165]

Multi-component workplace interventions which may include counselling and advice, opportunities to participate in activities, use of active workstations, availability of facilities and onsite exercise classes, and promoting active commuting to work would encourage more physical activity and less sedentary behaviour among working-age adults.[166],[167]

2.3.1 Enablers

Findings from the Special Eurobarometer on sport and physical activity 2022 involving Maltese individuals aged 15 years and over show that the most commonly reported setting where people engage in sport or other physical activity was 'on the way between home and school, work or shops', in comparison with the majority of EU Member States which

reported 'in a park, outdoors etc.' as the preferred setting for sport or other physical activities. In fact, Malta had the lowest proportion among all EU Member States of respondents who chose 'in a park, outdoors etc.' as the setting for engaging in physical activity.[168] This may potentially reflect the lack of adequate outdoor facilities or parks for physical activity in Malta, as well as the overload of car traffic in the streets. 'At a health or fitness centre', 'at a sport club/ sport centre', 'at work', and 'at school or university' were the least common settings in which Maltese respondents carry out physical activity,[169] highlighting the need to improve access to such facilities and promote more supportive work and school environments. Notwithstanding this, works are underway to continue investing in more sports facilities in Malta as well as in Gozo, providing local athletes and the general public with more facilities of the highest level.[170]

The Eurobarometer 2022 also explored the participants' perceptions of support and opportunities for sport participation in their local area. The proportion of respondents who agreed that the area where they live offers them many opportunities to be physically active has increased across most EU Member States, most notably in Malta (67%, an increase of 20% from 2017).[171] Thus, Maltese individuals perceive an improvement in this regard. Notwithstanding, a rate of 67% is still below the EU average of 76%. Moreover, 85% of Maltese respondents agreed that local sport clubs and other local providers offer many opportunities to be physically active, and again, this proportion increased from 2017. This, however, contrasts with the finding that fitness centres, sport clubs and sport centres were cited as among the least common settings in which Maltese individuals engage in physical activity.[172] This may indicate that although Maltese adults feel that sports facilities offer opportunities for sport and physical activity participation, there are other factors which may limit them from making use of or accessing such facilities.

Recognising barriers and, more importantly, motivators to physical activity provides an insight into what people perceive as important factors to encourage them or prevent them from engaging in physical activity and provides us with an opportunity to target these in an effort to increase physical activity levels in the Maltese population. According to the Eurobarometer 2022, the reason why more than half of Europeans engage in sport or physical activity was to improve their health. In Malta, this was also the most commonly cited reason, while countering the effects of ageing saw the largest increase since 2017. Other prominent reasons were to relax, to improve fitness, and to control weight.[173]

2.3.2 Barriers

The built environment and road safety

Previous policy documents have cited a lack of walkability within the built environment in Malta, particularly within town and village centres, as a barrier to walking being taken up as an active mode of daily transport and mobility.[174],[175] Eurobarometer 2022 survey data showed that Malta recorded the lowest proportion of individuals who regularly engage in recreational or non-sport-related physical activity (including activities such as cycling from one place to another) and one of the lowest proportions of individuals who walk on at least 4 days a week.[176] This likely implies a lack of safe walking, cycling and micro-mobility infrastructure in Malta, potentially coupled with a poor bicycle culture. A lack of adequate infrastructure,

such as pavements, pedestrian crossings, benches, traffic lights, speed cameras, and lighting of roads may also play a role in limiting active mobility. This indicates that safer and more appealing environments for unstructured physical activity are probably required. Legitimate concerns about road safety limit the uptake of active commuting.[177] Eurobarometer 2022 survey data also showed that Malta, along with Slovakia, has the highest proportion of individuals among all EU Member States who report being afraid of the risk of injuries which limits their participation in sport and physical activity. This proportion has increased since 2017.[178] Road safety, especially for vulnerable road users including women, children, older persons, pedestrians, bicycle users and users of micro-mobility, is the cornerstone for the uptake of more health-enhancing physical activity in unstructured settings, that is, daily life.

Car-centric mobility

Car-centric mobility creates unappealing and unsafe environments which discourage people from undertaking active forms of mobility such as walking and cycling. Malta's mobility continues to be heavily car-centric; the stock of licensed motor vehicles as at the end of December 2021 stood at 413,019, of which 75.8% were passenger cars.[179] Research shows that over 70% of urban road space in residential areas in Malta is dedicated to the car, in terms of roads and parking spaces, with very little remaining for pedestrians and other road users.[180] The 2021 National Household Travel Survey showed that private vehicle use was the preferred means of transport in Malta at 84.3%, contrasting sharply with walking (7%) and bus use (5.2%)[181], despite the taxation, licence, and insurance, maintenance, running and start-up costs of car ownership and use.

Cultural barriers

Despite the provision of various opportunities for physical activity for free or at a subsidised cost, there is still room for further initiatives to enhance access to physical activity opportunities to all, in particular to those in lower socio-economic groups. An important barrier that needs to be overcome is a cultural one since it seems that the vast majority of the Maltese population does not consider physical activity as a behaviour that should be part of everyday life, as reflected in the low levels of physical activity across all age groups (refer to section 2.1.1). Lack of time was the most common reason for not practising sport more regularly among Maltese participants in the Eurobarometer on sport and physical activity 2022. This was followed by a lack of interest or motivation. Sport being too expensive was among the least cited reasons for Maltese participants not engaging in sport more regularly.[182] Behavioural change is indeed a major challenge that needs to be overcome.

2.3.3 Safe and enabling environments to encourage more physical activity

The quality of the living environment also plays an important role in creating opportunities for informal physical activity as part of people's daily lives.[183] This will help to counteract the commonly cited barrier of lack of time to carry out physical activity among the population.[184] The first step in achieving more active lifestyles and a population-level increase in physical activity is the creation of safe and supportive environments. Indeed, the creation of safe recreational areas for physical activity and social interaction and their link to mental health is also mentioned in the Mental Health Strategy 2020-2030.[185]

Encouraging regular physical activity requires adequate provision of, and equitable access to supportive environments that enable people of all ages and abilities to engage in walking, cycling, sports, active recreation, and play. For example, the quality and accessibility of pedestrian infrastructure has an impact on walkability and affects people differently (e.g. parents with strollers, persons with a physical disability, and older persons).[186] Increased road safety, the provision of more green and public spaces, pedestrianisation of some roads (for example transforming suitable residential streets from traffic routes to public places to maximise informal recreational space in urban cores[187]), and the development of walking, cycling and micro-mobility infrastructure, would enable and motivate people to walk and cycle more, especially for short trips. There is an opportunity to link towns and villages through pedestrian and cycling routes.[188] [189] Securing road safety to pedestrians and users of micro-mobility, be they children, adolescents, adults, or older persons, would ensure the uptake of more active modes of transport such as walking and cycling. Road safety can be promoted for example through the promotion of slow speed shared roads for cars and bicycle users, although the importance of speed enforcement and driver responsibility remain paramount.[190] One example of slow speed initiatives is the Slow Streets Project that is led by the Local Councils' Association Malta.[191] The National Transport Strategy 2050[192] recognises the need to ensure that, while it supports the modal shift towards more active mobility modes, the planning and design of the transportation system does not negatively impact opportunities for informal recreation within urban areas. For example, traffic noise and pollution can deter people from walking and cycling, even if the physical infrastructure allows for it.[193] Likewise, Strategic Objective 1.1 and Strategic Goal 2 of the National Strategy for the Environment and the Air Quality Plan for Malta 2023[194] also advocate for a modal shift to walking, bicycle use and public transport that are close to where people live. Finally, road infrastructure and urban design can have an impact on social interactions within neighbourhoods. Sustainable community mobility infrastructure and affordable and accessible mobility systems, including for walking and cycling, would support active mobility and more active lifestyles.[195]

In the Budget Speech (2022), the Maltese government reinforced its commitment to the execution of the urban greening projects, an initiative aimed at creating open, safe, and green spaces in Malta's urban centres, as well as the maintenance of these spaces. This will be complemented by the restoration of public gardens, squares, and open spaces in town and village cores across Malta, as well as the development of larger spaces such as family parks, which will all provide opportunities for enhanced physical activity participation by all. Moreover, the government reaffirmed its consideration of pedestrianizing Strada Sant Anna, a principal street in Floriana leading up to Valletta, with a plan to proceed with feasibility studies. The success of greening projects will depend on their accessibility and their connection to safe walking and cycling infrastructure.

In an attempt to promote the use of public transport and reduce personal car use, the Maltese government introduced free public transport at point of use for Maltese residents as from October 2022.[196] Such a measure needs to be accompanied by measures aimed at instilling a culture of active mobility and public transport use, improving the experience of public transport use, promoting active modes of transport, and promoting the implementation of green travel plans.

3.0 Guiding principles

This strategy is informed by the following guiding principles that should underpin implementation of actions at every level as the whole of society works towards achieving the shared vision of a more active population.

3.1 Whole-of-government and whole-of-society approach

The uptake of health-enhancing physical activity is a public health challenge which calls for action from a multiplicity of stakeholders including government ministries, national authorities, local authorities, civil society, the private sector, and the individual. Such an endeavour is evidently not the sole responsibility of the Ministry for Health and Active Ageing or of the health sector. To the contrary, it is an issue that spans many sectors, including those responsible for spatial design, transport and mobility planning, community initiatives, and awareness raising of the health benefits of physical activity.[197] Among others, the Ministry for Health and Active Ageing will take an unremitting advocacy role inter-ministerially and at all levels to promote enabling environments, knowledge, and opportunities for the uptake of health-enhancing physical activity among Maltese residents across the life course.

Cross-government and multi-sectoral partnerships, as well as meaningful community engagement, will be required to achieve a co-ordinated, whole-of-system response which can deliver multiple benefits to health, to a healthy environment, and to a sustainable economy. Community based initiatives and collaborations, including with academia and NGOs, are particularly important.[198] [199] Of mention is the Nudging Active Travel project: walking and cycling directional signage is being installed across Malta with the aim of providing safe routes for walking/cycling to nearby destinations whilst also indicating the time and distance it takes to get to the destination.[200] Behaviour and lifestyle changes towards the uptake of increased levels of health-enhancing physical activity is a complex challenge which requires a comprehensive, integrated, and inter-sectoral collaborative approach among stakeholders guided by one shared vision.[201] The major focus of this strategy for the Ministry for Health and Active Ageing is to advance population health by enabling the uptake of health-enhancing physical activity. Making the healthy choice the easy choice across the whole of society is paramount.

3.2 Equity across the life course

Health inequities are unnecessary, avoidable, unfair and unjust differences between groups of people within and between countries, which result from circumstances stemming from socioeconomic status, living conditions and other social, geographical, and environmental determinants that can be improved upon by human actions. They are neither naturally predetermined nor inevitable. Disparities in physical activity participation by age, gender, disability, pregnancy status, socioeconomic status, and geography reflect limitations and inequities in the socioeconomic determinants and opportunities for physical activity for different groups and different abilities.[202]

Reducing health inequities was a key strategic objective of Health 2020, the European policy framework for health and well-being endorsed by the 53 Member States of WHO European Region in 2012, and is one of the guiding principles of the more recent WHO Global Action Plan on Physical Activity 2018-2030.[203] Preventing and treating ill health equitably is a public health priority and focuses on aspects of lifestyle – smoking, diet, alcohol consumption and physical activity - which are highly dependent on the socioeconomic status of individuals. It is therefore imperative that while encouraging active living, the needs of people at different stages of the life course (including childhood, adolescence, adulthood, and older age) and different levels of current activity and ability, are duly taken into consideration with a priority towards addressing disparities and reducing inequalities.[204] By supporting good health and addressing its determinants along the life course, starting from preconception to old age, health can be promoted and disease prevented, resulting in happier and healthier, more productive, resilient populations.[205] In the latest WHO European Regional Obesity Report 2022, the WHO strongly promotes a life course approach to disease prevention and optimisation of health by promoting physical activity, among other things.[206] The 2030 SDGs highlight the global commitment to optimising health throughout the life course in its third goal (SDG3) which is to 'ensure healthy lives and promote well-being for all at all ages'.[207] It is in this light that the priority action areas that follow have been developed, taking a general life course approach.

4.0 Priority action areas

Priority Area 1: Leadership and coordination

A multi-layered governance approach to enhancing physical activity is required. The health sector recognises the importance of cross-sectoral cooperation between transport, education, spatial planning, local councils, and other stakeholders, including civil society organisations.

The development and implementation of this strategy is overseen by the Superintendent of Public Health. The Advisory Council on Healthy Lifestyles, as established under Chapter 550 of the Laws of Malta entitled *Healthy Lifestyle Promotion and Care of Non-Communicable Diseases Act* of 2016 'to establish and ensure an inter-ministerial lifelong approach favouring physical education and healthy balanced diets for a healthy lifestyle and reducing the level of non-communicable diseases throughout all age-groups', will play an advisory role in the implementation of this strategy. Detailed action plans will be developed in line with the priorities, objectives, and areas of action identified in this document.

The promotion of health-enhancing physical activity should be integrated in national policies and strategies cross-sectorally in line with the guiding principles set out in this document. A health-in-all policies approach will be adopted to promote health-enhancing physical activity. Although the strategy is led by the Ministry for Health and Active Ageing, it is owned by all the entities that have a stake in the promotion of physical activity. The promotion of physical activity is a national, a shared and a collective responsibility.

The following entities were consulted in the development of this document: Infrastructure Malta, Local Government, Planning Authority, Ministry for Transport, Infrastructure and Planning, Transport Malta, Ministry for Education, Primary Health Care, Mater Dei Hospital, Sports Malta, Health Promotion and Disease Prevention Directorate, St Vincent de Paul Long Term Facility, Mental Health Services, Ministry for Environment, Energy and Regeneration of the Grand Harbour, Environment and Resources Authority, Project Green, Gozo General Hospital, Tourism Authority, Directorate for Health Information and Research, Office of

the Chief Medical Officer, Director General Health Care Services, Corradino Correctional Facilities, Ministry for Finance, Advisory Council on Healthy Lifestyles, Chamber of Commerce, Malta Employers' Association, Chamber of SMEs, Confederation of Malta Trade Unions, Commissioner for Mental Health, then Ministry for Active Ageing, Malta Association of Physiotherapists, Foundation for Education Services, Environmental Health Directorate, University of Malta, Malta Road Safety Council, the Malta College of Arts, Science and Technology, Faculty of Health Sciences, Institute for Physical Activity and Sport, and the Institute for Climate Change and Sustainable Development.

Priority Area 2: Pregnancy, early years, and adolescence

Objective 2.1: Awareness and training to enhance physical activity for parents, newborns, and children in the early years

2.1.1 The Ministry for Health and Active Ageing shall provide training to medical, nursing and midwifery professions, and allied health professionals on methods of assessment and counsel given to patients on physical activity, particularly for those providing antenatal and postnatal care and advice on physical activity.

2.1.2 The Ministry for Health and Active Ageing shall raise awareness about the health benefits of physical activity at conception, during pregnancy, parenthood, and in the early years. It shall develop programmes to develop parental skills, and age-appropriate campaigns to promote the importance of physical activity for all family members including parents, newborns, and children in their early years.

Objective 2.2: Promoting physical activity in the educational setting

2.2.1 Guidelines on the promotion and integration of health-enhancing physical activity in educational programmes shall be developed in educational settings such that:

1. Educational institutions are adequately staffed with trained professionals and educators to organise whole-of-school programmes during and after school hours.
2. Educational institutions are adequately equipped with facilities that encourage physical activity for students with diverse skills and abilities. This includes facilities to perform exercise or physical activity, and facilities to change/shower.
3. Active breaks are innovatively promoted to reduce sedentarism. Initiatives such as the 'daily mile' and the use of outdoor space are encouraged.
4. Physical education content and duration is such that students develop the skills and the mindset for a physically active lifestyle, and develop a positive experience of physical activity which will serve as a main motivation factor later on in life.
5. Breaks are used to encourage students to be physically active and to socially interact.

6. School outings are explored as a potential way to promote physical activity and decrease sedentarism

7. Parents and student are actively involved in the planning of physical activity programmes such that these are sensitive to the needs and interests of the students.

2.2.2 A legal minimum of hours of physical activity per week in pre-primary, primary and secondary schools shall be adopted.

2.2.3 The design of new and existing educational institution shall consider physical activity needs. Extensions to existing facilities shall be confined with the boundaries of the Development Zone or the footprint of other legally established committed sites, and shall duly integrate urban greening elements and sustainable soft landscaping.

2.2.4 The use of school premises and physical activity facilities shall continue to be used for activities outside school hours, such as sports and dance, and these activities shall be physically and financially accessible to people with diverse abilities and backgrounds.

2.2.5 Physical activity sessions shall be organised by taking a whole-of-family approach, such that parents, guardians and children have the possibility to participate in activities simultaneously within the same setting, wherever possible.

2.2.6 Active mobility, including walking and cycling, shall be seriously promoted within the education setting. Educational institutions shall:

1. Institute bicycle racks and/or lockers, as well as facilities (including changing rooms and showers) for changing clothing, if required.

2. Seriously consider setting up a supervised walking school bus, where relevant.

3. Teach students to cycle from a young age.

4. Educate children on road safety and the highway code.

2.2.7 Educational institutions shall lead by example by developing a culture of physical activity and by facilitating the uptake of physical activity among its staff members.

Objective 2.3: Physical activity in the community with a special focus on children and adolescents

2.3.1 The optimal use of community facilities for physical activity shall be made by the public and private sector.

2.3.2 Financial incentives and/or programmes shall be made available such that prospective parents, pregnant mothers, children and adolescents are encouraged to become members of sports clubs and associations. Incentives for child-caring facilities with fitness clubs, and the provision of training sessions specifically aimed at pregnant mothers and new mothers, shall be considered. Walking clubs for parents and young children shall be encouraged.

2.3.3 All the necessary measures shall be taken to ensure safe roads and open spaces for children and adolescents to play, socialise and interact. Road safety is a critical element

in attaining the modal shift to active mobility, physical activity, and safe play for children and adolescents. Among others, walkable pavements shall be accessible for parents using strollers and for young children using balance bikes and scooters. Level, connected and accessible pavements shall be the rule not the exception. Car-free zones around schools shall be seriously considered.

2.3.4 The specific needs of children and adolescents, including of children with a disability, shall be duly considered in national walking and cycling strategies and plans.

Priority Area 3: Physical activity in adulthood

While virtually all measures to develop and improve access to physical activity opportunities and environments for the general population will also benefit adults, work environments are especially important for physical activity promotion in this age group. At present, a large proportion of working age adults spend most of their waking hours in sedentary activity at work, with little or no physical activity. The Ministry for Health and Active Ageing encourages all relevant sectors to take action to promote physical activity at the workplace through multi-component interventions. One case of best practice on the workplace is the initiative being undertaken by the Institute for Sports and Physical Education and Committee for Sustainability at the University of Malta to design and advertise walking trails around the university campus for students and staff to enjoy as part of their day on campus, and as part of a healthy workplace, alongside initiatives to promote sport among students and staff. As with children and adolescents, there is also a need to promote leisure-time physical activity among adults, with special attention given to vulnerable sub-populations, such as unemployed adults or adults with low income, women, single parents, and adults with a disability.

Objective 3.1: Promoting physical activity on the workplace

3.1.1 The Ministry for Health and Active Ageing, as an employer, shall lead by example by promoting physical activity on the workplace. Active breaks for physical activity shall be encouraged. Facilities (including changing rooms, showers, bicycle racks/lockers) shall be provided for people who actively commute to work. Active measures to promote physical activity in the retirement transition shall be taken in accordance with Objective 2 (Healthy Ageing) Theme 2.6 (Retirement Transition) of the National Strategic Policy for Active Ageing 2023-2030. The Ministry for Health and Active Ageing shall develop a written policy on the promotion of physical activity on the workplace.

3.1.2 As a service provider, the Ministry for Health and Active Ageing shall promote physical activity among its clients in its hospital and healthcare settings, by creating enabling environments and promoting physical activity.

3.1.3 Incentives shall be provided for employees to be physically active and to use public transport. Financial incentives, including tax rebates, for the promotion of physical activity such as re-imbursement for sportswear and equipment, and memberships with sports clubs and fitness facilities, shall be expanded and extended. Financial incentives, for example in the form of tax credits, shall be considered for employers who invest in equipment that promotes physical activity, such as showers and bicycle facilities.

3.1.4 The Ministry for Health and Active Ageing shall develop guidelines to enhance physical activity on the workplace. To this end, the Health Promotion and Disease Prevention Directorate published *Improving Employee Health in the Workplace: Guidelines for Employers*[208] in 2022 which includes a section on the promotion of physical activity and the reduction of sedentarism. Such best practice shall be extended indefinitely addressing diverse settings and needs.

3.1.5 A whole-of-government and whole-of-society approach for the integration of physical activity in the workplace shall be adopted across government entities, and extended to the private sector. Every employer shall have a written policy to enhance physical activity on the workplace.

Objective 3.2: Physical activity in the community with a special focus on adults

3.2.1 Incentives shall be provided for adults to become members of sports clubs and gymnasiums.

3.2.2 The optimal use of community facilities and open green and blue spaces for physical activity shall be undertaken. This area of action is in line with the draft National Biodiversity Strategy and Action Plan 2030 Action 13.2: 'Synergies between a healthy natural environment and human health are strengthened, including through the National Strategy for the Environment.'

3.2.3 Attention shall be given to road safety, taking into particular account the needs of vulnerable road users (such as pedestrians, runners, joggers and users of micro-mobility) in national walking and cycling strategies and plans

3.2.4 Enabling environments that promote a modal shift to walking, bicycle use and public transport shall be provided. This is in line with the vision of the National Transport Strategy 2050 (which states that 'walking and cycling need to form an integral part of urban mobility and infrastructure design'[209]), the National Transport Master Plan 2025 (which maintains that 'there are clear opportunities to encourage modal shift to cycling and walking, if the right environment is created'[210]) and the draft National Biodiversity Strategy and Action Plan 2030 (which states that 'by 2027, country walks are promoted and enhanced for their health benefits and are used as opportunities for environmental education').

3.2.5 Accessible spaces for physical activity that are close to where people live shall be provided. Special consideration shall be given to the needs of vulnerable people – including persons who are disadvantaged in society (e.g. the unemployed and persons on low income), persons with a disability and persons with chronic health conditions – in policies and strategies related urban planning and design.

Objective 3.3: Physical activity in other settings

3.3.1 Physical activity programmes shall be developed in institutions for people with mental illness, people residing at correctional facilities and drug rehabilitation centres, among others, based on their needs, abilities and preferences and with the involvement of the service-users in the design phases.

3.3.2 Caregivers, medical, nursing and midwifery, allied health professionals, other relevant professionals, and healthcare workers shall be trained on the need for physical mobility. This shall apply to institutions for people with a disability, mental health institutions, correctional facilities, and drug rehabilitation centres, among others.

Priority Area 4: Physical activity among older persons

Physical activity has numerous health benefits for older persons. Not only does physical activity prevent or delay the onset of chronic diseases and improve mortality, but it can also delay functional decline, improve mental and cognitive health, and promote social interaction.[211] It is thus a cost-effective measure to promote active ageing and can contribute to substantially reducing their medical care costs. Older people will benefit from some of the actions suggested in Priority Areas 2[1] and 3 and should be included in the whole-of-family approach to physical activity promotion to support healthy ageing. At the same time, in line with the National Strategic Policy for Active Ageing (2023-2030)[212], the government and relevant stakeholders are encouraged to work together to provide tailored programmes and the appropriate infrastructure to promote physical activity among older people. As a vulnerable group, older persons are more likely to refrain from doing physical activity outside, if the environment (including the road and pavement infrastructure) is not, or is not perceived as, safe. Older persons' mobility choices are also motivated by their intentions and social norms and pressures.[213] These choices also vary by age, gender, occupation, and the district where they live, among others.[214] The relevance of amenities and services that are close and safely accessible to the places where people live also bears special relevance among older persons, who are either non-car users or who might be discouraged from crossing roads with high car traffic. Peer-environments, that is, spaces where older persons feel safe and are encouraged to exercise is also particularly important. Retirement and nursing homes, social clubs, and churches are also settings that bear special relevance to older persons.

Objective 4.1: Physical activity as part of active ageing

4.1.1 Physical activity shall be promoted among older persons. Town spaces shall be optimised in terms of accessibility and appeal. Social spaces shall be made more attractive with the use of green infrastructure which is also encouraged to reduce the urban heat island effect. Priority shall be given to having adequate tree canopy cover in urban environments, including town and village centres, free shaded outdoor seating and public convenience. The optimal use of benches, as periodical resting areas, shall be considered, as it would encourage older persons to walk.

4.1.2 Tailored physical activity programmes shall be developed in appropriate facilities in care homes for older persons based on their needs and preferences, as well as in different localities within the community setting.

[1] A whole-of-family approach to physical activity promotion in children and adolescents will also create opportunities for physical activity for adults so that the benefits of physical activity are extended to the older population.

4.1.3 Outdoor spaces shall be utilised and exploited in the implementation of physical activity programmes in residential settings.

4.1.4 Caregivers, nursing, and healthcare staff shall be trained on the need for physical mobility in older age in all settings. This includes residential care, community care, and the hospital setting.

Priority Area 5: Physical activity among persons with a disability

Objective 5.1: The needs of persons with a disability shall be addressed in strategies and policies related to urban design, transport policies and other settings.

5.1.1 The specific needs of persons with a disability, across the life course, shall be duly considered in all strategies and policies intended to promote physical activity behaviour, including in national walking and cycling strategies.

5.1.2 Special consideration shall be given to persons with a disability in urban planning and design, and in the accessibility and functionality of spaces for physical activity that are close to where people live.

5.1.3 Training to caregivers, medical, nursing and midwifery, allied health professionals, other relevant professionals, and healthcare workers on the promotion of physical activity shall pay particular attention to the physical mobility needs of persons with a disability.

Priority Area 6: Enabling environments for physical activity

The environment in which people live, work, learn, and spend their leisure-time has a significant impact on physical activity levels and consequently plays a pivotal role for physical activity promotion. Just as more sedentary environments have contributed to rising levels of inactivity in recent decades, developing urban spaces and the natural environment to be more physical activity-friendly will contribute to making the population more active. Improved infrastructure for active mobility, more extensive public transport, cycling skills, ability to calculate distances when walking, and feeling of safety, were to be essential elements for low-carbon modes of mobility.[215] Creating the right ambience to enhance human-powered transport – active mobility – could be an effective means to increase activity levels and at the same time make an important contribution to reducing car traffic, thus reducing ambient air and noise pollution and the adverse impact on climate change. To achieve these goals, infrastructure planning and financing need to be optimised. Another important step can be to sustain the number of dedicated sports facilities and improve access for families and society at large.

Objective 6.1: Urban spaces conducive to physical activity

6.1.1 The number and quality of physical activity-friendly spaces shall be increased in urban areas. Such spaces should be sensitive to the local context, appealing and make the best use of green

infrastructure. Green infrastructure shall include fully-fledged pedestrian no-car zones, dedicated spaces for bicycle use, pedestrian priority zones, bicycle friendly roads and other shared spaces. The institution of potable water fountains in such spaces shall be strongly considered.

6.1.2 Spatial and transport planning policies shall be integrated to prioritise the principles of compact, mixed-land use at all levels of government. Highly connected neighbourhoods which enable and promote walking, cycling and the use of micro-mobility, and public transport use, shall be prioritised.

Objective 6.2: Catalyse the modal shift towards active mobility

6.2.1 A modal shift from car-centric mobility to active mobility, collective transport, and micro-mobility shall be undertaken. Appealing environments and policy actions to improve road safety (including safety to pedestrians, users of bicycles and scooters, and public transport passengers) shall be provided and undertaken respectively. Road mobility strategies shall ensure that pedestrians, cyclists, users of micro-mobility, and collective transport, are prioritised over private car use, in view of the negative environmental and health externalities of cars. Strong consideration shall be given to closing off secondary roads for cars during off-peak hours, to encourage the use of bicycles, running and walking.

6.2.2 A national walking strategy shall be developed and shall ensure that infrastructure for pedestrians is safe and connects to the village centre and amenities. This includes connecting infrastructure to bus stops, ferry terminals, playgrounds, shops, local councils, schools, and village squares, among others. Intermodal use of transport shall be facilitated. It shall also include standards for pavements, keeping in mind the needs of different road users including older persons, persons with a disability, and adults with prams and pushchairs.

6.2.3 A robust national bicycle strategy shall be developed and expanded such that optimal use of segregated bicycle lanes and bicycle friendly roads is made. Roads that give priority to bicycle users shall be developed. The number of kilometres of safe bicycle infrastructure shall increase and, where appropriate, road furniture shall be employed.

6.2.4 The use of collective public transport (include land, ferry, and school transport) shall be promoted, encouraged and facilitated. Wherever possible, bus stops should be sheltered from sun and rain. Standards should be introduced to avoid overcrowding on buses and ensure that public transport is a convenient and an appealing way to commute. Improved public transport routes shall be extended to connect towns and villages across Malta and Gozo.

Objective 6.3: Develop and strengthen opportunities for physical activity in the natural environment and open spaces

6.3.1 Access to good quality public, green and blue open spaces, green networks, and recreational spaces (including coastal areas) shall be improved. Safe and equitable access to these spaces to people of all ages and abilities shall be provided. The natural and local characteristics, scenic value and the features of the countryside and coastal areas shall be safeguarded.

6.3.2 Physical activity facilities in open spaces shall be promoted in a nature-sensitive and aesthetically appealing manner, and shall not cause undue harm to the environment. Required interventions shall be minimal and sympathetic to the context where they are applied.

6.3.3 Bicycle tourism shall be developed as part of national bicycle and micro-mobility strategies and plans.

Objective 6.4: Optimise infrastructure planning and financing

6.4.1 An inventory of existing physical activity opportunities shall be maintained, updated, and publicly available in a user-friendly manner. Physical activity facilities include parks, walking and hiking areas, running trails, public gardens, playing fields, football fields, indoor and outdoor sports facilities, gymnasiums, swimming pools and beaches, among others.

6.4.2 Physical activity facilities, including playgrounds and parks, shall be properly maintained by the relevant authorities. Closure for maintenance shall be kept to a minimum. The use of rubber flooring in playgrounds shall be banned on a precautionary principle, and the use of wood chipping made mandatory instead. Extension of opening hours of public parks, such as San Anton, shall be seriously considered.

6.4.3 Spatial planning tools shall be utilised to study the availability of physical activity opportunities with population needs.

6.4.4 Prospective spatial planning shall be undertaken such that the provision for playgrounds and parks is planned in step with the projected needs of a community. No efforts shall be spared to designing multi-use playgrounds and parks such that people of different ages and different abilities can engage in physical activity, also taking a whole-of-family approach.

6.4.5 A whole-of-society participatory engagement, including of non-state community stakeholders, shall be undertaken in the planning processes of significant developments that impact patterns of physical activity from the outset.

6.4.6 Local councils shall be provided with the required capacity building and incentives for the promotion of physical activity in their localities, including short walks around the village or in the countryside.

6.4.7 Applications for significant land developments shall be required to undertake a health impact assessment (HIAs). The terms of reference of such HIAs shall include the impact of the development on patterns of physical activity.

6.4.8 Innovative financial approaches for the development of physical activity infrastructures, programmes and facilities, such as through the use of EU funds and public-private partnerships, shall be promoted.

Priority Area 7: Supporting action through training, research and surveillance

Reliable and timely information is crucial to inform national and local policy making. Priority should be given to strengthening and expanding physical activity surveillance and evaluating policy initiatives to promote physical activity and strengthen research for the implementation of physical activity promotion across the whole of society. Collaboration with research entities should be developed and strengthened.

Objective 7.1: Integrate physical activity in healthcare

7.1.1 The importance of health-enhancing physical activity shall be included in the formal undergraduate and postgraduate training programmes of health professionals, including medical, nursing, midwifery, allied health, and other relevant professionals.

7.1.2 Health-enhancing physical activity shall be integrated in the guidelines for clinical management and rehabilitation programmes. Authorised health professionals shall be encouraged to prescribe physical activity as part of patient management.

Objective 7.2: Strengthen research for physical activity promotion

7.2.1 Action research initiatives that evaluate the effectiveness of interventions promoting physical activity shall be encouraged and undertaken.

7.2.2 Financial resources shall be mobilised to support an increase in research and innovation in the field of physical activity and sedentary behaviour, in health and other key sectors, particularly in areas of policy evaluation, large-scale interventions, economic evaluations, innovative fiscal instruments, and effective approaches to address inequities.

Objective 7.3: Strengthen surveillance systems

7.3.1 Appropriate surveillance, including enhancing data systems and capabilities at the national level to support regular population surveillance of physical activity and sedentary behaviour, shall be sustained. The development and testing of new technologies to strengthen surveillance systems, development of monitoring systems of wider determinants of physical inactivity, and regular multisectoral monitoring and reporting on policy implementation to ensure accountability and inform policy and practice, shall be encouraged.

Annex 1: Physical activity in international documents

Recognising the growing burden posed by non-communicable diseases, the 57th World Health Assembly endorsed the **WHO Global Strategy on Diet, Physical Activity and Health** in May 2004. The strategy addressed diet and physical activity which are two risk factors for non-communicable diseases. It described the responsibility of various stakeholders including the WHO, Member States, international partners, private sector, civil society and non-governmental organisations.

The **European Charter on Counteracting Obesity 2006** was committed towards strengthening action on counteracting obesity and aimed to place this issue high on the political agenda of the governments in the WHO European Region. It set out the principles and a framework for action for all partners and stakeholders to take stronger action against obesity.

In 2007, the European Commission responded to the challenge of overweight and obesity by adopting the White Paper **A Strategy for Europe on Nutrition, Overweight and Obesity-related Health Issues**.

This strategy outlined actions that can be taken at local, regional, national and European levels to reduce the risks associated with unhealthy diets and physical inactivity. It also addressed the issues related to health inequalities across Member States.

Steps to Health: A European Framework to Promote Physical Activity for Health 2007 was aimed at raising national awareness of and drawing attention to physical activity as an important health determinant. It provided Member States, experts and policymakers with guidance on designing and implementing physical activity-promoting policy and action as part of national public health work and through multisectoral cooperation.

The WHO 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Non-Communicable Diseases was published in 2008 and outlines action points and targets for countries to work towards reducing modifiable risk factors for non-communicable diseases which include physical inactivity. This action plan was based on the sound vision of the Global Strategy for the Prevention and Control of Noncommunicable Diseases and provided Member States, WHO, and the international community with a roadmap to establish and strengthen initiatives for the surveillance, prevention, and management of NCDs.

The Toronto Charter for Physical Activity: A Global Call for Action (2010) outlined four actions based upon a set of nine guiding principles to be adopted by all stakeholders involved in the promotion of physical activity with the intention of creating sustainable opportunities for physically active lifestyles for all.

WHO Global Recommendations on Physical Activity for Health 2010 were published in support of the WHO Global Strategy on Diet, Physical Activity and Health. This document aimed to provide guidance on the dose-response relationship between physical activity and health benefits, that is, the frequency, duration, intensity, type and total amount of

physical activity to be achieved at population level to prevent the premature incidence of non-communicable diseases (NCDs). These recommendations were primarily aimed at policymakers to assist them in the development of national guidelines and public health policies for health-enhancing physical activity and the primary prevention of NCDs through physical activity.

Action Plan for Implementation of the European Strategy for the Prevention and Control of Non-Communicable Diseases 2012–2016. With attention to NCDs reaching unprecedented levels worldwide, this action plan, which was adopted in 2011, identified priority action areas and deliverables to which Member States, WHO and partners could commit themselves over the five years from 2012 to 2016 as they implemented the European Strategy for the Prevention and Control of Non-Communicable diseases.

Health 2020 – A European Policy Framework and Strategy for the 21st century (2013). Health 2020 focused on supporting action across government and society to improve the health and well-being of all and reduce health inequalities. The Health 2020 policy focused on addressing the major health challenges affecting the European Region by tackling the social and lifestyle determinants of health through a whole-of-government and whole-of-society approach across the life course.

The 2013 **EU Council Recommendation on Promoting Health-enhancing Physical Activity across Sectors** aimed to encourage more effective HEPA policies and cooperation among all sectors that have a role to play in the field of sport, health, education, environment and transport.

The World Health Assembly endorsed the **WHO Global Action Plan for the Prevention and Control of Non-Communicable diseases 2013-2020** in May 2013. The goal of the Global Action Plan was to reduce the preventable and avoidable burden of morbidity, mortality, and disability due to NCDs and reduce modifiable risk factors for NCDs and underlying social determinants through the creation of health-promoting environments. It provided Member States, international partners and WHO with a roadmap and policy options which, when implemented collectively between 2013 and 2020, would contribute to progress on nine global NCD targets, including a 10% relative reduction in the prevalence of insufficient physical activity by 2025.

In July 2013, the **Vienna Declaration on Nutrition and Non-Communicable Diseases in the Context of Health 2020** was adopted by ministers of countries in the WHO European Region in an attempt to face the challenges posed by the burden of NCDs and reaffirm their commitment to address important NCD risk factors, including physical inactivity. It provided a strong mandate for the development of a physical activity strategy for the European Region. Member States endorsed the Vienna Declaration during the 63rd session of the WHO Regional Committee for Europe in resolution EUR/RC63/R4.

The EU Action Plan on Childhood Obesity 2014-2020 was adopted by European Union (EU) Member States for the period 2014-2020 in response to the growing issue of childhood obesity in Europe. The overarching goal of this Action Plan was to contribute to halting the rise in overweight and obesity in children and young people (0-18 years) by the year 2020. It

outlined eight key areas for action, including supporting a healthy start in life, encouraging physical activity, and the creation of environments in which health and wellbeing are promoted and healthy options become the easy option.

The **Physical Activity Strategy for the WHO European Region 2016-2025** was developed in light of the existing voluntary global targets set out in the WHO Global Action Plan for the Prevention and Control of Non-Communicable Diseases 2013–2020. A 10% relative reduction in the prevalence of insufficient physical activity by 2025 is one of its nine global targets. In addition, increased levels of physical activity contribute towards achieving other targets, namely reducing the risk of premature mortality from NCDs, reducing the prevalence of high blood pressure, and halting the rise in diabetes and obesity. The strategy aims to inspire governments and stakeholders to work towards increasing the levels of physical activity among all citizens of the European Region by promoting physical activity and reducing sedentary behaviours, ensuring an enabling environment which supports physical activity through engaging and safe built environments, ensuring accessible public spaces and infrastructure, providing equal opportunities for all, and removing barriers to and facilitating physical activity. It aims to cover all forms of physical activity throughout the life course.

The **WHO Global Action Plan on Physical Activity 2018-2030: More Active People for A Healthier World** was launched in 2018. The Action Plan outlines four policy action areas and numerous recommended policy actions and interventions for Member States, international partners and the WHO to increase physical activity worldwide. It calls for countries, cities, and communities to adopt a 'whole-of-system' approach involving all sectors and stakeholders, with the aim of providing access to safe and supportive environments and more opportunities for all people to be physically active in their daily lives. The action plan sets a target to reduce physical inactivity by 15% by 2030.

The **WHO Guidelines on Physical Activity and Sedentary Behaviour** were published in 2020 and provide an update to the 2010 global recommendations. The guidelines provide evidence-based public health recommendations for children, adolescents, adults and older adults on the amount of physical activity needed to offer significant health benefits and mitigate health risks. For the first time, recommendations are provided on the associations between sedentary behaviour and health outcomes, as well as for subpopulations, such as pregnant and postpartum women and people living with chronic conditions or disability.

The **EU Work Plan for Sport** (2021-2024), published in December 2020, stresses the importance of physical activity for citizens' health and well-being. Promoting and increasing participation in sport and health-enhancing physical activity is a key priority of the Work Plan for the coming years. Key objectives include investment in physical activity and the creation of opportunities for sport and physical activity for all generations, with the ambition of promoting an active and environmentally friendly lifestyle and active citizenship. Other priority areas are the protection of integrity and values in sport, and the socio-economic and environmental dimensions in sport, while ensuring cross-sectoral co-operation to raise awareness on the contribution that sport can make to Europe's growth and to achieve the United Nations Sustainable Development Goals (SDGs).

The **Ostrava Declaration of the Sixth Ministerial Conference on Environment and Health** of 2017 and the **Vienna Declaration "Building forward better by transforming to new, clean, safe, healthy and inclusive mobility and transport"** are landmark documents that highlight the importance of inter-sectoral collaboration to provide green, safe and appealing environments for physical activity. The *Ostrava Declaration of the Sixth Ministerial Conference on Environment and Health* was adopted in 2017 with the aim of shaping future common actions to decrease the burden of diseases caused by environmental factors for current and the future generations and to promote synergies between the two sectors and stakeholders to achieve the health and well-being objectives of the United Nations 2030 Agenda for Sustainable Development. The parties also re-enforced their commitment to the targets of the previous Ministerial Conference on Environment and Health, including providing all children with access to safe and healthy environments that support physical activity. In 2021, the *Vienna Declaration "Building forward better by transforming to new, clean, safe, healthy and inclusive mobility and transport"* was adopted at the Fifth High-level Ministerial Meeting of the Transport, Health and Environment Pan-European Programme (THE PEP). The parties committed to leading the transformation towards green and healthy mobility and transport while involving stakeholders from all sectors, in particular committing to promote active mobility in the pan-European region by increasing cycling and walking in every country through appropriate, safe infrastructures and the setting of national targets, supplemented with policies, strategies, and plans.

The **Hamburg Declaration (2021)** represents an international commitment to take measures to increase physical activity and improve individual and community health. Numerous organisations worldwide have signed the declaration and work together as the Global Alliance for the Promotion of Physical Activity to promote physical activity as a primary preventive measure. The 'Hamburg Declaration' calls on national and international policymakers to take concrete action to promote daily physical activity and exercise at a population level and in healthcare settings.

The **WHO European Regional Obesity Report 2022** examines the growing challenge and impact of obesity in the European Region and aims to accelerate ongoing efforts to halt the rise in obesity. The report focuses on managing obesity throughout the life course and tackling obesogenic environments. Moreover, it highlights the synergistic effect of engaging in high levels of physical activity and eating healthy diets in an effort to protect against ill-health. Policy options to tackle obesity are outlined for consideration by all Member States, together with a set of population-level approaches. This includes a range of interventions which promote physical activity across the life course and for all ages, while creating environments that promote health and progress towards sustainable development.

The first **WHO Global Status Report on Physical Activity 2022** presents an update of global progress on implementation of the recommendations set out in the Global Action Plan on Physical Activity (GAPPA) 2018-2030. This report reveals that, while some countries have started to implement the recommended GAPPA policy actions, global implementation since its adoption has been slow and uneven, with little progress towards increasing population levels of physical activity and significant gaps in policy implementation. A consequence of

this is that communities fail to benefit from the wider social, environmental, and economic benefits associated with more people being more active and already stretched health systems are burdened with preventable diseases now and in the future. The report calls for stronger collective action in all countries and accelerated political action.

Annex 2: Physical activity in national policy documents

Health Vision 2000

This was the first national health strategy for Malta, published in 1995. This document gave a good description of the nation's health status at the time, described a reform for the health services, and set targets for intervention within particular key areas. It highlighted the importance of preventing major non-communicable diseases such as coronary heart disease, certain cancers, and type 2 diabetes by tackling the lifestyle risk factors of smoking, unhealthy diets, obesity and physical inactivity, while providing enabling environments and facilities for empowering people to make healthy choices. The strategy emphasised the need for a long-term commitment and a shift in emphasis towards prevention and health promotion.

Re-Shaping Sport: Towards Personal Development, Health and Success

The first national strategy for sport, put together by the *Kunsill Malti għall-iSport,* was launched in 2007. This presented a medium-term (2007-2010) strategic plan for enhancing sport culture in Malta. The strategy put the *Kunsill Malti għall-iSport* as its focus to become a more efficient organisation that is better positioned to broaden the accessibility of sporting activity at recreational and competitive levels for the whole population by maximising, in a sustainable way, the utilisation of available resources and establishing better partnerships with related stakeholders.

Performance Audit: Physical Education and Sport in State Primary and Secondary Schools

This audit was carried out by the National Audit Office (NAO) and published in 2010. It aimed to determine the issues and factors impacting the delivery, quality and frequency of physical education and sport initiatives in state primary and secondary schools, whilst proposing recommendations on how these could be mitigated.

A Strategy for the Prevention and Control of Non-Communicable Diseases in Malta (2010)

Inspired by the guiding principles of the Health Vision 2000 (Malta) report, this strategy aimed to reduce the burden of the major non-communicable diseases in Malta by addressing lifestyle-related risk factors, namely unhealthy diets, physical inactivity, tobacco, and alcohol.

The strategy set out the following targets for 2020:

> "To increase the proportion of the Maltese population who carry out a moderate or high level of physical activity daily or on most days, from the current 43.5% to 70%.

To reduce the proportion of children and adolescents who never perform any exercise by 5%."

The strategy aimed to shift all those within the 'low level of physical activity', and 'moderate level of physical activity' categories to the 'high level of physical activity' category.

The National Cancer Plan 2011–2015

This was launched in February 2011 with the overarching purpose of reducing the incidence of cancer, prolonging survival, and ensuring the best quality of life possible for cancer patients. The important role that lifestyle factors play in the causation of cancer was highlighted and the strategy stressed the importance of focusing on behavioural changes related to tobacco smoking, alcohol consumption, unhealthy diet, and physical inactivity, not only for cancer prevention but also other major non-communicable diseases. Supporting individuals to sustain lifestyle changes was considered essential.

A Healthy Weight for Life: A National Strategy for Malta 2012–2020

The strategy was launched in 2012 with the aim of controlling and reversing the rising trends of overweight and obesity in the Maltese population, subsequently reducing the health, social and economic consequences of excess body weight. It is in fact the main national strategy to addressing obesity and life-style related risk factors, namely unhealthy diets and physical inactivity. This strategy highlighted the need for the development of a national physical activity action plan and guidelines to further support existing policies and strategies related to physical activity

National Environment Policy

This policy, which was published in 2012, highlights the importance of the outdoor environment as a source of opportunities for physical activity especially when walking and cycling are presented as reasonable and safe mobility options. It addresses the fact that Malta's towns and villages are particularly poor in urban green space and other recreational facilities; a scenario that does not encourage healthy lifestyles. The policy takes up the improvement of the local environment as one of its main objectives and sets out measures to address the liveability of Malta's urban areas.

National Health Systems Strategy for Malta 2014–2020

This new strategy for health was launched in 2014 in response to the growing challenges faced by the national health care systems. Such challenges included the changing demographic structure of the Maltese population, together with changes in disease epidemiology and health needs, political transformations, technical revolutions, and higher expectations from patients. The strategy supported previously published documents in that it recognised the need to strengthen actions to promote health and prevent disease throughout the life course by addressing lifestyle-related risk factors, including physical activity, together with the creation of supportive environments that facilitate making the healthier choice the easier choice.

Strategic Plan for Environment and Development (SPED)

The SPED was issued by the then called MEPA and provided a strategic spatial policy framework for both the environment and development up to 2020. It addressed the spatial issues in the Maltese Islands based on an integrated planning system that regulates the sustainable use and management of land and sea resources. It ensures the integration of socio-economic development and environmental protection.

National Strategic Policy for Active Ageing: Malta 2023–2030

This policy recognises the role that older adults play in Maltese society as valued decision-making members such that they can partake fully in the opportunities provided by society to age actively. There is a special focus on independent living, access to health services, physical activity, physical safety, mental wellbeing, retirement transition, and community care, among others.

Road Safety Strategy Malta 2014–2024

This strategy sets out an action plan to improve road safety and reduce road traffic accidents in the Maltese Islands. It adopts the following guiding principles; engineering for the design of safer roads and speed limits, enforcement to improve road user behaviour, safer vehicles that offer the maximum protection to occupants and the promotion of safe road user behaviour through road safety education. The strategy highlights the fact that travel choices, including walking and cycling and the use of public transport, have significant impacts on the environment and also on the health and wellbeing of individuals at both a personal and a societal level.

A Whole School Approach to a Healthy Lifestyle: Healthy Eating and Physical Activity Policy

This policy, which was launched in February 2015, highlights the critical role of schools in establishing a safe and supportive environment for encouraging healthy behaviours. Life-long habits and behaviours are generally formed during the early school years. This policy adopts a whole-school approach to healthy eating and physical activity so that children engage in such behaviours and develop the necessary skills set to adopt a healthy lifestyle from an early age and make informed choices about their lifestyles throughout the life course.

A National Policy for Sport in Malta & Gozo 2017–2027

This policy recognises the holistic nature of sport, with one of its main objectives being to increase participation in all forms and levels of sport and physical activity by attracting individuals from all parts of society, ensuring that sport is readily available and open to all. The policy is based on three pillars, namely sport and education, sports participation, and sports as a means of economic growth. Furthermore, an additional priority of this policy is to enhance engagement in physical activity and make the public aware that prevention is better than cure. Targets of this National Sports Policy include increasing physical activity

participation in schools, both during and after school hours, increasing participation in leisure or informal physical activity in the communities, and strengthening the sports industry.

Aiming Higher: National Strategy for Sport and Physical Activity in Malta

Launched in 2019, this strategy recognises the value of sport and physical activity towards a healthier, inclusive, economically productive, ecologically educated, and balanced society. The aim is to build a more active and healthy nation and change the current culture through a national campaign to promote physical activity and sports from pre-school to tertiary education and provide access to sports facilities and more open spaces for physical activity participation.

National Transport Strategy 2050 and Transport Master Plan 2025

The Transport Master Plan 2025 builds on the strength of the long-term vision, goals and guiding principles established in the National Transport Strategy 2050. These national documents serve to guide transport's contribution to the physical, environmental, social, and economic development of the Maltese Islands. They focus on delivering a safer, secure, more sustainable, and healthier transport system which supports attractive urban, rural, and coastal environments and communities for the ultimate benefit of improving public health through a clean and pleasant public realm, active lifestyles, and reduced air and noise pollution. Among the guiding principles is the creation of environments which support a modal shift towards sustainable transportation modes, such as public transport, walking, and cycling, which would increase physical activity levels.

National Strategy for the Environment 2050

The National Strategy for the Environment 2050 is intended to provide strategic direction to all national plans, policies, decisions, and projects which have a bearing on the state of Malta's environment. It has been built on 8 key pillars and addresses typical environmental efforts but also goes a step further in seeking to address the key drivers behind Malta's national environmental challenges, pushing for sustainable economic growth and laying out what can enable the required green transition through a range of effective policy responses. The strategy underscores the importance of enabling environments and open spaces for physical activity and wellbeing.

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