



Let's move Europe:

*School-based promotion of healthy lifestyles to prevent obesity*

# Parents Toolkit for promoting healthy lifestyles



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PHYSICAL  
ACTIVITY

# 1.1 Understanding “physical activity”

## What do we mean when we talk about physical activity?

It's easier if you know about the physical activity domains.



### PHYSICAL ACTIVITY

This is the broadest notion and refers to “any bodily movement produced by skeletal muscles that requires energy expenditure” [1].



### PHYSICAL INACTIVITY

When a person has an insufficient physical activity level to meet present physical activity recommendations [2].

For children and adolescents, physical activity can be undertaken in educational, home, and community settings under **two main domains:**

1

### INFORMAL

(i.e. unplanned, unstructured, self-directed) as part of leisure-time (play, games), active transportation (wheeling, skating, walking and cycling), or household activities.

2

### FORMAL

(i.e. planned, structured, directed) as physical education, sports and exercise.

#### Leisure-time physical activity

Physical activity performed by an individual that is not required as an essential activity of daily living and is performed at the discretion of the individual. Such activities include recreational and unstructured activities such as going for a walk, dancing, or playing [2].

#### Household activity

Physical activity undertaken at home for domestic duties (such as cleaning, caring for children, gardening etc.) [2].

#### Transport domain physical activity

Physical activity performed for the purpose of getting to and from places, and refers to walking, cycling and wheeling (the use of non-motorized means of locomotion with wheels, such as scooters, rollerblades, manual wheelchair, etc.) [2].



#### Physical education

Physical Education is the only space available to all children and adolescents during their compulsory education to learn the different aspects of physical activity and be exposed to a range of physical activity experiences with specialised qualified professionals, in inclusive and safe conditions, with appropriate resources.

#### Sports

A range of activities performed within a set of rules and undertaken as part of leisure or competition. Sporting activities involve physical activity carried out by teams or individuals and are typically supported and regulated by an institutional framework, such as a sporting agency [2].

#### Exercise

This is a subcategory of physical activity that is planned, structured, repetitive, and purposeful in the sense that the improvement or maintenance of one or more components of physical fitness is the objective [2].

# 1.1 What does it look like to be physically active?

You need to know the guidelines and understand how to quantify the amount of physical activity.

## The Physical Activity guidelines to be physically active:

- ✓ Children and adolescents aged between 5 and 17 years-old should do at least an average of 60 minutes per day of moderate-to-vigorous intensity, mostly aerobic, physical activity, across the week [2].
- ✓ Vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone, should be incorporated at least 3 days a week [2].

To quantify the amount of physical activity, it is important to acknowledge the following notions:

### Frequency

How often each person does physical activity. It is usually measured by considering the number of physical activity sessions done per day (e.g. did 2 sessions per day), per week (e.g. did 4 sessions per week), or the number of days each week (e.g. did physical activity 3 days in the last week).

### Duration

The minutes of each session, or exercise bout, per day (e.g. 60 minutes of physical activity per day), or per week (e.g. 150 minutes of physical activity per week).

### Intensity

How much energy is expended when participating in physical activities to the extent that higher intensities lead to shorter durations of physical activity sessions. Participation in physical activity can be categorized in three types of intensity levels, namely:



**Light intensity** Refers to activities that result in a light increase of heart rate or breathing rate (i.e. one can speak or sing while doing the activity) [2]. At the personal level, this refers to a perceived exertion score of 2 to 4 on a scale between 0 and 10.



**Moderate intensity** Refers to activities that result in a moderate increase of heart rate or breathing rate (i.e. one can engage with short speech while doing the activity) [2]. At the personal level, this refers to a perceived exertion score of 5 to 6 on a scale between 0 and 10 [2].



**Vigorous intensity** Refers to activities that result in a significant increase of heart rate or breathing rate (i.e. one cannot speak or sing at all while doing the activity) [2]. At the personal level, this refers to a perceived exertion score of 7 to 8 on a scale between 0 and 10 [2].

# 1.2 What does it look like to be physically active?

**Table 1. Physical activity intensity and examples of activities.**

INTENSITY	ACTIVITY (EXAMPLES)
Vigorous	Run, football, basketball, swim, rope jumping
Moderate	Aquatic gymnastics, climbing chairs, walking ( $\geq 4$ km/h)
Light	Cooking, making the bed, wash dishes, walking ( $\leq 4$ km/h), standing, watching tv-dvd standing
Sedentary	Sitting, quietly lying, watching television - sitting, working at the computer seated, playing video games - sitting

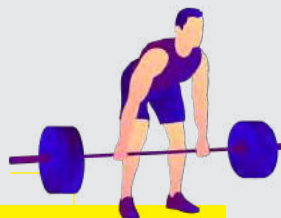
## Other important concepts for understanding the physical activity guidelines

### Aerobic activity



Activity in which the body's large muscles move in a rhythmic manner for a sustained period of time. Aerobic activity – also called endurance activity – improves cardiorespiratory fitness. Examples include walking, running, swimming, and bicycling [2].

### Muscle strengthening activity



Physical activity and exercise that increase skeletal muscle strength, power, endurance, and mass (e.g. strength training, resistance training, or muscular strength and endurance exercises) [2].

### Bone strengthening



Physical activity primarily designed to increase the strength of specific sites in bones that make up the skeletal system. Bone-strengthening activities produce an impact or tension force on the bones that promotes bone growth and strength. Running, jumping rope, and lifting weights are examples of bone-strengthening activities [2].



# 1.3. Benefits of Physical Activity

For children and adolescents, physical activity has many benefits [2, 4, 5, 6, 7, 8] including:

**Physical fitness** = higher cardiorespiratory and muscular fitness.

**Cardiometabolic health** = better blood pressure, reduced dyslipidemia, improved glucose and insulin resistance.

**Bone health** = higher bone density

**Cognitive outcomes** = higher academic performance and cognitive skills.

**Mental health** = reduced symptoms of depression, anxiety and stress.

**Body composition** = reduced levels of body fat.

**Sleep** = improved sleep quality.

**Psycho-social health** = improved social and emotional skills.

**Movement competence** = improved motor competence and coordination.



# 1.4 The problem: Levels of physical activity and physical inactivity

There is evidence [9, 10, 11, 12, 13, 14] supporting that worldwide:

About 80% of adolescents **do not meet the physical activity recommendations to benefit their health.**

About 18% of adolescents **do not practice physical activity during the week**, 39% practice **between 1 and 3 times/week**, 26% **4 to 6 times/week**, and only 17% **practice daily.**

The prevalence of **physical inactivity increases from childhood to adolescence.**

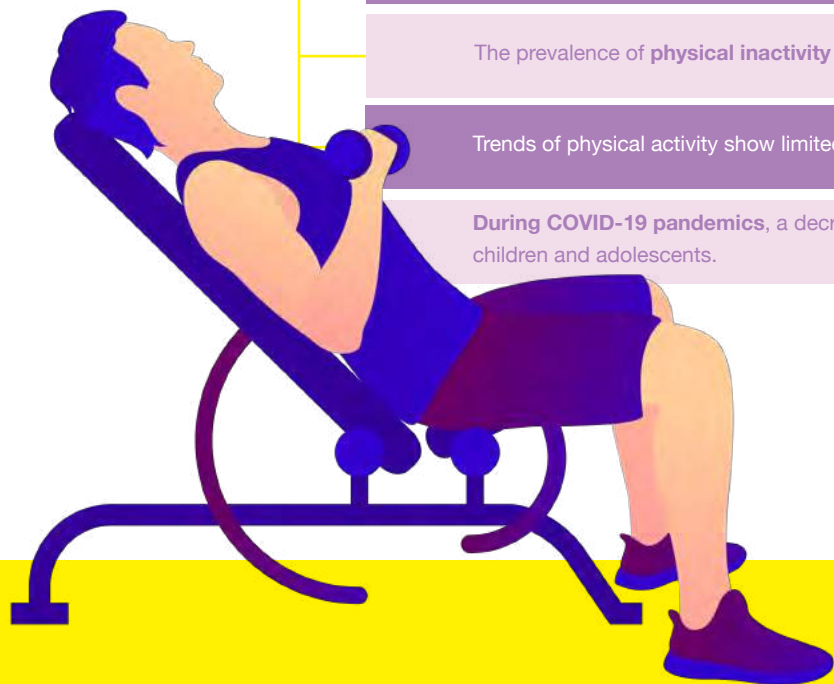
At all ages, **girls are more likely than boys to be physically inactive**, with this gender gap increasing with age.

Physical activity is also particularly low among children and adolescents from **poorer families.**

The prevalence of **physical inactivity is higher in young people from high income countries.**

Trends of physical activity show limited global improvement or no progress in the last decades.

**During COVID-19 pandemics**, a decrease in physical activity levels and health-related fitness has been identified in children and adolescents.



# 1.5 Practical strategies for promoting physical activity



Other helpful resources: [15], [16], [17], [18] & [19].

- 1 Encourage your children and adolescents to be active every day, inside or outside your home. Every move counts and everyone can always improve their skills, confidence, motivation, and learn to enjoy moving for life.
- 2 Even if children and adolescents are not meeting the daily physical activity recommendations, remember that doing some physical activity is better than doing none and that this will benefit their health.
- 3 Provide your children and adolescents with safe and equitable opportunities and encouragement to participate in physical activities that are enjoyable, offer variety, and are appropriate for their age and ability.
- 4 Encourage your children and adolescents to move, play, and be active everyday in as many ways as they can and have fun in as they can and have fun. Find out their favourite activities and help them set a routine for being active.
- 5 For promoting physical activity, consider all the different domains where physical activity can take place: leisure time, household, school physical education, transportation; and also explore indoor and outdoor options.
- 6 Remember that the physical activities don't have to be organized, competitive and/or paid activities to be beneficial. Creativity can overcome the challenges of limited time and money. There are many ways to be active without costs and using materials usually available at home!
- 7 Your children and adolescents should start by doing small amounts of physical activity (e.g. 5 minute bouts during the day), and gradually increase the frequency, intensity, and duration over time.
- 8 Moderate to vigorous intensity physical activity benefits children and adolescent's health.
- 9 Find out what are your children and adolescents favourite activities. Help them set a routine, overcoming the barriers of physical activity (e.g. lack of time, transportation), set a plan and get started in being active.
- 10 Provide constant support (e.g. encourage, emotional - value physical activity, logistical - transportation, buying equipment; co-participation; observe training sessions) for your children/adolescents to get regularly involved in formal (sport clubs) or informal (in the street with friends) physical activities.
- 11 Be physically active yourself and be a role model for your children and adolescents.
- 12 Spread your enthusiasm to others. Doing physical activity with your children and adolescents is a great way to develop parenting relationships while modelling healthy behaviors.
- 13 Take account of the types of activities your children/adolescents participate in.
- 14 Explain, support, and provide them with ideas to be active and meet the recommendations of physical activity. Below is an example of a physically active school-day.

**Table 2. Meeting the physical activity guidelines: physically-active school-day example for children/adolescents.**

ACTIVITY	TIME (MIN)	INTENSITY
Walking the dog (before or after school)	15	Light
Stop the car / Leave on bus one stop earlier and walk the rest to the school	10	Light
Play games during the school recess.	10	Moderate
Physical education lesson	60	Moderate to vigorous (included muscle-strengthening and bone-strengthening activities)
Homework (sitting)	20	Sedentary (non recreational)
Watch television with the family	1h	Sedentary (recreational)
Play games with family	30	Light to Moderate



**YES**

More than 60 minutes of Moderate to vigorous physical activity?  
 Vigorous physical activity  
 Muscle strengthening activities  
 Bone strengthening activities

- 15 Help monitor the progress of your children and adolescent regarding their physical activity level, the types of activities involved, and if they are meeting the recommendations of physical activity.
- 16 Use technology as an ally for physical activity (e.g. pedometers, exercise apps, smartwatches). It can help children and adolescents to monitor their progress and get inspired for doing physical activity.
- 17 Try to switch sitting with being active. Encourage your children/adolescents to get off the bus a stop earlier, or to meet friends for a game in the park rather than spend their leisure time with sedentary behaviour on a screen.

- 18 Be an active family and have fun together. Set aside time to be active together as a family – visit playgrounds, parks, nature reserves, beaches, and all other places where children can be active. Try out new activities, explore new environments, take a walk-in nature, for example during the weekends.
- 19 Support physical education and school-based physical activity practices (before and after school programs, recess, active breaks, school sport).
- 20 Celebrate your children and/or adolescent's progress, success and being physically active and healthy!

2

SEDENTARY  
BEHAVIOUR

## 2.1 What is Sedentary behaviour?

**Sedentary behaviour** is any waking behaviour characterized by a low level of energy expenditure while sitting, reclining, or lying [1]. Most desk-based office work, driving a car, standing on rolling stairs, and watching television are examples of sedentary behaviours.

There are some activities, such as schoolwork, working on a computer, or travelling, that may need to be done while you are sitting. However, other activities, such as sedentary screen time (e.g. TV, computer, mobile devices) in recreational moments, don't and can be replaced with more active behaviours.

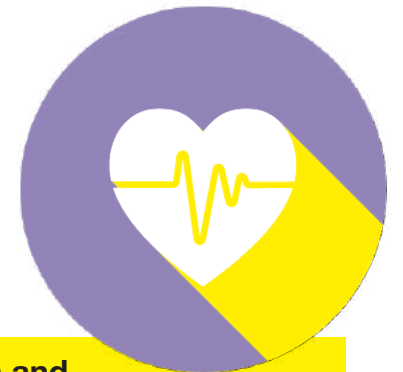
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## 2.2 Sedentary behaviour and health

In children and adolescents, available emerging research suggests that higher amounts of sedentary behaviour are associated with the following poor health outcomes [1]:

- ⊘ increased adiposity.
- ⊘ poorer cardiometabolic health, fitness.
- ⊘ poorer behavioural conduct/pro-social behaviour.
- ⊘ reduced sleep duration.



At this moment, research suggests that the benefits of limiting the amount of sedentary behaviour for children and adolescents outweigh the harms. This means that less time spent in sedentary behaviours appears to be better for health [2].

It is acknowledged that not all sedentary behaviour is harmful. Pursuits such as reading, doing puzzles, drawing, crafting, singing, board games, music are important for child/adolescent development and have cognitive as well as other benefits.

## 2.3 Sedentary behaviour guidelines

Children and adolescents should limit the amount of time spent being sedentary, particularly the amount of recreational screen time [1].

Despite WHO considering that there is insufficient research to specify any time limits on sedentary behaviour, the Canadian[13] and Australian 24h movement guidelines [14] suggest that children and adolescents should:

**Limit recreational screen time to no more than 2 h per day**

**Breaking up long periods of sitting as often as possible.**



## 2.4 The problem: Levels of sedentary behaviour

Regarding the levels of sedentary behaviour, there is evidence [1, 3, 4, 5, 6, 7, 8, 9, 9, 10, 11, 12, 13, 14] supporting that worldwide:

- 1 Sedentary behaviours dominate adolescents' daily lives today.
- 2 Young people spend approximately 60% of their waking time sitting, making sedentary behaviour the most common behaviour (besides sleep) for children and adolescents.
- 3 Screen-time-related sitting is the most common sedentary behaviour, covering between 40% and 60% of overall sitting time.
- 4 More than 50% of 15-year-olds reported watching TV for two hours or more per day.
- 5 Over 80% of 15-year-old boys and more than 70% of girls of 15 in many countries and regions exceeded two hours of computer use in 2014.
- 6 In most countries, children and adolescents are spending greater time engaged in sedentary behaviours, particularly for recreation, such as screen-based entertainment (television and computers) and digital communications, such as mobile phones.
- 7 Using a computer for two hours or more for non-gaming (such as surfing the Internet or doing homework) and gaming activities showed a continuous steep increase between 2002 and 2014 across all countries, regions and age groups].
- 8 Increases in sedentary behaviour related to study and academic work relate with secondary education years with higher academic demands.

## 2.5 Practical strategies for reducing sedentary behaviour

- ✓ Limited time should be spent sitting, particularly the amount of recreational screen time.
- ✓ Limit sedentary recreational screen time to no more than 2 hours per day and establish consistent boundaries (e.g. duration; content; quality).
- ✓ Allocate specific time periods for electronic media use, preferably not during daylight hours when children can be active outside
- ✓ Rewarding good behaviour with active family time, rather than with electronic media use.
- ✓ Instead of screen time, consider encouraging quality sedentary behaviour like reading, storytelling and puzzles which support healthier growth and development with non-digital formats to further develop fine-motor skills.
- ✓ When using screen-based electronic media, positive social interaction and experiences should be encouraged (e.g. watching a movie together, playing screen-based games together).
- ✓ Help your children and adolescents to find opportunities to stand up and move more whenever they can during the day. For example, encourage them to get off the bus a stop earlier, or to meet friends for a game in the park rather than spend their leisure time sedentary on a screen.
- ✓ Stimulate the use of active modes of transportation (walking, cycling) instead of passive transportation.
- ✓ Park away from the destination for active transportation.
- ✓ Make bedrooms a screen free zone or limit screen-use outside the bed-time routines.
- ✓ Turn off TV or any other screen related devices during meal times.
- ✓ Remember your child/adolescent to break-up long periods of sitting, as often as possible.
- ✓ Children/adolescents see and do what you do. Set a good example. Be an active role model, sit less and move more. Limit and monitor your family screen time and sedentary behaviour.
- ✓ Do at least one active pause for each hour you spend seated. Get up from your chair, regularly!



3

SLEEP

# 3.1 What is sleep?

**Sleep** Is a physiological process that is essential for parents' and children's health and wellbeing. Waking and sleeping cannot be separated. Our sleeping patterns have a direct influence on our waking behaviour and our daytime activities influence our sleep.

In the process of sleep, humans go through five different phases that constitute a sleep cycle. A complete sleep cycle takes 90 to 110 minutes on average and its fulfilment is crucial to body homeostasis. Thus, it is very important to get enough sleep every day [1].



Despite the importance of getting enough sleep every day, the quality of sleep is also very important.

**Sleep quality.** Is the measurement of how well a person sleeps. In practice, improving sleep quality can help ensure that sleep cycles won't be interrupted, which in turn helps assure that people wake up feeling energized. Four items are generally assessed to measure sleep quality [2].

## Sleep latency

A measurement of how long it takes to fall asleep. Drifting off within 30 minutes or less after going to bed suggests that the quality of sleep is good.

## Sleep waking

A measurement refers to the frequency of waking up during the night. Frequent wakefulness at night can disrupt your sleep cycle and reduce sleep quality. Waking up once or not at all suggests that the sleep quality is good.

## Wakefulness

A measurement of how many minutes you spend awake during the night after you first go to sleep. People with good sleep quality have 20 minutes or less of wakefulness during the night.

## Sleep efficiency

The amount of time spent sleeping while in bed. This measurement should ideally be 85% or more for optimal health benefits.

**Insomnia.** Is characterized by the recurring difficulty to fall or remain asleep despite motivation and means to do so. The condition can be short-term (acute) or can last a long time (chronic). Acute insomnia lasts from 1 night to a few weeks. Insomnia is chronic when it happens at least 3 nights a week for 3 months or more [4,5].

**Sleep apnea.** Is a condition marked by abnormal breathing during sleep. People with sleep apnea have multiple extended pauses in breath when they sleep. These temporary breathing lapses cause lower-quality sleep and affect the body's supply of oxygen, leading to potentially serious health consequences.

*In children, nightmares, bedwetting, sleep walking are some examples of common sleep disorders that can affect and compromise their sleep and, consequently, their development [4].*

## 3.2 Effects of (not) sleeping

Sleep interferes with people's daily lives and can generate positive and negative effects on their health and well-being, which can be visible from their mood, appearance and ability to do everyday tasks and work.

**The main effects of poor sleep include [4]:**

- Physical effects (sleepiness, fatigue, hypertension, higher risk of obesity and type II diabetes).
- Cognitive impairment (deterioration of performance, attention and motivation; diminishment of mental concentration and intellectual capacity and increase of the likelihood of accidents at work and during driving).
- Mental health complications.

**In children and adolescents, there is moderate to strong evidence related to sleep effects showing that [3, 6, 7, 8]:**

- Short sleep duration increases the risk of obesity.
- Inadequate sleep is associated with type 2 diabetes.
- Poor sleep is related with poorer cognitive performance, and with depression, anxiety, conduct problems, and hyperactivity.
- Sleeping long enough is positively correlated with school performance.

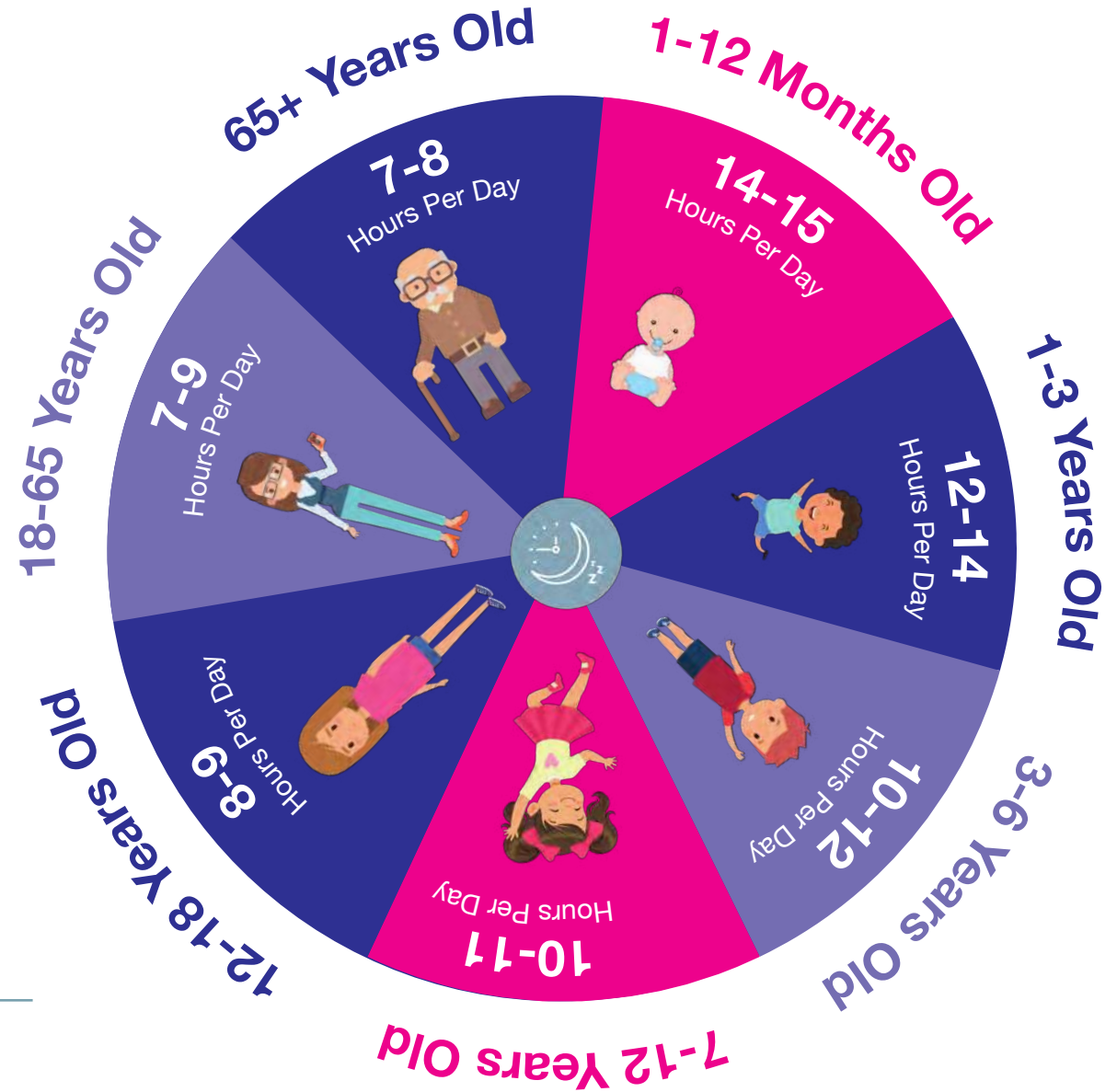


## 3.3 Sleep guidelines

Despite WHO considering that there is insufficient available evidence to specify sleep time by age, the Canadian 24h movement and National Sleep Foundation guidelines recommend [10, 11, 12]:

To children and adolescents, uninterrupted 9 to 11 hours of sleep per night for those aged 5–13 years and 8 to 10 hours per night for those aged 14–17 years.

For all ages, it is crucial to have consistent bed and wake-up times.



Adapted from The Sleep Charity from the United Kingdom  
(<https://thesleepcharity.org.uk/how-much-sleep-does-my-child-need/>)

## 3.4 The problem: Levels and quality of sleep

Regarding the levels and quality of sleep in children and adolescents, there is evidence [7, 13, 14, 15, 16, 17] supporting that:

**Nowadays insufficient sleep quantity and poor sleep quality are common among adults as well as children and adolescents.**

**Insufficient sleep duration is associated with bad dietary habits, longer screen time, and obesity in children.**

**Screen time is adversely associated with sleep outcomes and its use has grown exponentially in recent years by children, adolescents and adults.**

**The average sleep duration has decreased in children during the past few decades. Estimates in Europe are that between 20 – 40% of children suffer from poor sleep, with half of them having persistent problems over time.**

**The prevalence of insomnia has been increasing in Europe in recent years, with an average of 10%, moreover.**

## 3.5 Practical strategies to improve sleep quality and quantity

- 1 Create a routine which includes a regular bedtime: go to sleep at the same time each night, and get up at the same time each morning. In that routine try to relax before bed by reading a book, or taking a bath.
- 2 Turn off computers, TV screens, video games, and other bright lights.
- 3 If any device is to be used (e.g. an electronic device for reading a book) lower the light intensity.
- 4 Avoid doing exercise before bed time and sleep.
- 5 Eat dinner early and long before going to bed.
- 6 Reduce irregular or long daytime naps.
- 7 Avoid falling asleep on the sofa or any other place that makes you move during the night.
- 8 If your children and adolescents tend to lie awake and worry about things, make a to-do list before they go to bed. This may help you put their concerns aside for the night.
- 9 Avoid scary or violent content at night.
- 10 Picking a stuffed animal or security blanket for the night for toddlers.
- 11 If your children and adolescents can't fall asleep at night, provide a calm activity, like reading instead of using your phone or playing video games.
- 12 Do not toss and turn, relax and do not pick up any devices in the middle of the night.
- 13 Make the bedroom comfortable: dark, quiet, and not too warm or too cold.

4

DIETARY  
HABITS

# 4.1 What are dietary habits?

A complete and diversified diet is crucial for healthy growth and development. Through drink and food consumption the body gets water and nutrients that are essential to its development, functioning and survival.

People's bodies need energy to keep alive and for organs to function normally. The more active a person is, the more energy the person will have to consume to be able to carry out the daily life. The amount of energy in an item of food or drink is measured in calories.



## Dietary habits



Are the food choices preferred by people in their daily life. Proper dietary choices require a varied consumption of vitamins, minerals and three macronutrients: carbohydrates, proteins, and lipids/fats. Dietary habits and choices play a significant role in human health [1].

## Vitamins



Are organic compounds that people need in small quantities. Most vitamins are present in natural foodstuffs and having too little of any vitamin may increase the risk of developing certain health issues.

## Minerals



Are a chemical element required as an essential nutrient by organisms to perform functions necessary for life. They are important for making enzymes and hormones and to keep bones, muscles, heart, and brain working properly.

## Carbohydrates



Are a source of energy to body and brain activity by sugars, starches and fibers found in fruits, grains, vegetables and milk products. Carb intake for most people should be approximately 60% of total calories [2]. Carbohydrates are classified as simple (fructose found in fruits and galactose found in milk products) or complex (referred to as starchy foods and include beans, potatoes, corn, whole-grain breads and cereals) and the difference remains between the two forms of the chemical structure and how quickly the sugar is absorbed and digested (simple are faster).

## Proteins

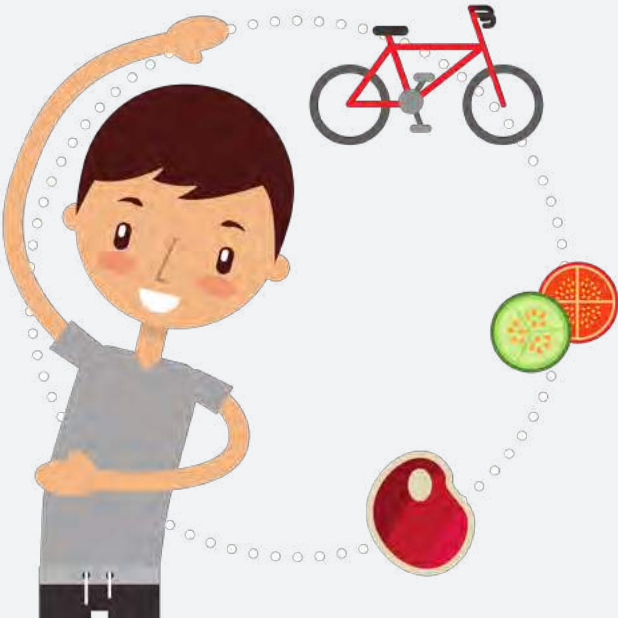


Are present in every body cell, and an adequate protein intake is important for keeping the muscles, bones, and tissues healthy. Both animal and plant foods can be excellent sources of protein. Protein intake for most people should be approximately 15% of total calories [2].

## Lipids



Mostly known as fats, lipids are concentrated sources of energy as well as structural components of cell membranes. Fats provide more than double the energy per gram than protein or carbohydrates, so it has more energy density. They are critical for maintaining body temperature, cushioning vital organs, regulating hormones, transmitting nerve impulses, and storing memory. Lipids intake for most people should be approximately 25% of total calories [2].



*The energy intake (calories) should be in balance with energy expenditure.*

**If a person does not regularly consume the energy needed for their daily lives or if excesses his needs of intake of energy it is called malnutrition. Historically, it has been addressed two separate broad groups of conditions [3, 4]:**

**undernutrition**, which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals);

**overweight/obesity and diet-related noncommunicable diseases** such as heart disease, stroke, diabetes and cancer.

## *Body Mass Index*

**Is normally used to calculate a body composition, which allows to locate a person as underweight, normal, overweight or obese. The limitation is that the Body Mass Index formula does not distinguish weight associated with muscle from weight associated with fat which is not spent, only stored as fat.**







## 4.2 Global overview of dietary habits

**Regarding the dietary habits of children and adolescents, there is evidence [3, 4, 5, 6] suggesting that:**

Increased production of processed foods, rapid urbanization and changing lifestyles have led to a shift in dietary patterns. People are now consuming more food which is high in energy, fats, free sugars and salt/sodium, and many people do not eat enough fruit, vegetables and other dietary fibre such as whole grains.

The prevalence of obesity is estimated to account for 10–13% of deaths in Europe.

Globally, in 2017, one in five deaths is associated with poor diet (an estimated 11 million deaths).

In 2020 an estimated 39 million children under the age of 5 were overweight or obese.

Children with obesity are very likely to remain obese as adults and are at risk of developing serious noncommunicable diseases.

Most people consume too much sodium through salt (corresponding to consuming an average of 9–12 g of salt per day) and not enough potassium (less than 3.5 g). High sodium intake and insufficient potassium intake contribute to high blood pressure, which in turn increases the risk of heart disease and stroke.

In 2016, more than 1.9 billion adults, 18 years and older, were overweight. Of these over 650 million were obese.

In 2016, 39% of adults aged 18 years and over were overweight, and 13% were obese.

Over 340 million children and adolescents aged 5–19 are overweight or obese in 2016.

## 4.3 The importance of having healthy dietary habits

Eating a variety of food and consuming less salt, sugars and saturated and industrially-produced trans-fats are essential for a healthy diet.

Obesity in adulthood is a major risk factor for the world's leading causes of poor health and early death including cardiovascular disease, diabetes, cancers and osteoarthritis. Preventing obesity has direct benefits for children's health and wellbeing, in childhood and continuing into adulthood [7].

It is essential to guarantee food consumption that is adequate to the nutritional needs and energy expenditure of each child and adolescent. Opting for a balanced, adequate and varied diet is an important step towards a happy and healthy lifestyle.

Vitamins and minerals in the diet are vital to boost immunity and healthy development.

An individual with healthy dietary habits tends to be more confident, with a better self-esteem. When inadequate and chronic, eating behaviours contribute to the development of chronic diseases, such as hypertension, obesity, type 2 diabetes, dyslipidemia and cardiovascular diseases. Food and nutrition education is an important process to implement healthy options [7].

Healthy dietary habits can also contribute to an adequate body weight. Eating behaviours are acquired at young ages and tend to persist into adulthood.



## 4.4 Dietary habits guidelines

### A healthy diet includes the following:

Fruit, vegetables, legumes (e.g. lentils and beans), nuts and whole grains (e.g. unprocessed maize, millet, oats and brown rice).

At least 400 g (i.e. five portions) of fruit and vegetables per day, excluding potatoes, sweet potatoes and other starchy roots.

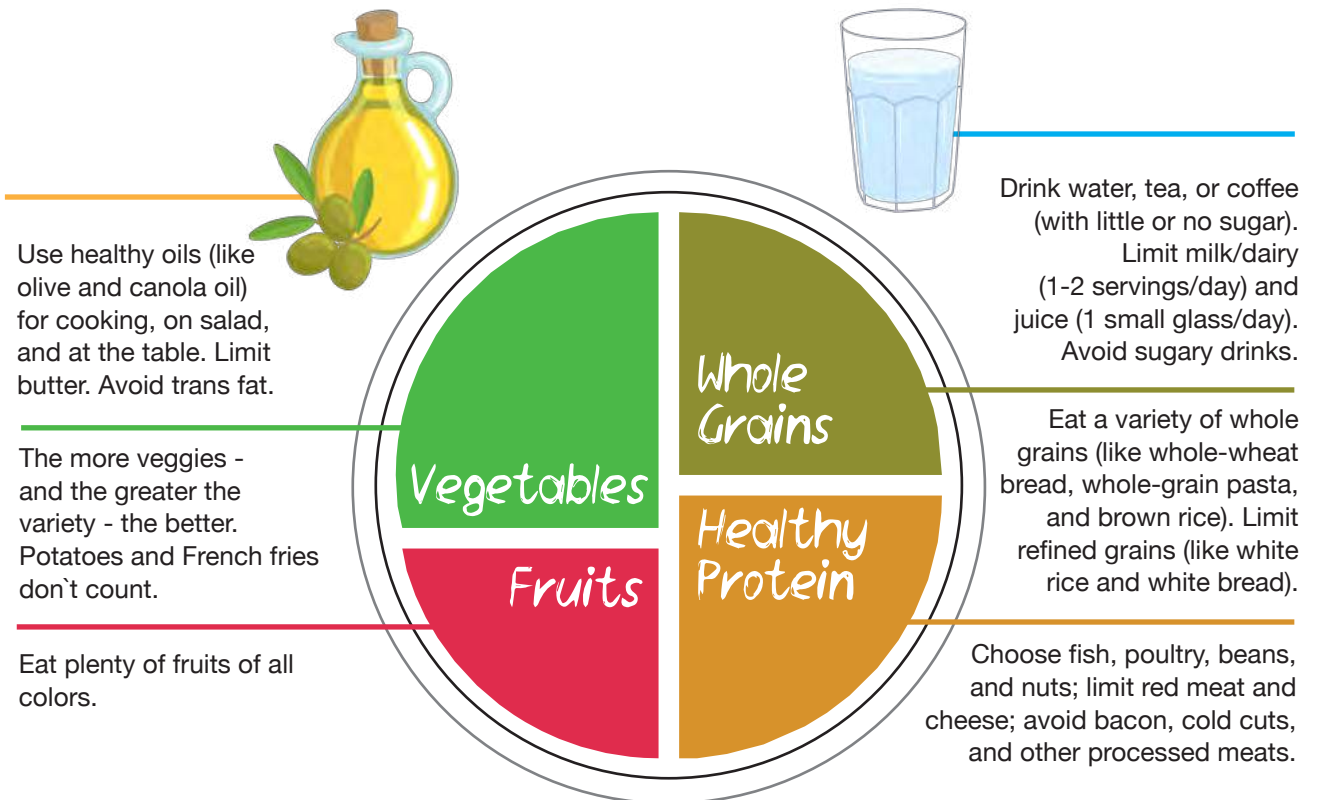
Less than 30% of total energy intake comes from fat. Unsaturated fats (found in fish, avocado and nuts, and in sunflower, soybean, canola and olive oils) are preferable to saturated fats (found in fatty meat, butter, palm and coconut oil, cream, cheese, ghee and lard) and trans-fats of all kinds. It is suggested that the intake of saturated fats be reduced to less than 10% of total energy intake and trans-fats to less than 1% of total energy intake. In particular, industrially-produced trans-fats are not part of a healthy diet and should be avoided.

Less than 10% of total energy intake from free sugars, which is equivalent to 50 g (or about 12 level teaspoons) for a person of healthy body weight consuming about 2000 calories per day, but ideally is less than 5% of total energy intake for additional health benefits. Free sugars are all sugars added to foods or drinks by the manufacturer, cook or consumer, as well as sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates [8].

Less than 5g of salt (equivalent to about one teaspoon) per day. Salt should be iodized [9].

Drink water regularly along the day. Remember that more should be consumed in hot climates and due to sickness or exercise.

## Healthy Eating Plate





## 4.5 Practical strategies to have good dietary habits

- Eat and provide a nutritious diet based on a variety of foods originating mainly from plants, rather than animals.
- Pay attention to portion size and ingredients.
- Eat and provide a variety of vegetables and fruits, several times per day (at least 400g per day or 5 items) and include it on children's and your snacks.
- Plan food shopping and avoid going shopping hungry.
- Involve your children in food shopping and preparing meals.
- Encourage your children to eat slowly.
- Eat and provide meals together as a family as often as possible.
- Encourage your children to drink water regularly.
- Control fat intake (not more than 30% of daily energy) and replace most saturated fats with unsaturated vegetable oils or soft margarines.
- Don't completely deprive yourself or children/adolescents of the foods that you love.
- Avoid eating sweets and drinking soft drinks.
- Choose a low-salt diet. Total salt intake should not be more than one teaspoon (6g) per day, including the salt in bread and processed, cured and preserved foods.
- Avoid the number of times you go to fast food restaurants.
- Avoid eating immediately before main meals.
- At main meals seek to have a dish with varied colours and macronutrients.

5

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PHYSICAL  
EDUCATION

# 5.1 What is Physical Education?

**Is a subject area in the school context that plays an important and unique role in educating and in promoting an active and healthy lifestyle among children and adolescents.**

## Physical Education

**All students should have access to quality physical education experiences, meaning:**

## Quality Physical Education

**To prepare children and adolescents for a lifetime of physical activity and engage them in physical activities. In Physical Education, students learn to enjoy physical activities and that's where teachers, knowing their students closely, can organize activities and appropriate learning processes, tailored to their individual needs [1, 3, 4].**

## Physical Education's aim

**The school, through Physical Education, is the place where all children and young people are, where the child's education process is guided by validated criteria by qualified teachers with accredited scientific and pedagogical training, engaged in continuous professional development, to provide adequate and inclusive learning and development experiences.**

“Physical education is the most effective means of providing all children and youth with the skills, attitudes, values, knowledge and understanding for lifelong participation in society.”  
The Declaration of Berlin 2013 – UNESCO’s World Sports Ministers Conference (MINEPS V) [9]

“The planned, progressive, inclusive learning experience that forms part of the curriculum in early years, primary and secondary education. In this respect, quality physical education acts as the foundation for a lifelong engagement in physical activity and sport. The learning experience offered to children and young people through physical education lessons should be developmentally appropriate to help them acquire the psychomotor skills, cognitive understanding, and social and emotional skills they need to lead a physically active life”.  
(UNESCO) [9]

“Physical Education is like building a house: each exercise, drill or game represents one brick that the teacher puts down on another to set up a wall making sure that all stones are interlinked to be solid; there is a wall for each school year, and the house is finished when the roof is fixed at the end of compulsory education. The house should be ready for lifelong use.” [7]

## 5.2 Physical Education benefits

Physical education has many benefits [1, 6, 9, 10, 11, 12, 13, 14, 15, 20, 21]:

- 1 Promotes physical, social, affective and cognitive benefits;
- 2 Is a privileged way to develop physical literacy;
- 3 Is the only curriculum subject whose focus combines the body and physical competence with values-based learning and communication, providing a learning gateway to grow the skills required for success in the 21st Century;
- 4 Regular participation in quality physical education and other forms of physical activity can improve a child's attention span, enhance their cognitive control and speed up their cognitive processing;
- 5 Is a worthwhile investment in education that may lead to improvements in cognition and academic performance;
- 6 Is the entry-point for lifelong participation in physical activity. Globally, many of the major causes of death connect to non-communicable diseases (NCDs) associated with physical inactivity.
- 7 Is a developmentally appropriate and inclusiveway to develop motor skills, motor competenceand pysical fitness, raising physical capacities;
- 8 Worldwide, attending physical education classes was positively associated with physical activity participation among adolescents regardless or sex or age group;
- 9 It allows a multilateral and harmonious development, through the practice of sporting physical activities, expressive physical activities and physical activities exploring the nature;
- 10 Promotes sociability because it is always done with others;
- 11 Promote pleasure for the regular practice of physical activities and ensure the understanding of its importance as a health factor and component of culture, in the individual and social dimension;
- 12 It is a context of social inclusion: is a platform for inclusion in wider society, particularly in terms of challenging stigma and overcoming stereotypes.



## 5.3 Recommendations for Physical Education in schools

**There are several important recommendations for Physical Education in schools [9, 21,22, 23] and that parents should be aware. Some of them are:**

From birth and during early childhood, Physical Education should include daily active play, enjoyable games, and sports aiming to develop core neuromotor skills, physical, psychological, and social attributes. In primary and secondary education, Physical Education should include a broad variety of different games, dance, sports, and physical exercises. Physical Education should be fun, enjoyable, motivating and bring novelty to maximise children's willingness and desire to learn and participate.

The Physical Education curriculum content should include physical activities according to the human development phases considering the favourable periods that allow the full development of neuromotor abilities and skills.

The Physical Education curriculum should include health education concepts like personal and social wellbeing, health promotion, and healthy lifestyles from a broader perspective beyond the practice of physical activity and sport.

Everyone should be able to participate in Physical Education and extracurricular activities through inclusive, differentiated and adapted methodologies and activities, especially less active and less skilled children.

Worldwide, several documents have identified huge differences between countries regarding the minimum taught time in Physical Education. Thus, the minimum Physical Education taught time recommended during the compulsory education period should be increased to at least 5 lessons per week (~ 5 hours).

Physical Education is a necessary part of school curriculum, and exemptions should only be granted in extraordinary circumstances.

Qualified and specialised Physical Education teachers should be preferred at all educational levels. When not possible, as a minimum, qualified Physical Education teachers or certified coaches should consult and support general teachers.





# 5.4 Practical strategies for parents to support Physical Education

Parents have a decisive role in ensuring quality Physical Education for their children [10]. They can influence children's activity in two ways:



1

by being a role model and adopting and maintaining an active and healthy lifestyle.

2

by providing encouragement (e.g. verbal motivation) to their children/adolescents to actively learn and participate in physical education classes and for leading an active lifestyle.

Parents should [9]:

- Encourage children to be competent in the Physical Education area;
- Ensure Physical Education is a core part of school curricula;
- Demand and ensure the quality of the Physical Education facilities in which it is developed;
- Demand and ensure the qualification and quality of Physical Education teachers;
- Know the purposes and objectives of Physical Education curriculum programs;
- Help students continue to build their fitness skills at home continuing what is done in part of Physical Education the classes;
- Pledge support for school community-sport partnerships.



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