

MINISTRY OF HEALTH OF BRAZIL

PHYSICAL ACTIVITY GUIDELINES FOR THE BRAZILIAN POPULATION



Brasília – DF
2021

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2021 Ministry of Health of Brazil.



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<http://bvsm.s.saude.gov.br>

Original title in Portuguese: Guia de Atividade Física para a População Brasileira

Copies printed: 1st edition – 2021 – electronic version

Elaboration, distribution, and information:

MINISTRY OF HEALTH OF BRAZIL
Secretariat of Primary Health Care
Health Promotion Department
General Coordination of Physical Activity Promotion and Intersectoral Actions
Esplanada dos Ministérios, bloco G,
Edifício Anexo, ala B, 4º andar
CEP: 70058-900 – Brasília/DF
Site: <http://aps.saude.gov.br>

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Catalog Card

Brazil. Ministry of Health of Brazil. Secretariat of Primary Health Care. Health Promotion Department.

Physical Activity Guidelines for the Brazilian Population [electronic resource] / Ministry of Health of Brazil, Secretariat of Primary Health Care.

Health Promotion Department. – Brasília: Ministry of Health of Brazil, 2021.

63 p.: il.

Translation of: Guia de Atividade Física para a População Brasileira

Access: World Wide Web: http://bvsm.s.saude.gov.br/bvs/publicacoes/physical_activity_guidelines_brazilian_population.pdf

ISBN 978-65-5993-035-7

1. Physical Activity. 2. Health Promotion. 3. Health Care (Public Health). I. Title.

CDU 616.39

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INTRODUCTION

Physical activity is important for human development, can be practiced by people of all ages and can take place in various domains, such as going from one place to another, at work or school, while doing household chores or during leisure time. Exercise is one example of physical activity, that requires planning, structuring and repetition, aimed at improving or maintaining physical fitness and adequate body weight, as well as it requires prescription by a professional. Therefore, every exercise is a physical activity, but not every physical activity fulfills the definition of exercise.

The sooner physical activity is encouraged to become part of our life, the greater the benefits for our health. Some of these benefits are weight control; reduced risk of developing some types of cancers and chronic diseases such as diabetes (high blood sugar levels), high blood pressure and heart diseases; improvement on liveliness; and the promotion of social interaction.

Over the past years, there have been several advances in physical activity surveillance, research and policy in Brazil. However, a high proportion of the population remains physically inactive, i.e. does not achieve the recommended levels of physical activity to obtain health benefits.

Although the Health Sector has a crucial role in the promotion of physical activity, the involvement of other sectors is also key to increase physical activity levels of the Brazilian population. Therefore, this document aims to subsidize professionals working at the Unified Health System and in other sectors to include the promotion of physical activity in their agendas, thus converging intersectoral efforts to prompt the Brazilian population for being more active.

The Physical Activity Guidelines for the Brazilian Population brings the first recommendations from the Ministry of Health about how much physical activity should be practiced by each group of the Brazilian population to obtain health benefits and improve quality of life through physical activity.

These Guidelines present physical activity recommendations for all ages – children 0-5 years, youth 6-17 years, adult and elderly individuals – and for people with some conditions, such as pregnant women and people with disabilities. There is also a special chapter on Physical Education at school and an opening chapter on the concepts of physical activity, exercise, sedentary behavior, and other relevant definitions.

This document is directed to the Brazilian population with a focus on health promotion through physical activity. In order to know the physical activity recommendations, it is necessary to read Chapter 1 – Understanding Physical Activity - and the Chapter that is designed for your age group or condition.

During the preparation of these Guidelines, the scientific literature was screened, and the scientific committee dialogued with specialists and member of the public. Also, a formal online open consultation was conducted, to get suggestions from experts and from the lay public. The final version therefore represents up-to-date scientific evidence complemented with suggestions from the Brazilian society.

Ministry of Health of Brazil



UNDERSTANDING PHYSICAL ACTIVITY

Physical activity is important for our lives. It can be done by all of us regardless of our age. But what is physical activity?

Physical activity is a behavior that involves voluntary body movements with levels of energy expenditure above the levels of rest and that promotes social and environmental interactions. It may happen during leisure time, while in transport from one place to another, at work or school, and during household chores.

Examples include: walking, running, cycling, playing, going upstairs, carrying objects, dancing, cleaning our homes, walking our pets, growing crops, gardening, and practicing sports, martial arts, gymnastics, yoga and so on.

Physical activity is part of our daily lives and it brings us several benefits such as weight control, improvements in your quality of life, your mood, your liveliness and your social and environmental interactions.

You can practice physical activity in four domains: in your leisure time, while in transport from one place to another, at work or at school, or during your household chores.

Leisure time physical activity is practiced during your spare time, and should be based on your personal preferences and opportunities. You may walk, run, fly a kite, dance, swim, go trekking, cycling or surfing, skip rope, play soccer, volleyball, basketball, bocce, tennis, shuttlecock, stickball, fresco, practice gymnastics, weight training, water aerobics, martial arts, capoeira, yoga or engage in active games such as hide and seek, playing catch, Chinese jump rope, dodgeball and so on.

Transport-related physical activity is practiced when you actively travel from one place to another. You may walk, wheel, cycle, row, skate, ride on horseback or on a scooter and so on.

Physical activity at work or at school is practiced during work hours or during educational activities in order to carry out your job or study roles. You may cultivate crops, clear off the land, harvest, walk, run, cycle, clean up, sweep the floor, wash stuff, milk, carry objects, engage in physical education activities, play during recreation or class breaks and also before and after class and so on.



Physical activity during household chores is practiced when taking care of our homes and our families. You may take care of plants, mow your lawn, go shopping, bathe the child, the elder, the person that requires care or the pet, sweep the floor, mop or wash it and so on.

Bear in mind that practicing any physical activity at the time and place that is possible is better than doing nothing. Physical activity is important for your life. You can obtain health benefits even when you practice little amounts of physical activity.

○ DID YOU KNOW THAT PHYSICAL ACTIVITIES CAN BE PRACTICED IN DIFFERENT INTENSITIES?

Intensity is the degree of physical effort that is necessary to practice a physical activity. Usually, the higher the intensity is, the higher is the increase of heart and respiratory rates, energy expenditure and perceived effort.

In order to know the intensity of the physical activity you are engaged in, pay attention to how you feel. The intensity can be:

Light: takes minimum effort and causes little respiratory and heart rate increases. On a scale of 0 to 10 the perceived effort is from 1 to 4. You will be able to breathe calmly and talk normally while you move and you may even sing a song.

Moderate: takes more physical effort, which makes you breathe faster than normal and moderately increases your heartbeats. On a scale of 0 to 10 the perceived effort is around 5 and 6. You will be able to talk with some difficulty while you move and you will not be able to sing.

Vigorous: takes great physical effort, which makes you breathe faster than normal and largely increases your heartbeats. On a scale of 0 to 10 the perceived effort is around 7 and 8. You will not be able to talk while you move.



○ WARNING! DID YOU KNOW THAT THERE IS A DIFFERENCE BETWEEN PHYSICAL ACTIVITY AND EXERCISE?

Every exercise is a physical activity but not every physical activity is an exercise. That is: exercise is a type of planned, structured and repetitive physical activity that aims to improve or maintain physical capacities and adequate weight.

○ UNDERSTAND WHAT THE PHYSICAL CAPACITIES ARE AND HOW THEY RELATE TO YOUR HEALTH.

Physical capacities help you control your weight, maintain strong muscles, a healthy heart, improve your daily activities and prevent diseases. They are:

- **CARDIORESPIRATORY FITNESS:** the capacity that helps you to move or do daily activities without being tired.
- **STRENGTH:** the capacity that helps you carry grocery bags or some object.
- **FLEXIBILITY:** the capacity that helps you get dressed or squat in order to pick up some object from the floor without difficulties.
- **BALANCE:** the capacity that helps you maintain your posture and sustain your body.

○ WHAT ABOUT SEDENTARY BEHAVIOR? DO YOU KNOW WHAT IT IS?

Sedentary behaviors are activities that are done when you are awake sitting, reclining or lying down and spending little amounts of energy. For example: when you are in some of these positions in order to use your cell phone, computer, tablet, video game and watch television or classes, perform manual labors, play cards or board games, in a car, bus or subway.

Avoid engaging in sedentary behavior. Whenever possible, reduce the amount of time that you remain seated or lied down watching television or using your cell phone, computer, tablet or video game. For example: after one hour, move yourself for at least 5 minutes, changing your body position in order to stand up, go to the bathroom, drink some water and stretch your body. These are small actions that can help diminish your sedentary behavior and improve your quality of life.

○ WHOM CAN YOU PRACTICE PHYSICAL ACTIVITY WITH?

You can practice physical activity by yourself or accompanied. Do as you prefer.

Most sports and games are done with others! Take the time to call friends, family members, neighbors or your coworkers!

Family gatherings can also be an opportunity to practice physical activity such as sports, walking your pets, go cycling and practice activities in nature. Or in household chores getting help from family members, be it washing the dishes, taking out the trash, helping to clean up the space or cooking.

Coworkers can also be good companions for physical activity, through active commuting, through work-related activity and also through leisure time physical activity. Taking a walk is always appreciated in order to have an active routine.

Being physically active is safe but in rare cases we must pay attention! Pay attention to some signs and symptoms: if you feel nauseous, pain, dizziness, excessive sweat or other discomforts, stop the physical activity. Seek a health professional in order to check if everything is OK. Respect your limits!

It is important to remember that physical activity does not depend solely on a personal decision. There are several individual, collective, environmental, cultural, economic and political factors that facilitate or hinder a more active lifestyle. Have you ever considered how these factors affect you and your community?

Talk to people about these issues and seek your representatives from the city hall or the state's government – such as city councilors, representatives, people responsible for municipal or state health, sports or leisure secretaries, among others – in order to know how the community can turn your specific locality into a more favorable environment for physical activity.

In these Guidelines you will find several tips to make physical activity part of your routine in order to have a healthier life.

PHYSICAL ACTIVITY FOR CHILDREN UP TO 5 YEARS OLD

In this chapter you will find information about physical activity that is suited for children, from their birth until they are five years old. You will learn ways of making the children's routine physically active, joyful and full of experiences! But it is important to highlight that before you start this chapter you should read [Chapter 1 - Understanding Physical Activity](#).

If the child is already going to school, the proper information about physical education can be found in [Chapter 6](#). If you are responsible for a child with disabilities, you may find more specific information in [Chapter 8](#).

○ WHY SHOULD CHILDREN PRACTICE PHYSICAL ACTIVITY?

Physical activity is important for all children, including babies.

Healthy growth and development are the main benefits of physical activity during childhood but it also:

- Helps maintaining adequate weight and diminishing the risk of obesity;
- Improves the quality of sleep;
- Helps motor coordination;
- Improves cognitive functions and learning readiness;
- Helps in the integration and development of psychological and social skills;
- Contributes for healthy muscle and bone growth;
- Improves heart health and physical condition.



Besides, children who are physically active tend to maintain the practice of physical activity throughout their lives.



FOR HOW LONG SHOULD CHILDREN ENGAGE IN PHYSICAL ACTIVITY?

Children up to 1-year-old: at least 30 minutes per day with their bellies faced down. The time can be distributed throughout the day;

Children between 1 and 2 years old: at least 3 hours per day of physical activities of any intensity. The time can be distributed throughout the day;

Children between 3 and 5 years old: at least three hours per day of physical activities of any intensity. This includes at least 1 hour of moderate to vigorous-intensity that can be accumulated throughout the day.

The more physically active, the healthier you are!

○ WHICH PHYSICAL ACTIVITIES CAN CHILDREN PRACTICE?

For children, physical activity is practiced mainly through games or more structured activities such as attending sport schools and physical education classes.

These physical activities should be joyful, safe, supervised by parents or guardians and teachers and should be adequate to the child's age. Aside from bringing more satisfaction to the child, this care prevents accidents.

○ EXAMPLES OF PHYSICAL ACTIVITIES FOR BABIES AND CHILDREN MAY BE:

Children up to 1-year-old: games involving activities that require the child to stay faced down or seated while moving their arms and legs and that stimulate the child to reach, hold, pull, push, crawl, roll, balance themselves with or without support, sit and stand and so on;

Children between 1 and 2 years old: games that involve activities such as balancing themselves on both feet, balancing on just one foot, crawling, walking, running, jumping, climbing, tossing, bouncing and holding and so on;



Children between 3 and 5 five years old: games that involve activities such as walking, running, twisting, kicking, tossing, jumping and walking or climbing on objects and so. At this age, physical activity can also be done during the school's physical education classes, swimming classes, gymnastics, martial arts, dances and sports or even through active transport from one place to another, such as walking or cycling, always accompanied by parents or guardians.



It is important that children are physically active in several moments throughout the day, being part of different movement experiences suited to their development phase and according to their capabilities.

Warning! Accidents in pools, lakes and at sea are common. That is why it is recommended that the child learn how to swim, float, dive and adapt to the aquatic environment. Furthermore, physical activities in liquid environments can be a lot of fun and offer children many opportunities of learning and joyfulness.

○ GUIDELINES TO HELP CHILDREN ENGAGE IN PHYSICAL ACTIVITY

Children should be physically active and get involved in games on several moments throughout the day and on every day of the week. They can be physically active inside their homes, joining activities with their relatives, especially if it is not possible to practice outdoor activities.

Going from home to school or daycare by walking or cycling, with parents and guardians or even a caregiver, may be a good way of including movement in the child's life.

Parents and guardians or caregiver support is essential so that the children engage in games and other forms of physical activities that stimulate responsibility and autonomy. You should keep in mind that it is not necessary to have resources or special installations in order to encourage the children's involvement in some form of physical activity.

Music can be a powerful ally in promoting physically active habits. That is why you should encourage babies and children to move while they sing or play with musical instruments. That can also be achieved through movements that generate sounds such as clapping the hands or stomping the feet.

Children older than 6 months must drink water before, during and after the practice of physical activity. In order to know more about adequate and healthy eating, check out the [Dietary Guidelines for Brazilian Children Under 2 Years of Age](#) and the [Dietary Guidelines for the Brazilian Population](#).

Children learn through playing, mostly with other children. That is why teachers should include movement as part of their school activities' routines, along with active regional games and games in general.

When parents and guardians engage in physical activity with their children they stimulate these children to be physically active and thus enjoy every benefit that physical activity can provide.

○ HOW TO REDUCE SEDENTARY BEHAVIOR AMONG CHILDREN?

Time spent using cell phones, computers, tablets, video games or watching television should be drastically reduced for children.

Up to 1-year-old it is not recommended to interact with these devices at all. Children between 1 and 5 years old can interact with these devices but only up to 1 hour per day. But you should keep in mind that the less time spent engaging in sedentary behavior, the better!

Replacing sedentary behavior with physical activities should be encouraged. When engaging in sedentary behavior is inevitable, encourage the children to perform cultural and educational activities such as painting, drawing, playing with building blocks, puzzles and perform storytelling while moving.

Diminishing time spent interacting with cell phones, computers, tablets, video games and television helps to maintain adequate weight, improves motor and cognitive development and also improves the development of social skills.

It is also important to highlight that babies and children should not stay for more than 1 hour straight in strollers, baby seats and cradles.

SUPPORTING NETWORK

If you have any doubts or need any assistance to include movements, games and play in a child's routine, here are some suggestions:

The [Child Booklet](#) brings several guidelines regarding the care and the health of the children. Some Primary Health Care Units also offer physical activity programs for children's routine. Get in touch with the health professionals in the nearest Primary Health Care Unit.

Some public programs such as [Programa Academia da Saúde](#), [Programa Saúde na Escola](#), [Segundo Tempo and Esporte e Lazer na Cidade](#), as well as actions like “closed streets” or “leisure streets” encourage the practice of physical activity.

Talk to health professionals and teachers in order to know if there are such initiatives in your neighborhood;

Many universities, colleges and institutions of the “Sistema S” (SESC, SESI, SEST/SENAT and SENAC) also offer physical activity programs for their communities. You can check the nearest institution.

Talk to your child's teacher, whether he or she goes to school or daycare;

Talk to the school or daycare physical education teacher, as well as the coaches in sports schools or community programs for physical activity in your neighborhood.

PHYSICAL ACTIVITY FOR CHILDREN AND YOUTH FROM 6 TO 17 YEARS OLD

In this chapter you will find information about physical activity for children and youth between 6 and 17 years old. Before you start reading this chapter it is important to highlight that you should also read [Chapter 1 - Understanding Physical Activity](#).

Information about school physical education can be found in [Chapter 6](#). Specific information about physical activity for children or youth with disabilities can be found in [Chapter 8](#).

○ WHY SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

You can have many benefits from practicing physical activity, such as:

- **Promoting your human development and well-being, which helps you to enjoy a more fulfilling and better quality of life;**
- **Improving your socialization skills;**
- **Improving your heart's health and physical condition;**
- **Developing your motor skills, such as running, jumping and throwing;**
- **Improving your mood and reducing feelings of stress and symptoms of anxiety and depression;**
- **Helping you achieve a better school performance;**
- **Achieving adequate weight control and diminishing obesity risk;**
- **Helping you adopt a healthier life through improvements such as better eating habits and reducing time engaged in sedentary behavior (i.e. interacting with cell phones, computers, tablets, video games and television).**



Furthermore, when you are physically active during childhood or adolescence you will have more chances of maintaining the practice of physical activity throughout your life.

FOR HOW LONG SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

You should practice physical activity for 60 minutes or more per day. Choose those activities that make your breathing and heartbeats increase. During such activities you will have some difficulty to talk while you move and you will not be able to sing.

As part of these 60 minutes per day, in at least 3 days per week, you should include activities that strengthen both muscles and bones and that involve movements such as: jumping (e.g., skipping rope), pulling or pushing (e.g., moving objects and weights or playing tug of war).

You can divide your practice of physical activity into small time blocks or do the entire 60 minutes per day at once. Do as you like and do as you can!

Try to practice physical activity in a regular manner and progressively increase the dedicated time per week for additional benefits to your health. When you are not able to practice the entire 60 minutes, try to perform the longer you can – every minute counts!

○ WHICH PHYSICAL ACTIVITIES CAN YOU PRACTICE?

In your leisure time: before or after your school activities, you should dedicate some time to engage in physical activity with friends, family or by yourself and you should choose activities that you like. You may walk, run, fly a kite, dance, swim, cycle, surf, play soccer, volleyball, basketball, bocce ball, tennis, shuttlecock, fresco, do gymnastics or martial arts, engage in games such as hide and seek, catch, skipping rope, Chinese jump rope, play dodgeball, stickball and so on.



At school: having a more active scholar routine is also a form of physical activity. Be sure to engage actively in your physical education classes. Talk to your teacher if you are having difficulties in some activities so that he or she can help you. Try to join some extracurricular physical activities before or after class if your school offers them. You may also play games that involve movement with your friends while you are on a break.

While in transport from one place to another:

whenever possible, move yourself - walking, cycling, skating or using a scooter. You can commute to school, to your internship, to the grocery store, to a friend's house, to the Primary Health Care Unit and to a unit of the Programa Academia da Saúde. Try to commute with your parents or guardians or even with friends or peers in order to have a safer and more pleasant experience.



During household chores: helping your family with some domestic tasks may help you become a more physically active person. Engage in activities to preserve your backyard or the public spaces of your condominium, such as: gardening, mowing, cleaning the bicycle, walking or washing the pets, taking out the trash and so on.

○ GUIDELINES FOR PRACTICING PHYSICAL ACTIVITY

For children and youth between 6 and 17 years old:

If you are not ready to act in accordance with the time recommendations for the practice of physical activity, do not give up and increase gradually both quantity and intensity. Keep in mind that doing any physical activity whenever and wherever possible is better than doing nothing.

It is never too late to start! Try different types of physical activity in order to find those you like the most!

You should state your willingness to practice physical activity and ask your family, friends and the physical education teacher for help.

Include physical activity in your daily routine! Do you remember that we already talked about this in [Chapter 1 - Understanding Physical Activity](#)? You can practice physical activity even when you are playing: run, jump, get out of the couch, practice some sports!



Try to find out with your parents or guardians which physical activity options your school or neighborhood may offer: check if there are any squares, sports courts or parks nearby, units of the Programa Academia da Saúde or sports schools.

When engaging in physical activity, if possible, wear light clothing and comfortable shoes.

During outdoor physical activities, use some form of protection such as caps, long sleeve shirts and sunscreen if possible.

You must drink water before, during and after engaging in physical activity. You must also have an adequate, healthy diet whenever possible. In order to learn more, check out the [Dietary Guidelines for the Brazilian Population](#).

Always inform your parents or guardians about what physical activity you will practice, where you will do it and which friends are joining you.

Invite your friends to practice some physical activity that you have learned or create some games yourself.

Actively engage in your physical education classes. They will help you to become physically active.

For parents and guardians:

In order for the child or adolescent to become physically active it is important that you present a variety of physical activities such as games, dances and sports so they can choose those with which they identify themselves the most.

If the child or adolescent does not know exactly how to practice some physical activity, you can help him or her by practicing with them.

Make sure you know the places in your community or neighborhood where you can take the child or adolescent to practice physical activity, such as squares, parks, playgrounds, sports courts, units of the Programa Academia da Saúde or sea shores.

Whenever you feel it is safe, encourage the child or adolescent to walk or to ride on a bicycle to school.

Try to find information on social media about groups that practice physical activity so that you can participate with the child or adolescent.

Supporting the child or adolescent by encouraging, stimulating and being an example is important in order for them to develop healthy habits, including practicing physical activity.

For physical education teachers:

Keep yourself active! You may be the example of a physically active person that encourages children and adolescents to adopt or maintain the practice of physical activity.

Show them a wide range of physical activities such as games, body practices, dances and sports and do so in a manner that is attractive to them.

Talk to the students' parents or guardians, suggesting which physical activities they may practice with the child or adolescent.

Try your best to show these Guidelines to your students during your classes. Explain to them how to use them, promote its activities and answer their questions. Also show these Guidelines to their parents or guardians, recommending them to read it.

○ HOW CAN YOU REDUCE SEDENTARY BEHAVIOR?

For children and youth between 6 and 17 years old:

Avoid too much time engaged in sedentary behavior. Whenever possible, reduce the time that you remain seated or lied down watching television or using the cell phone, computer, tablet or video game. For example: for every hour spent like this, try to move yourself for at least 5 minutes, changing your body position in order to stand up, go to the bathroom, drink some water and stretch your body. These are small actions that can help diminish your sedentary behavior and improve your quality life.

Create a routine for your daily activities, organizing your time according to moments dedicated to study, physical activity, relaxing, eating and sleeping.



For parents or guardians:

Encourage the child or adolescent to reduce the time engaged in sedentary behavior.

Whenever possible, set a 2 hour per day time limit for the child or adolescent to interact with computers, cell phones, tablets, video games and television. Encourage them to substitute part of this time engaged in sedentary behavior with the practice of physical activities.

Encourage the child or adolescent to play electronic games that involve movements.

Encourage the child or adolescent to move every one hour when they're doing their homework.

Talk to the child or adolescent about the importance of organizing their time and help them to reserve moments for studying, practicing physical activity, relaxing, eating and sleeping.

For physical education teachers:

Talk to the school community in order to, whenever possible, develop physical activities that stimulate students to reduce the time engaged in sedentary behavior during school activities.

Inform your peers about these Guidelines and suggest that the theme should be included in the political-pedagogical project of your school.

○ ADDITIONAL INFORMATION

Having a physically active day is very safe. Concerns about injuries or health problems should not stop you from practicing physical activity.

If you have any injuries or feel any abnormal discomfort, look for a health professional or for the Primary Health Care Unit that is nearest to you.

If you are overweight, start with activities that are more pleasant to you and that are of light-intensity and of minor duration. You should progressively increase the intensity and duration. Respect your limits.

If you have diabetes (i.e. high blood sugar levels), ask your parents or guardians to pay attention to those levels, especially when you are practicing a more vigorous-intensity physical activity. In order to avoid hypoglycemia (i.e. low blood sugar levels), your parents or guardians will need to adjust your dose of insulin and diet while you are doing physical activity. Practicing physical activity helps regulate your blood sugar levels.

If you have asthma, you may engage in all physical activities that are recommended by health professionals. Avoid practicing them if you are having an asthma attack, especially those that are more intense and during cold, dry days.

You should also remember that an adequate sleep and a healthy, adequate diet are also important for practicing physical activity.

If you, your parents or guardians have any other questions about the practice of physical activity and chronic diseases, look for a health professional or go to the nearest Primary Care Health Unit.

○ SUPPORTING NETWORK

If you have any doubts or need any assistance to include movements, games and play in a child's routine, here are some suggestions:

Look for the nearest Primary Health Care Unit, since many of them offer physical activity programs;

Some public programs such as [Programa Academia da Saúde](#), [Programa Saúde na Escola](#), [Segundo Tempo](#) and [Esporte e Lazer na Cidade](#), as well as actions like “closed streets” or “leisure streets” encourage the practice of physical activity.

Talk to your parents or guardians or with your teachers in order to know if your school and neighborhood engage in such initiatives;

Many universities, colleges and institutions of the “Sistema S” (SESC, SESI, SEST/SENAT and SENAC) also offer physical activity programs for their communities. You can check the nearest institution.

Check out if your school opens on weekends so that you can use its space to practice physical activity with the people from your community;

Your study or internship place may offer structures that support active commuting, such as: bicycle parking racks, as well as locker rooms for taking showers and changing clothes.

PHYSICAL ACTIVITY FOR ADULTS

In this chapter you will find information about physical activity for adults. But it is important to highlight that, before you start reading this chapter, you should read [Chapter 1 - Understanding Physical Activity](#).

Specific information about physical activity for adults with disabilities can be found in [Chapter 8](#).

○ WHY SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

You can have many benefits from practicing physical activity, such as:

- Promoting your human development and wellbeing, which helps you to enjoy a more fulfilling and better quality of life;
- Preventing and reducing mortality by several chronic diseases such as high blood pressure, diabetes (high blood sugar levels), heart diseases and some types of cancer (breast, stomach and intestinal);
- Helping weight control, which improves not just your health but also your relationship with your body;
- Reducing symptoms of asthma;
- Reducing the overall usage of medicine;
- Reducing stress and symptoms of anxiety and depression;
- Improving your sleep;
- Promoting pleasure, relaxation, enjoyment and liveliness;
- Helping social inclusion, creating and strengthening social relationships, bonds and solidarity;
- Remembering and keeping alive several aspects of the local culture.



FOR HOW LONG SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

If you prefer moderate-intensity physical activities, you should practice at least 150 minutes of physical activity per week.

When practicing moderate-intensity physical activities, you should be able to talk while moving but you will not be able to sing. Your breathing and heartbeats will increase moderately.

If you prefer vigorous-intensity physical activities, you should practice at least 75 minutes of physical activity per week.

When practicing vigorous-intensity physical activities, you will not even be able to talk. Your breathing will be much faster than normal and your heartbeats will increase a lot.

It is also possible to reach the weekly recommended amount of physical activity by combining moderate and vigorous activities.

As part of your weekly physical activities, be sure to include activities that strengthen both muscle and bones such as weight training and exercises with external overloads or with your own body weight, and practice them in at least 2 days of the week.

You can divide your practice of physical activity into small time blocks or do the entire 60 minutes per day at once. Do as you like and do as you can!

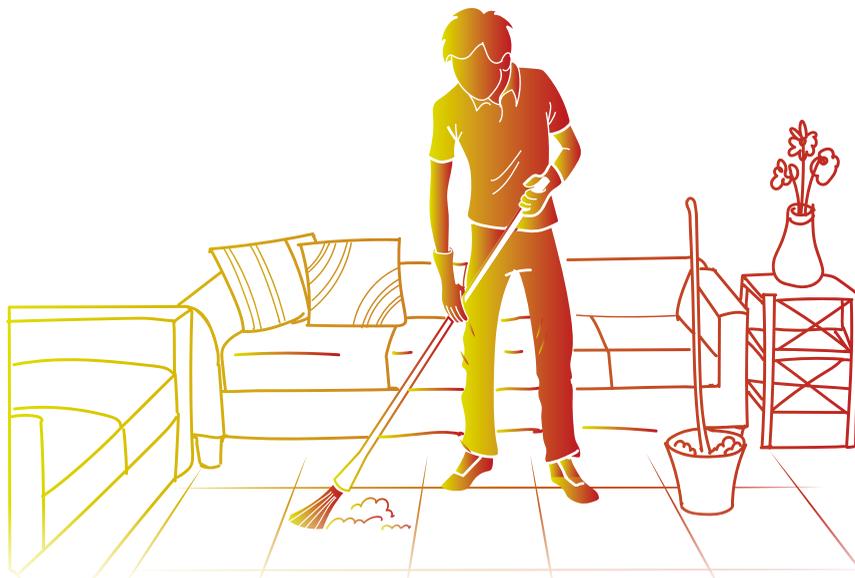
For additional health benefits, try to practice physical activity on a regular basis and progressively increase the weekly time of practice. Every minute counts!

○ WHICH PHYSICAL ACTIVITIES CAN YOU PRACTICE?

In your leisure time: dedicate some time to practice physical activities with friends, family or on your own, preferably doing the ones that you like. You may walk, run, dance, swim, cycle, surf, play soccer, volleyball, basketball, bocce, tennis, shuttlecock or fresco, do gymnastics, weight training, water aerobics, yoga or martial arts and so on.

While in transport from one place to another: whenever possible, move yourself - walking, cycling, skating or using a scooter. You can commute to school, to your internship, to the grocery store, to a friend's house, to the Primary Health Care and to the units of the Programa Academia da Saúde. Try to commute in the safest and most pleasant way possible.

At your work or school: having a more active routine is also a physical activity. In this case you may choose to take the stairs instead of the elevator. If your work or study place offers physical activity, engage in it or look for locations nearby that are suited for physical activity.



During household chores: you can practice physical activity by contributing during household chores. Engage in house tasks such as gardening, sweeping the floor, wiping, taking out the trash and mowing. Beyond that, you can also walk or wash your pet. Taking a stroll with the baby and playing active games with the children may also be an option.

○ GUIDELINES FOR PRACTICING PHYSICAL ACTIVITY

If you are not ready to meet the recommendations for the practice of physical activity, do not give up and increase gradually both quantity and intensity. Keep in mind that doing any physical activity, whenever and wherever possible, is better than doing nothing.

It is never too late to start! Try different types of physical activity to find those you like the most!

Include physical activity in your daily routine! Do you remember that we already talked about this in [Chapter 1 - Understanding Physical Activity?](#)

Planning a physical activity schedule is a good start. Identify spots in your routine that are better suited for the practice of physical activity.



There are spaces and equipment that enable the practice of physical activity in the community or neighborhood that you live in or visit frequently, such as squares, sport courts and parks, units of the Programa Academia da Saúde and sports schools.

Physical activity is incorporated in many popular, social and cultural movements. Are you aware of the ones in your community? They can help you to have an active life.

You have a big influence on your family! Children whose parents or guardians practice physical activity have greater chances of making a habit of it.

When engaging in physical activity, if possible, wear light clothing and comfortable shoes.

During outdoor physical activities, use some form of protection such as caps, long sleeve shirts and sunscreen if possible.

You must drink water before, during and after engaging in physical activity. You must also have an adequate, healthy diet whenever possible. In order to learn more, check out the [Dietary Guidelines for the Brazilian Population](#).

Everyone can practice physical activity and have health and life quality benefits. Respect your limits!

Sharing and learning games with your children, parents and grandparents can be a good opportunity to relive pleasant experiences, strengthen family bonds and practice physical activity.

○ HOW CAN YOU REDUCE SEDENTARY BEHAVIOR?

Avoid too much time engaged in sedentary behavior. Whenever possible, reduce the time that you remain seated or lied down watching television or using the cell phone, computer, tablet or video game. For example: for every hour spent like this, try to move yourself for at least 5 minutes and change your position in order to stand up, go to the bathroom, drink some water and stretch your body. These are small attitudes that can help diminish your sedentary behavior and improve your life quality.

If you spend too much time seated throughout the day, try to compensate for this behavior by dedicating more time to practice physical activity in your routine.

○ ADDITIONAL INFORMATION

Having a physically active day is very safe. Concerns about injuries or health problems should not stop you from practicing physical activity.

If you have any injuries or feel any abnormal discomfort, look for a health professional or for the Primary Health Care Unit that is nearest to you.

Pay attention if you have diabetes (high blood sugar level), especially when you engage in more vigorous-intensity physical activity. To avoid hyperglycemia (high blood sugar levels) or hypoglycemia (low blood sugar levels), you will need to adjust your insulin dose and your diet for the periods in which you are engaged in physical activity. Look for a health professional to help you.

If you have asthma, pay attention to situations that might trigger off allergies, such as dry weather and pool chlorine. Asthma medication, along with the type, the place and the time chosen to engage in physical activity, helps to alleviate the symptoms.

You should remember that adequate, healthy sleep and diet are important for the practicing physical activity.

If you have any doubts about the practice of physical activity and about chronic diseases, look for the nearest Primary Health Care unit.



○ SUPPORTING NETWORK

If you have any doubts or need any assistance to include physical activity in your routine, here are some suggestions:

Look for the nearest Primary Health Care unit because a lot of them offer programs and actions of physical activity.

Some public programs such as the [Programa Academia da Saúde](#), the [Programa Saúde na Escola](#), [Segundo Tempo](#) and [Esporte e Lazer na Cidade](#), as well as actions such as “closed streets” or “leisure streets” provide the practice of physical activity. Try to find out if your neighborhood has any of these or even other initiatives of the type.

Many universities, colleges and institutions of the “Sistema S” (Sesc, Sesi, Sest/Senat and Senac) also offer physical activity programs for their communities. You can also check out the nearest of these institutions.

Neighborhood and State Health, Sports, Leisure, Tourism, Culture, Social Assistance and Environment Secretaries often offer opportunities, having sports courts, walking tracks and other spaces dedicated to the practice of physical activity. Look for the available ones that are nearest to your home, your work or study place.

Your work or study place may offer structures that support active displacement, such as: bicycle parking racks, as well as locker rooms for taking showers and changing clothes.

PHYSICAL ACTIVITY FOR OLDER ADULTS

In this chapter you will find information about physical activity for older adults. But it is important to highlight that, before you start reading this chapter, you should read [Chapter 1 - Understanding Physical Activity](#).

Specific information about physical activity for older adults with disabilities can be found in [Chapter 8](#).

○ WHY SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

When you are physically active, you will find some changes in the quality of your life. Some will be noticed quicker than others. However, even those that you do not notice are important. Some of the benefits provided by these changes are:

- Promoting human development and well-being, which helps you enjoy a more fulfilling and better quality of life;
- Improving your social skills through the engagement in group activities;
- Increasing your energy, liveliness, autonomy and independence to carry out your daily activities;
- Reducing tiredness throughout the day;
- Improving your capacity to move and strengthening your muscles and bones;
- Reducing joint and back pain;
- Improving posture and balance;
- Reducing the risk of falling and having injuries;
- Improving the quality of your sleep;
- Improving your self-esteem and self-image;
- Helping control your body weight;
- Reducing symptoms of anxiety and depression;
- Helping to control high blood pressure;
- Reducing cholesterol and diabetes (high blood sugar levels);
- Reducing the risk of developing heart diseases and some types of cancer;
- Improving lung health and circulation;
- Helping to maintain your memory, attention, concentration, reasoning and focus;
- Reducing the risks of dementia such as Alzheimer's.



FOR HOW LONG SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

If you prefer moderate-intensity physical activities, you should practice at least 150 minutes of physical activity per week.

While practicing moderate-intensity physical activities, you should be able to talk with some difficulty while you move and you will not be able to sing. Your breathing and heartbeats will moderately increase.

If you prefer vigorous-intensity physical activities, you should practice at least 75 minutes of physical activity per week.

While practicing vigorous-intensity physical activities, you will not even be able to talk. Your breathing will be a lot faster than normal and your heartbeats will increase a lot.

It is also possible to reach the weekly recommended amount of physical activity by combining moderate and vigorous activities.

Activities that strengthen the main muscles (back, abdomen, arms and legs) and that improve balance should be done two to three times per week in alternate days. That way you will prevent risks of falling down and you will improve your capacity to perform your daily activities.

You can divide your practice of physical activity into small time blocks or do the entire 60 minutes per day at once. Do as you like and do as you can!

For additional health benefits, try to practice physical activity regularly and progressively increase the weekly time of practice. Every minute counts!

○ WHICH PHYSICAL ACTIVITIES CAN YOU PRACTICE?

In your leisure time: dedicate some time to practice physical activity with friends, family or by yourself and do what you like. You may walk, join oriented physical activity programs (weightlifting, water aerobics, functional training, pilates, yoga, stretching or dancing), active games (malha, exergames, bocce or snooker), sports (volleyball, shuttlecock, ping pong or field tennis) and so on.

While in transport from one place to another: whenever possible, move yourself - walking or cycling. You may commute to the grocery store, the mall, the drugstore, Primary Health Care Unit, churches or religious temples, a friend or relative's house and so on. Try to commute in the safest and most pleasant way possible.

At work: you may choose to take the stairs every once in a while or, better yet, be active when you are performing your duties, doing activities such as



gardening, watering, harvesting, fishing, cleaning, sweeping, going from one place to another. If your workplace offers physical activity, engage in it or look for nearby places that are suited for it.

During household chores: you become a physically active person when contributing with home and family related activities. Do activities such as sweeping, washing the dishes, washing and ironing clothes, organizing grocery shopping, gardening, walking the pets, pushing strollers and so on.

○ HOW CAN YOU PRACTICE PHYSICAL ACTIVITY?

If you do not yet meet the recommended time for physical activity, do not give up and increase gradually both quantity and intensity. Doing any physical activity, in the time and place that is possible, is better than doing nothing.

It is never too late to start! Try different types of physical activity to find those you like the most! Respect your limits when you choose your physical activity! It is important to remember that it is normal to feel a little bit of muscle pain after the first times practicing physical activity.

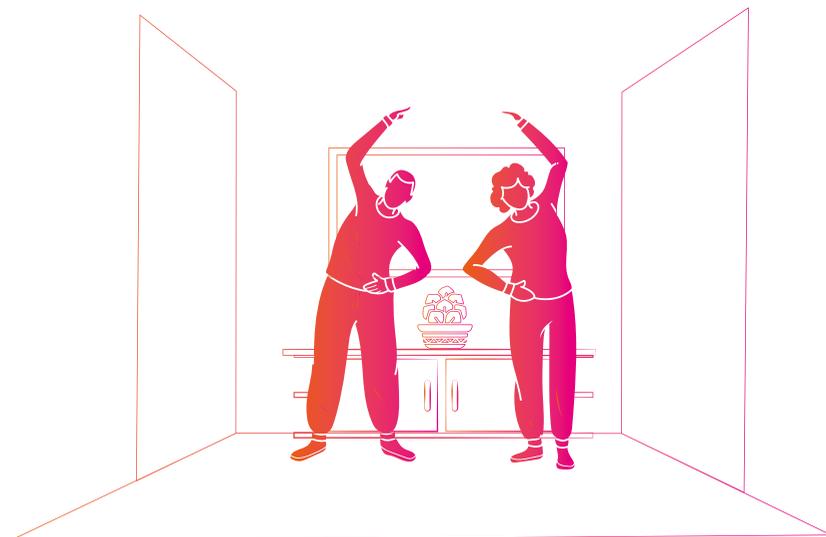
Include physical activity in your routine! Do you remember that we talked about this in [Chapter 1 - Understanding Physical Activity](#)? You can even practice many types of physical activities in your own house. Start with activities of lighter intensity such as slow walking, sitting in the couch or chair and standing up after it, making the bed, washing and wiping the dishes, ironing the clothes, taking care of plants and so on. That will help prevent muscle pain and discomforts and will provide a sense of safety and motivation to continue.

Planning a physical activity schedule is a good start. Identify spots in your routine that are better suited for the practice of physical activity.

There are spaces and equipment that enable the practice of physical activity in the community or neighborhood that you live in or visit frequently, such as squares, sport courts and parks, units of the Programa Academia da Saúde and sports schools.

Remember that you do not need to spend money to be physically active. Practice the activities that you are able to do.

Physical activity is incorporated in many popular, social and cultural movements. Are you aware of the ones in your community? They can help you to have an active life. If possible, you should use light clothing and comfortable shoes when practicing physical activity.



During outdoor physical activities, use some form of protection such as caps, long sleeve shirts and sunscreen if possible.

You must drink water before, during and after engaging in physical activity. You must also have an adequate, healthy diet whenever possible. In order to learn more, check out the [Dietary Guidelines for the Brazilian Population](#).

When physical activity becomes part of your routine, try to gradually progress. Try to increase your efforts by walking faster and during more days of the week, for example.

Try to practice physical activity in safe and lighted environments.

Avoid holding your breath when you practice physical activity. You should always breathe freely.

Share your daily physical activity experiences with other people. This may encourage them to begin or maintain their own practice. Practicing physical activity in groups can be more pleasant and joyful. Invite your friends and family.

○ HOW CAN YOU REDUCE SEDENTARY BEHAVIOR?

Avoid too much time engaged in sedentary behavior. Whenever possible, reduce the time that you remain seated or lied down watching television or using the cell phone, computer, tablet or video game. For example: for every hour spent like this, try to move yourself for at least 5 minutes, changing your body position in order to stand up, go to the bathroom, drink some water and stretch your body. These are small actions that can help reduce your sedentary behavior and improve your quality of life.

If you spend too much time seated throughout the day, try to compensate for this behavior by dedicating more time to have some physical activity in your routine.

○ ADDITIONAL INFORMATION

Having a physically active day is very safe. Concerns about injuries or health problems should not stop you from practicing physical activity.

If you have any injuries or feel any abnormal discomfort, look for a health professional or for the Primary Health Care Unit that is nearest to you.

Check if your feet have injuries before or after the practice of physical activity, observing if your socks or shoes have stains that might indicate some lesion. Blisters and rashes are common and may need special care. Also if you have any injuries or feel any abnormal discomfort, look for a health professional or for the Primary Health Care Unit that is nearest to you.

When you are seated or lied down, stand up slowly. This will help prevent you from dizziness, unbalance and falls.

In case you wear glasses, use crutches or hearing aids, do not forget to have them with you when practicing physical activity.

If you have high blood pressure, diabetes (high blood sugar levels), asthma or if you are overweight, start with short, light to moderate-intensity periods of physical activity. You should progressively increase both intensity and time. Respect your limits.

If you have high blood pressure and need medicine, keep the treatment and try to measure your pressure before any vigorous-intensity activity. That way, practicing physical activity may help to control your pressure and reduce your usage of medicine.

Pay attention if you have diabetes (high blood sugar level), especially when you engage in more vigorous-intensity physical activity. To avoid hyperglycemia (high blood sugar levels) or hypoglycemia (low blood sugar levels), you will need to adjust your insulin dosage and your diet during the periods in which you are engaged in physical activity. Look for a health professional to help you.

You should also remember that an adequate sleep and a healthy, adequate diet are also important for practicing physical activity.

If you have any questions about the practice of physical activity and about chronic diseases, look for the nearest Primary Health Care unit.

○ SUPPORTING NETWORK

If you have any questions or need any assistance to include physical activity in your routine, here are some suggestions:

The Centros de Convivência develop actions to promote active ageing;

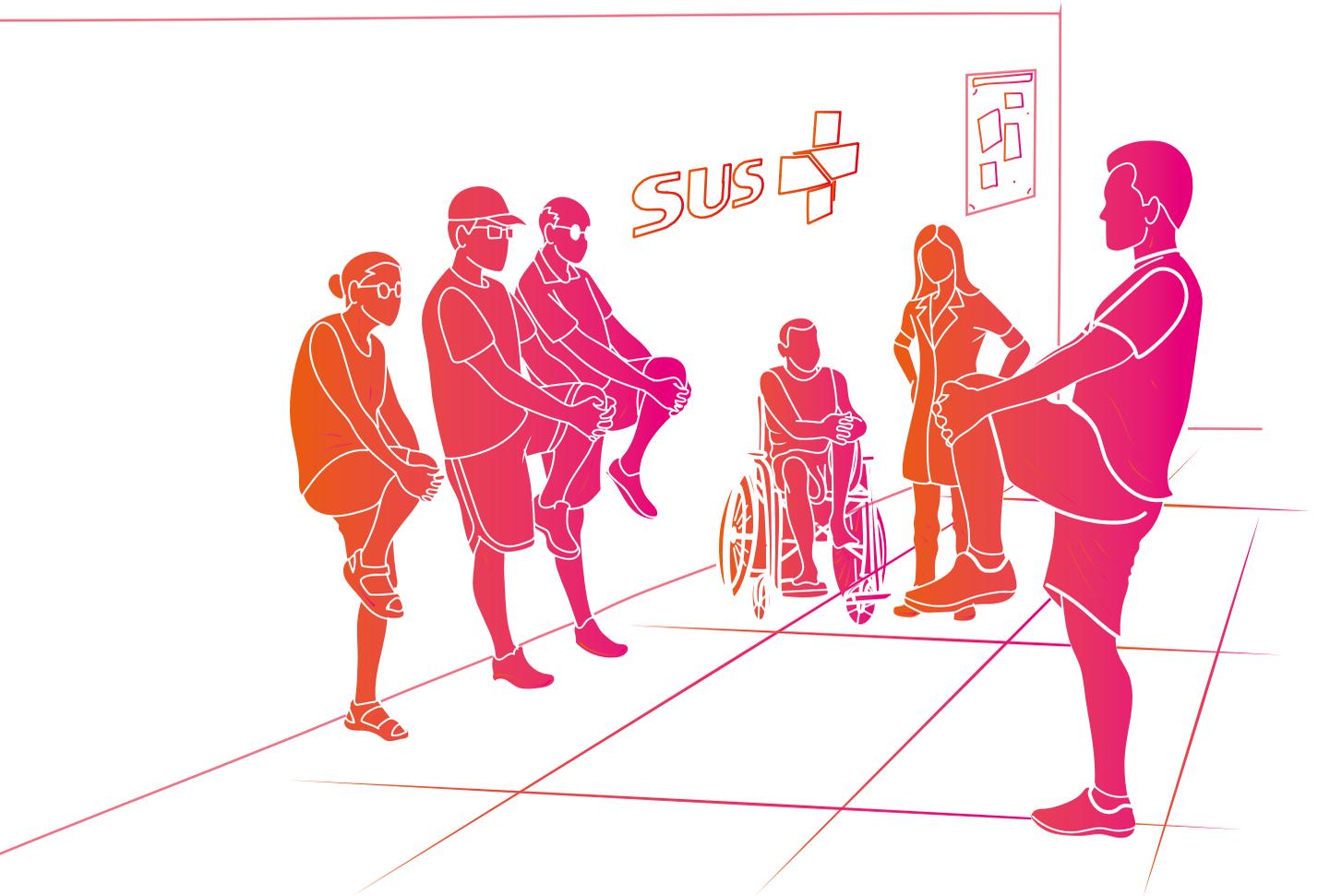
The local sports, leisure and tourism or social assistance secretaries may offer programs and public spaces dedicated to physical activity for older adults. Look for them in your neighborhood!

Look for the nearest Primary Health Care Unit, since many of them offer physical activity programs and initiatives;

Some public programs such as the [Programa Academia da Saúde](#), [Programa Saúde na Escola](#), [Segundo Tempo and Esporte e Lazer na Cidade](#), as well as initiatives such as “closed streets” or “leisure streets” provide the practice of physical activity. Find out if your neighborhood has such initiatives;

Many universities, colleges and institutions of the “Sistema S” (Sesc, Sesi, Sest/Senat and Senac) also offer physical activity programs for their communities. You can also check out the nearest of these institutions;

Your work or study place may offer structures that support active commuting, such as: bicycle parking racks, as well as locker rooms for taking showers and changing clothes.



PHYSICAL EDUCATION AT SCHOOL

In this chapter you will find information about physical education school classes. Most children and adolescents have their main physical activity experiences in this context. It is important to highlight that, before you start reading this chapter, you should read [Chapter 1 – Understanding Physical Activity](#).

Check Chapter 5 for specific information about children up to 5 years old and [Chapter 3](#) for children and youth between 6 and 17 years old. As for specific information about physical activity for children and adolescents with disabilities, you should check [Chapter 8](#).

○ WHY SHOULD STUDENTS' PARTICIPATION IN PHYSICAL EDUCATION CLASSES BE ENCOURAGED?

Physical education can contribute significantly for the students' health and personal development. Engaging in physical education classes goes beyond the practice of physical activity and the development of motor skills such as running and jumping, and contributes to a healthy, active life. That is why it is important to guarantee that every student has access and participate in more and better physical education classes.

Physical education classes contribute to the students' physical, motor, psychological and social health. The main benefits are:

- Increased physical activity practices during classes and throughout the day;
- Improvements in heart and breathing functions;
- Improvements in flexibility and running, walking or jumping skills;
- Helps weight control;
- Improvements in motivation and mental well-being, reducing anxiety and depression;
- Increased cooperation between peers during class activities;
- Improved attitude and satisfaction to engage in physical education classes;
- Improvements in socialization skills and friendship relationships;
- Enhancement in school performance;
- Improvements in the students' focus and ability to perform a task;
- Improvements in how the students organize themselves to perform several tasks and learn new abilities.

○ WHAT ARE THE RECOMMENDATIONS FOR THE PHYSICAL EDUCATION CLASSES?

In order to reach the benefits presented above, a quality physical education must be mandatory, preferably taught by a physical education teacher throughout Elementary School, including Early Childhood Education.

Every week there should be at least three 50-minute physical education classes. Classes should include contents that provide positive experiences and innovative approaches for the students.

In order for these guidelines to be put in practice, qualification and valuing physical education teachers is essential.

○ GUIDELINES ABOUT PHYSICAL EDUCATION CLASSES FOR STUDENTS



Engage in physical activity classes in order to develop skills and to know different types of physical activity. This will help you have an active life!

You should actively get involved in physical education classes and help your teacher to choose contents and practices that respect and develop your health.

Respect and accept peers with different skills, disabilities and preferences during classes.

Pay attention to your teachers' orientations during classes and to the practice environments for your safety and the safety of your peers.

Talk to your teacher about the physical activity modalities that you prefer or would like to learn better.

Do not be embarrassed to engage in physical activity classes, your teacher and peers will help you learn the activities.

○ ADDITIONAL GUIDELINES:

When practicing physical activity, if possible, wear light clothing and comfortable shoes; You should drink water before, during and after practicing physical activity. You should also have a healthy, adequate diet whenever possible. In order to know more, check out the [Dietary Guidelines for the Brazilian Population](#);

During outdoor physical activities, use some form of protection such as caps, long sleeve shirts and sunscreen if possible.

○ RECOMMENDATIONS ABOUT PHYSICAL EDUCATION CLASSES

For the school community:

The school community must acknowledge that physical education is an important part of the educational and health policies and that it contributes to the health, quality of life and the students' human and social development;

School curriculum should present a sequential, progressive structure of specific physical education learning objectives, always in accordance with national, state and neighborhood references;

The school community must provide and support physical education in the same manner as it does with other disciplines, offering the presentation of contents, evaluation and professional development, for example;

The school community must guarantee and value the work conditions (equipment and spaces) and professional qualification (specialized, continuing training and pedagogical support) that enhances the physical education classes' quality;

Other school subjects may also work with physical activity, as well as physical education can explore mathematical principles through some games, for example.

For the physical education teachers:

Try to enhance the quality of your classes through trainings and sharing experiences about the curriculum, pedagogical practices and evaluation;

Adopt strategies that keep students physically active and engaged for the most part of the class through diversified, interactive, challenging pedagogical practices that bring satisfaction and stimulate the students' confidence and autonomy;

Address the subject of physical activity respecting local, regional specificities to also promote discussions about inequalities and health determinants;

Encourage every student's involvement in classes, regardless of abilities, disabilities and health conditions;

Make use of innovative pedagogical strategies during classes, stimulating the students' participation in community classes and activities;

Incorporate transversal physical activity and health related themes such as digital literacy, citizenship and sustainability in order to stimulate interdisciplinarity;
Develop a more favorable environment so that the students feel motivated to experience physical education classes.

Dedicate some of your classes to show these Guidelines to your students. Explain to them how to use it, promote its activities and answer any questions. Present and recommend parents and guardians reading these Guidelines.



For parents or guardians:

Choose schools that value the role of physical education for the child or adolescent's development throughout the years.

Encourage active participation and follow the child or adolescent's progress in the physical education classes;

Encourage the child and the adolescent to explore the activities learnt in the physical education classes in a manner that goes beyond the school environment, focusing on keeping an active, healthy life.

PHYSICAL ACTIVITY FOR PREGNANT AND POSTPARTUM WOMEN

In this chapter you will find information about physical activity for pregnant and postpartum women. But it is important to highlight that, before you start reading this chapter, you should read [Chapter 1 - Understanding Physical Activity](#).

Information about physical activity for adults can be found in [Chapter 4](#). Check [Chapter 8](#) for specific information about physical activity for people with disabilities.

○ WHY SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

Practicing physical activity during pregnancy and postpartum period is safe, brings several health benefits for you and your baby, and reduces risks of some pregnancy related complications. Physical activity for pregnant and postpartum women brings the following benefits:

- It promotes your human development and well-being, which helps you to enjoy a more fulfilling and better life quality;
- It promotes relaxation, enjoyment and liveliness;
- It helps your weight control;
- It diminishes the risk of developing high blood pressure and gestational diabetes (high blood sugar levels during pregnancy);
- It reduces the risk of developing preeclampsia (high blood pressure during pregnancy);
- It improves your capacity to do your daily activities;
- It helps reducing the intensity of your back pain;
- It reduces the risk of depression;
- It helps social inclusion, creating and strengthening social relationships, bonds and solidarity;
- It reduces the risk of premature birth for the baby;
- It helps your baby to be born with an adequate weight.

It is also important to know that the practice of physical activity during pregnancy:

- Does not increase the risk of malformation for your baby;
- Does not increase the risk of rupturing membranes;
- Does not increase the risk of miscarriage;
- Does not induce childbirth;
- Does not increase mortality risk after birth;
- Does not alter composition, quantity or taste of breast milk;
- Does not drain the milk.



FOR HOW LONG SHOULD YOU PRACTICE PHYSICAL ACTIVITY DURING PREGNANCY AND POSTPARTUM?

If you do not have contraindications and prefer moderate-intensity physical activities, you should practice at least 150 minutes of physical activity per week.

When practicing moderate-intensity physical activities, you should be able to talk with some difficulty while you move and you will not be able to sing. Your breathing and heartbeats will increase moderately.

If you were already active before pregnancy and prefer vigorous-intensity physical activities, you should practice at least 75 minutes per week.

When practicing vigorous-intensity physical activity, you will not even be able to talk. Your breathing will be much faster than normal and your heartbeats will increase a lot. Vigorous-intensity physical activities are recommended if you already used to exercise very frequently and engaged with vigorous-intensity before pregnancy.

If you were already active before pregnancy, it is also possible to reach the weekly recommended amount of physical activity by combining moderate and vigorous activities.

You can divide your practice of physical activity into small time blocks or do more minutes per day at once. Do as you like and do as you can!

For additional health benefits, try to practice physical activity regularly and increase your weekly time. Every minute counts!

Activities that strengthen the pelvic floor are recommended during and after pregnancy.

Right after the postpartum you should begin physical exercises to strengthen the pelvic muscles and organs (the ones located in the area of the hips), preferably with the evaluation of the health professional that monitored your pregnancy.

Also during the postpartum, choose a physical activity that brings you satisfaction and that you may practice with your baby, turning the practice into an opportunity to strengthen the bond between you.

○ WHICH PHYSICAL ACTIVITIES CAN YOU PRACTICE?

If you were already active before pregnancy or the postpartum, you may keep your physical activity routine, practicing activities of light to vigorous-intensity.

If you did not use to practice the recommended amount of time for physical activity before pregnancy or postpartum, then start with a light-intensity physical activity and initially practice it for less time. You should increase both time and intensity progressively, practicing light to vigorous-intensity activities, according to your capacity. Respect your limits!

If you are in a pregnancy with no contraindications, the practice of physical activity can be done until childbirth or while it is comfortable for you.

During your leisure time: dedicate some time to practice physical activity with friends, family, with the baby - if you are during postpartum - or by yourself, and do the activities that you like. You may walk, run, dance, swim, cycle, do gymnastics, weight lifting, water aerobics or stretching and so on.



Activities with risk of collisions with objects or other people, or that may cause unbalance and enhances the risk of falling should be avoided, such as:

- Sports with risk of physical contact with people or objects. e.g., soccer, volleyball, basketball and martial arts;
- Activities that stress the abdomen;
- Scuba diving.

Some modifications in the activities may be necessary to accommodate the physical changes that occur during pregnancy. Supervision by a health professional is recommended for physical activity practices such as weightlifting, water aerobics, yoga, pilates and physical exercises that strengthen the pelvic muscles and organs (the ones located in the area of the hips).

While in transport from one place to another: whenever possible, commute by walking or cycling, for example. You can commute to school, to the grocery store, to the workplace, to a friend's house, to the Primary Health Care Unit or units of the Programa Academia da Saúde. Try to commute in the safest and most pleasant way possible.

At your work or school: you may choose to take the stairs instead of the elevator. If your work or study place offers physical activity, engage in it or look for locations nearby that are suited for physical activity.

During household chores: you can become a more physically active person in your daily routine. For example, you may take your baby for a walk, push the stroller, play with the children and walk the pet.

○ GUIDELINES FOR PRACTICING PHYSICAL ACTIVITY

If you do not yet meet the recommended time for physical activity, do not give up and increase gradually both quantity and intensity. Keep in mind that doing any physical activity, in the time and place that is possible, is better than doing nothing.

It is important to remember that, in the beginning of a physical activity routine, it is normal to feel a little muscle pain after practicing.

It is never too late to begin! Try different types of physical activity to find those you like the most!

Include physical activity in your daily routine! Do you remember that we already talked about this in [Chapter 1 - Understanding Physical Activity](#)? You can even practice several types of physical activities in your home.

If you do not have any contraindications, different types of physical activity can be practiced easily. Choose the ones that provide satisfaction and safety.

This life phase is full of tasks that depend on you. Trying to have a physical activity schedule is a good start. Identify spots in your routine that are better suited for the practice of physical activity. If there is not much time, ask for family or friend's support so they can help you with the baby while you practice physical activity! Invite other pregnant women and women that are going through postpartum to practice physical activity with you.

There are spaces and equipment that enable the practice of physical activity in the community or neighborhood that you live in or visit frequently, such as squares, sport courts and parks, Programa Academia da Saúde units and sports schools.

Physical activity is incorporated in many popular, social and cultural movements. Are you aware of them in your community? They can help you to have an active life.

You have a big influence on your family! Children whose parents or guardians practice physical activity have greater chances of making a habit of it.

When engaging in physical activity, if possible, wear light clothing and comfortable shoes.

During outdoor physical activities, use some form of protection such as caps, long sleeve shirts, and sunscreen if possible.

You must drink water before, during and after engaging in physical activity. You must also have an adequate, healthy diet whenever possible. In order to learn more, check out the [Dietary Guidelines for the Brazilian Population](#).

○ HOW CAN YOU REDUCE SEDENTARY BEHAVIOR?

Avoid too much time engaged in sedentary behavior. Whenever possible, reduce the time that you remain seated or lied down watching television or using the cell phone, computer, tablet

or video game. For example: for every hour spent like this, try to move yourself for at least 5 minutes and change your position in order to stand up, go to the bathroom, drink some water and stretch your body. These are small attitudes that can help diminish your sedentary behavior and improve your life quality.

If you spend too much time seated throughout the day, try to compensate for this behavior by dedicating more time to perform physical activity in your routine.



○ ADDITIONAL INFORMATION AND CONTRAINDICATIONS

Having a physically active routine is very safe for most pregnant and postpartum women. Concerns about injuries or health problems should not stop you from practicing physical activity.

If you have any injuries or feel any abnormal discomfort, look for the nearest Primary Health Care Unit.

If you feel nauseous, short of breath or dizziness when doing physical activities that require you to be lied down (belly faced upwards), avoid them.

Riding a bicycle in your leisure time or while in transport from one place to another is not contraindicated. But pay attention to the risks of falling and, if possible, try to travel through safe places.

If you have any of the conditions below during your pregnancy, the practice of physical exercise during this phase must be recommended, supervised and guided by a qualified health professional:

- Mild, controlled respiratory diseases;
- Mild heart diseases;
- Type 1 diabetes (high blood sugar levels), on the condition that it is well controlled;
- Mild preeclampsia (high blood pressure before childbirth);
- Preterm, premature rupture of membranes (before the 37th week of pregnancy);
- Placenta previa after 28 weeks;
- Nutritional deficiencies or malnutrition.

If you have some of the conditions below during pregnancy, then you should not practice physical exercise during this phase:

- Severe respiratory diseases;
- Severe cardiac diseases with physical exercise intolerance;
- Severe or uncontrolled arrhythmia;
- Placenta abruption;
- Intrauterine growth restriction;
- Active preterm birth;
- Bleeding;
- Severe preeclampsia (high blood pressure before childbirth).

○ SUPPORTING NETWORK

If you have any questions or need any assistance to include physical activity in your routine, here are some suggestions:

Look for the nearest Primary Health Care Unit, since many of them offer physical activity programs and actions;

Some public programs such as the [Programa Academia da Saúde](#), the [Programa Saúde na Escola](#), [Segundo Tempo](#) and [Esporte e Lazer na Cidade](#), as well as actions such as “closed streets” or “leisure streets” provide the practice of physical activity. Find out if your neighborhood has such initiatives.

Many universities, colleges and institutions of the “Sistema S” (Sesc, Sesi, Sest/Senat and Senac) also offer physical activity programs for their communities. You can also check out the nearest of these institutions;

Your work or study place may offer structures that support active commuting, such as: bicycle parking racks, as well as locker rooms for taking showers and changing clothes.

PHYSICAL ACTIVITY FOR PEOPLE WITH DISABILITIES

In this chapter you will find information about physical activity for people with disabilities. It is important to highlight that, before you start reading this chapter, you should read [Chapter 1 - Understanding Physical Activity](#).

Additional information about physical activity for each age group can be found in [Chapters 2 \(children up to 5 years old\)](#), [3 \(children and youth between 6 and 17 years old\)](#), [4 \(adults\)](#) and [5 \(older adults\)](#).

○ WHY SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

There are several benefits that you can have by practicing physical activity. The main benefits of practicing physical activity for people with disabilities are:

- Promoting human development and well-being, helping enjoy a more fulfilling, better quality of life;
- Increasing autonomy to perform daily activities;
- Promoting relaxation, enjoyment and liveliness;
- Enhancing muscle strength, resistance, motor coordination, balance, flexibility and agility;
- Improving socialization skills;
- Helping social inclusion, creating and strengthening social relationships, bonds and solidarity;
- Auxiliating your adequate body weight control and reducing the risk of obesity;
- Enhancing your immunity;
- Improving your attention, memory and reasoning, as well as reducing the risk of cognitive decline;
- Improving your mood, reducing feelings of stress and symptoms of anxiety and depression;
- Improving blood circulation and reducing the risk of heart diseases, diabetes (high blood sugar levels), high blood pressure and high cholesterol.

You may perform physical activity regardless of your disability. Despite some experienced difficulties, finding forms of physical activity practice is needed, whether they are individualized activities (that consider every person's specificities) or group activities (that provide socialization and interaction).



FOR HOW LONG SHOULD YOU PRACTICE PHYSICAL ACTIVITY?

Children up to 1-year-old: at least 30 minutes per day with their bellies faced down. The time can be distributed throughout the day. Children with any disability should be stimulated within their potentialities since the first stages of life;

Children between 1 and 2 years old: at least 3 hours per day of physical activities of any intensity. The time can be distributed throughout the day;

Children between 3 and 5 years old: at least three hours per day of physical activities of any intensity. This includes at least 1 hour of moderate to vigorous-intensity that can be accumulated throughout the day.

For children and youth between 6 and 17 years old: you should practice at least 60 minutes or more of physical activity per day. Give preference to those of moderate-intensity. As part of these daily 60 minutes or more, for at least 3 days per week, include activities that strengthen muscles and bones, such as jumping, pulling, pushing or practicing sports.

Adults: you should practice at least 150 minutes of moderate-intensity physical activity throughout the week or at least 75 minutes of vigorous-intensity physical activity, or even an equivalent combination. Activities of muscle strengthening must be performed engaging the main muscle groups in one or more days of the week.

Older adults: by this age, the recommendation is the same as for adults. Additionally, those with reduced mobility must practice physical activity to improve their balance and being prevented from falling, during three or more days per week.

You can divide your practice of physical activity into small time blocks or do the entire 60 minutes per day at once. Do as you like and do as you can!

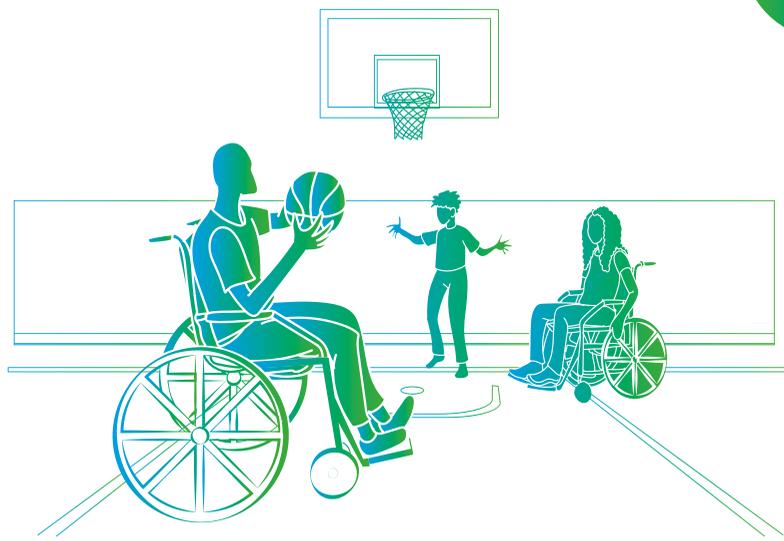
For additional health benefits, try to practice physical activity regularly and progressively increase the weekly time of practice. Every minute counts!

WHICH PHYSICAL ACTIVITIES SHOULD YOU PRACTICE?

In your leisure time: dedicate some time to practice physical activity with friends, family or by yourself, doing the activities that you like. You may dance, practice weightlifting, swim or other adapted sports, or take a stroll in the park.

While in transport from one place to another: if possible, commute by handling the wheelchair, by walking or by cycling, for example. You may commute to school, to work, to the grocery store, to friends' house, to the Primary Health Care Unit or units of the Programa Academia da Saúde. Try to commute in the safest and most pleasant way possible.

At your work or school: if your work or study place offers physical activity, engage in it or look for the nearest locations that are suited for physical activity. Having a more active work routine is also a form of physical activity.



During household chores: by contributing during household chores, you become a more physically active person. Engage in tasks to preserve your backyard or the public spaces of your condominium, such as: gardening, taking out the trash, cooking, sweeping and cleaning, cutting the grass, washing the car, pulling the stroller, playing with the children, walking or washing the pet.



○ GUIDELINES FOR PRACTICING PHYSICAL ACTIVITY

The practice of physical activity must be adapted in order to be comfortable and safe for you.

If you do not yet meet the recommended time for physical activity, do not give up and increase gradually both quantity and intensity. Keep in mind that doing any physical activity, in the time and place that is possible, is better than doing nothing.

It is never too late to start! Try different types of physical activity to find those you like the most!

Include physical activity in your daily routine! Do you remember that we already talked about this in [Chapter 1 - Understanding Physical Activity?](#)

Planning a physical activity schedule is a good start. Identify spots in your routine that are better suited for the practice of physical activity.

There are spaces and equipment that enable the practice of physical activity in the community or neighborhood that you live in or visit frequently, such as squares, sport courts and parks, units of the Programa Academia da Saúde and sports schools.

Physical activity is incorporated in many popular, social and cultural movements. Are you aware of them in your community? They can help you to have an active life.

When engaging in physical activity, if possible, wear light clothing and comfortable shoes.

During outdoor physical activities, use some form of protection such as caps, long sleeve shirts and sunscreen if possible.

You must drink water before, during and after engaging in physical activity. You must also have an adequate, healthy diet whenever possible. In order to learn more, check out the [Dietary Guidelines for the Brazilian Population](#).

Share your physical activity routine experiences with friends and family. This may encourage them to begin or maintain their own practice.

You may use cell phone apps in order to be an active person. Some of them help you monitor how many steps you have taken or measure the distance you traveled, as well as your caloric expenditure.

Play electronic games both in your cell phone as well as in video games. They can be a good strategy to practice physical activity, since some of them simulate movements such as dancing or sports in a fun, interactive way.

Parents or guardians, teachers, managers and caregivers

Try to encourage, stimulate and let the people with disabilities explore the environment as they wish. Do not create any difficulties that might hamper their physical activity practice at home, at work, at school or outdoors.

You have a big influence on your family! Children whose parents or guardians practice physical activity have bigger chances of making a habit of it.

Help the people that are under your care practice physical activity and listen to their longings, anguishes and also their preferences, skills and needs. This action can be the beginning of a transformation into an active life and may contribute to their social insertion.

Stimulate the practice of physical activity from an early age, regardless of the kind of disability the person has and be patient. People perform activities in their own time but the feeling of being able to accomplish an activity will be very important for their development.



Try to understand which adaptations may be necessary so the practice of physical activity may be accessible to people with disabilities.

Encourage students with disabilities to participate actively in physical education classes.

Try to look for school support so that its installations may offer good accessibility conditions for people with disabilities. If you are a manager, accessibility should be a priority. It is important to prioritize architectural, signaling and transport, street and health facilities related information accessibility.

Buses, subways, trains, sidewalks and general access to facilities must be equipped and properly signaled in order to contemplate all types of disabilities (physical, visual, auditory or intellectual). These actions encourage independence and autonomy for the people with disabilities while they are in transport from one place to another or engaged in their activities.

Before you even start to help a person with disabilities in any situation, you must first ask how you can help. For example, do not push a wheelchair or touch the arm of a visually impaired person without their permission.

○ HOW TO REDUCE SEDENTARY BEHAVIOR?

Sedentary behavior can generate health problems that imply bigger limitations. Less time engaged in such behavior reduces health problems throughout life such as high blood pressure, diabetes (high blood sugar levels) and cardiovascular diseases.

Remaining still for long periods may be harmful to your health. Try to change position and eventually practice some light-intensity physical activity, such as moving inside the house or from one place to another, moving while watching television or when seated by the computer or even during study activities.

Try not to be more than one hour in the same position! Any substitution of idle time with some movement will contribute to your health.

Whenever possible, substitute the cell phone, computer, tablet, video game and television with moving, less idle activities. You may even use these resources in order to dance, sing and move your body.

If possible, for every hour spent engaged in sedentary behavior, move yourself for at least 5 minutes. These are small actions that can help you reduce sedentary behavior and improve the quality of your life.

○ ADDITIONAL INFORMATION

Having a physically active day is very safe. Concerns about injuries or health problems should not stop you from practicing physical activity.

If you have any injuries or feel any abnormal discomfort, look for a health professional or for the Primary Health Care Unit that is nearest to you.

Pay attention if you have diabetes (high blood sugar level), especially when you engage in more vigorous-intensity physical activity. To avoid hyperglycemia (high blood sugar levels) or hypoglycemia (low blood sugar levels), you will need to adjust your insulin dose and your diet for the periods in which you are engaged in physical activity. Look for a health professional to help you.

If you have asthma, pay attention to situations that might trigger off allergies, such as dry weather and pool chlorine. Asthma medication, along with the type, the place and the time chosen to engage in physical activity, helps to alleviate the symptoms.

You should also remember that an adequate sleep and a healthy, adequate diet are also important for practicing physical activity.

If you have any questions about the practice of physical activity and chronic diseases, look for the nearest Primary Health Care Unit.

○ SUPPORTING NETWORK

If you have any doubts or need any assistance to include physical activity in your routine, here are some suggestions:

Look for the nearest Primary Health Care unit because a lot of them offer programs and actions of physical activity;

Some programs such as the [Programa Academia da Saúde](#), the [Programa Saúde na Escola, Segundo Tempo](#) and the [Esporte e Lazer na Cidade](#), as well as actions such as “closed streets” or “leisure streets” provide the practice of physical activity. Try to find out if your neighborhood has any of these or even other initiatives of the type;

Many universities, colleges and institutions of the “Sistema S” (Sesc, Sesi, Sest/Senat and Senac) also offer physical activity programs for their communities. You can also check out the nearest of these institutions;

Check out if your neighborhood has any Centro Especializado em Reabilitação that is linked to the Unified Health System. Such places frequently develop initiatives to promote physical activity for people with disabilities;

Some non-governmental organizations (NGOs), such as the Associação de Pais e Amigos dos Excepcionais (APAE) have units built throughout Brazil and also develop physical activity programs;

The [Comitê Paralímpico Brasileiro](#) provides several information about adapted physical activities and sports.

Your work or study place may offer structures that support active commuting, such as: bicycle parking racks, as well as locker rooms for taking showers and changing clothes.

REFERENCES

- ADESEGUN, D. *et al.* Prenatal exercise and pre-gestational diseases: a systematic review and meta-analysis. **Journal of Obstetrics and Gynaecology Canada**, Toronto, v. 41, n. 8, p. 1134-1143, Aug. 2019.
- ÁLVAREZ-BUENO, C. *et al.* Academic achievement and physical activity: A metaanalysis. **Pediatrics**, Springfield, Ill., v. 140, n. 6, p. e20171498, Dec. 2017.
- AMORIM, T. C.; AZEVEDO, M. R.; HALLAL, P. C. Physical Activity Levels According to Physical and Social Environmental Factors in a Sample of Adults Living in South Brazil. **Journal of Physical Activity & Health**, Champaign, IL, v. 7, p. S204-S212, July 2010. Suppl. 2.
- ANABY, D. *et al.* The effect of the environment on participation of children and youth with disabilities: a scoping review. **Disability and Rehabilitation**, London, v. 35, n. 19, p. 1589-1598, Sept. 2013.
- ANDREATO, L. V. *et al.* The influence of high-intensity interval training on anthropometric variables of adults with overweight or obesity: a systematic review and network meta-analysis. **Obesity Reviews**, Oxford, v. 20, n. 1, p. 142-155, Jan. 2019.
- AUGESTAD, L. V. Physical activity, physical fitness, and body composition among children and young adults with visual impairments: A systematic review. **British Journal of Visual Impairment**, [s. l.], v. 33, n. 3, p. 167-182, Sept. 2015.
- AUSTRALIA. Department of Health. **Australian 24-Hour Movement Guidelines for Children (5-12 years) and Young People (13-17 years)**: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. Canberra: Commonwealth Department of Health, 2017.
- AUSTRALIAN COUNCIL FOR HEALTH, PHYSICAL EDUCATION AND RECREATION. **ACHPER NATIONAL POSITION STATEMENT**: Support of the Australian Curriculum: Health and Physical Education. 2017. Disponível em: <https://www.achper.org.au/documents/item/393>. Acesso em: 13 jul. 2020.
- BARBOSA FILHO, V. C. *et al.* Promoting physical activity for children and adolescents in low- and middle-income countries: An umbrella systematic review: A review on promoting physical activity in LMIC. **Preventive Medicine**, [s. l.], v. 88, p. 115-126, Jul 2016.
- BARRETO, P. de S. *et al.* Association of Long-term Exercise Training With Risk of Falls, Fractures, Hospitalizations, and Mortality in Older Adults: A Systematic Review and Meta-analysis. **JAMA Internal Medicine**, Chicago, v. 179, n. 3, p. 394-405, Mar. 2019.
- BECERRA FERNANDEZ, C. A.; MERINO-MARBAN, R. Efficacy of hamstring stretching programs in schoolchildren: A systematic review. **Timisoara Physical Education and Rehabilitation Journal**, [s. l.], v. 8, n. 5, p. 36-43, 2015.
- BEETHAM, K. S. *et al.* The effects of vigorous intensity exercise in the third trimester of pregnancy: a systematic review and meta-analysis. **BMC Pregnancy and Childbirth**, London, v. 19, n. 1, p. 281, Aug. 2019.
- BERGHELLA, V.; SACCONI, G. Exercise in pregnancy! **American Journal of Obstetrics & Gynecology**, [s. l.], v. 216, n. 4, p. 335-337, Apr. 2017.

- BLOND, K. *et al.* Association of high amounts of physical activity with mortality risk: a systematic review and meta-analysis. **British Journal of Sports Medicine**, Loughborough, Inglaterra, v. 54, n. 20, p. 1195-1201, 2020.
- BOHM, A. W. *et al.* Social Support and Leisure-Time Physical Activity Among the Elderly: A Population-Based Study. **Journal of Physical Activity & Health**, Champaign, IL, v. 13, n. 6, p. 599-605, June 2016.
- BORDE, R. *et al.* Dose-Response Relationships of Resistance Training in Healthy Old Adults: A Systematic Review and Meta-Analysis. **Sports Medicine**, Auckland, N.Z., v. 45, n. 12, p. 1693-1720, 2015.
- BOUAZIZ, W. *et al.* Effect of Aerobic Training on Peak Oxygen Uptake Among Seniors Aged 70 or Older: A Meta-Analysis of Randomized Controlled Trials. **Rejuvenation Research**, Larchmont, NY, v. 21, n. 4, p. 341-349, Aug. 2018.
- BOUAZIZ, W. *et al.* Effect of high-intensity interval training and continuous endurance training on peak oxygen uptake among seniors aged 65 or older: A meta-analysis of randomized controlled trials. **International Journal of Clinical Practice**, Oxford, v. 74, n. 6, p. e13490, Feb. 2020.
- BRAITHWAITE, R.; SPRAY, C. M.; WARBURTON, V. E. Motivational climate interventions in physical education: A meta-analysis. **Psychology Sport Exercise**, [s. l.], v. 12, n. 6, p. 628-638, 2011.
- BRASIL. Ministério do Esporte. **Diesporte**: diagnóstico nacional do esporte. Brasília, DF: Ministério do Esporte, 2016. Caderno 2. Disponível em: <http://cev.org.br/arquivo/biblioteca/4033637.pdf>. Acesso em: 7 jul. 2020.
- BROWN, A. E. *et al.* **Development of Evidence-based Physical Activity Recommendations for Adults (18-64 years)**. Australia: Commonwealth of Australia, 2012. Report prepared for the Australian Government Department of Health.
- BROWN, H. E. *et al.* Family-based interventions to increase physical activity in children: a systematic review, meta-analysis and realist synthesis. **Obesity Reviews**, Oxford, v. 17, n. 4, p. 345-360, Apr. 2016.
- BROWN, W. J.; MOORHEAD, G. E.; MARSHALL, A. L. **Choose health: Be Active: A physical activity guide for older Australians**. Canberra: Commonwealth of Australia and the Repatriation Commission, 2005.
- CACCIATA, M. *et al.* Effect of exergaming on health-related quality of life in older adults: A systematic review. **International Journal of Nursing Studies**, Elmsford, NY, v. 93, p. 30-40, May 2019.
- CANADIAN SOCIETY FOR EXERCISE PHYSIOLOGY. **Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep**. Ottawa: The Canadian Society for Exercise Physiology, 2016.

CARLON, S. L. *et al.* Differences in habitual physical activity levels of young people with cerebral palsy and their typically developing peers: a systematic review. **Disability and Rehabilitation**, London, v. 35, n. 8, p. 647-655, Apr. 2013.

CARSON, V. *et al.* Systematic review of the relationships between physical activity and health indicators in the early years (0-4 years). **BMC Public Health**, [s. l.], v. 17, n. 845, p. 33-63, Nov. 2017.

CASPERSEN, C. J. *et al.* Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. **Public Health Reports**, [s. l.], v. 100, n. 2, p. 126-131, Mar./Apr. 1985.

CAVAZZATTO, T. G. *et al.* Social-ecological correlates of regular leisure-time physical activity practice among adults. **International Journal of Environmental Research and Public Health**, Basel, v. 17, n. 10, p. 2-15, May 2020.

CENTERS FOR DISEASE CONTROL AND PREVENTION. **Overcoming Barriers to Physical Activity**. 10 abr. 2020. Disponível em: <https://www.cdc.gov/physicalactivity/basics/adding-pa/barriers.html>. Acesso em: 25 jun. 2020.

CENTERS FOR DISEASE CONTROL AND PREVENTION. **School Health Guidelines to Promote Healthy Eating and Physical Activity**. Atlanta, U.S.: Department of Health and Human Services, 2011.

CHILE. **Recomendaciones para la práctica de actividad física según curso de vida**. Santiago de Chile: Ministerio del Deporte, 2017.

CHRISTIANSEN, P. K. *et al.* Lifestyle interventions to maternal weight loss after birth: a systematic review. **Systematic Reviews**, London, v. 8, n. 1, p. 327, Dec. 2019.

COLL, C. V. *et al.* Perceived barriers to leisure-time physical activity during pregnancy: A literature review of quantitative and qualitative evidence. **Journal of Science and Medicine in Sport**, Belconnen, v. 20, n. 1, p. 17-25, Jan. 2017.

CROCHEMORE-SILVA, I. *et al.* Promoção de atividade física e as políticas públicas no combate às desigualdades: reflexões a partir da Lei dos Cuidados Inversos e Hipótese da Equidade Inversa. **Cadernos de Saúde Pública**, Rio de Janeiro, v. 36, n. 6, p. e00155119, 2020.

CUSHING, C. C. *et al.* Systematic review and meta-analysis of health promotion interventions for children and adolescents using an ecological framework. **Journal of Pediatric Psychology**, Washington, US, v. 39, n. 8, p. 949-962, Sept. 2014.

DEPARTMENT OF HEALTH; PHYSICAL ACTIVITY; HEALTH IMPROVEMENT AND PROTECTION. **Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers**. London: Crown, 2011.

DIPIETRO, L. *et al.* Benefits of Physical Activity during Pregnancy and Postpartum: Na Umbrella Review. **Medicine and Science in Sports and Exercise**, Madison, Wis., v. 51, n. 6, p. 1292-1302, June 2019.

DU, S. *et al.* Taichi exercise for self-rated sleep quality in older people: a systematic review and meta-analysis. **International Journal of Nursing Studies**, Oxford, v. 52, n. 1, p. 368-379, Jan. 2015.

DUDLEY, D.; BURDEN, R. What effect on learning does increasing the proportion of curriculum time allocated to physical education have? A systematic review and metaanalysis. **European Physical Education Review**, Driffield, Inglaterra, v. 26, p. 85-100, 2020.

EKELUND, U. *et al.* Do the associations of sedentary behaviour with cardiovascular disease mortality and cancer mortality differ by physical activity level? A systematic review and harmonised meta-analysis of data from 850 060 participants. **British Journal of Sports Medicine**, Loughborough, Inglaterra, v. 53, n. 14, p. 886-894, July 2019.

ELSHAHAT, S. *et al.* Built environment correlates of physical activity in low- And middleincome countries: A systematic review. **PLoS One**, [s. l.], v. 15, n. 3, p. 1-19, 2020.

ESCALANTE, Y. *et al.* Playground Designs to Increase Physical Activity Levels During School Recess: A Systematic Review. **Health Education and Behavior**, [s. l.], v. 41, n. 2, p. 138-144, 2014.

EUROPEAN PHYSICAL EDUCATION ASSOCIATION. **European Framework of Quality Physical Education**. 2018. Disponível em: <http://www.eupea.com/wp-content/uploads/2018/02/European-Framework-of-Quality-PE.pdf>. Acesso em: 5 jul. 2020.

EVENSON, K. R. *et al.* Guidelines for Physical Activity during Pregnancy: Comparisons From Around the World. **American Journal of Lifestyle Medicine**, Thousand Oaks, Calif., v. 8, n. 2, p. 102-121, Mar./Apr. 2014.

EVENSON, K. R.; MOTTOLA, M. F.; ARTAL, R. I. Review of Recent Physical Activity Guidelines During Pregnancy to Facilitate Advice by Health Care Providers. **Obstetrical and Gynecological Survey**, Baltimore, Md., v. 74, n. 8, p. 481-489, 2019.

FANG, Q. *et al.* Effects of Exergaming on Balance of Healthy Older Adults: A Systematic Review and Meta-analysis of Randomized Controlled Trials. **Games for Health Journal**, [s. l.], v. 9, n. 1, p. 11-23, Feb. 2020.

FEDERATION INTERNATIONALE D'ÉDUCATION PHYSIQUE. **The World Manifest of Physical Education FIEP 2000**. [2000?]. Disponível em: <http://fiepeurope.eu/manifest.php>. Acesso em: 5 jul. 2020.

FORECHI, L. *et al.* Adherence to physical activity in adults with chronic diseases: ELSABrasil. **Revista de Saúde Pública**, São Paulo, v. 52, 2018.

FRANCISCO, C. O. *et al.* Effects of physical exercise training on nocturnal symptoms in asthma: Systematic review. **PLoS One**, [s. l.], v. 13, n. 10, p. e0204953, 2018.

GARCÍA-HERMOSO, A. *et al.* Association of physical education with improvement of health-related physical fitness outcomes and fundamental motor skills among youths: A systematic review and meta-analysis. **JAMA Pediatrics**, Chicago, v. 174, p. e200223, 2020.

GASPAR, R. *et al.* Physical Exercise for Individuals With Spinal Cord Injury: Systematic Review Based on the International Classification of Functioning, Disability, and Health. **Journal of Sport Rehabilitation**, Champaign, IL, v. 28, n. 5, p. 505-516, July 2019.

- GORDON, B. R. *et al.* Association of efficacy of resistance exercise training with depressive symptoms: meta-analysis and meta-regression analysis of randomized clinical trials. **JAMA Psychiatry**, Chicago, v. 75, n. 6, p. 566-576, 2018.
- GUERRA, P. H. *et al.* Revisão sistemática dos indicadores de atividade física e de comportamento sedentário em pré-escolares sul-americanos. **Revista Paulista de Pediatria**, São Paulo, v. 38, p. 1-10, 2020.
- GUIMARÃES-LIMA, M. *et al.* Leisure-time physical activity and sports in the Brazilian population: A social disparity analysis. **PLoS One**, [s. l.], v. 14, n. 12, p. e0225940, 2019.
- GUIZELINI, P. C. *et al.* Effect of resistance training on muscle strength and rate of force development in healthy older adults: A systematic review and meta-analysis. **Experimental Gerontology**, Oxford, v. 102, p. 51-58, Feb. 2018.
- HERROD, P. J. J. *et al.* Exercise and other nonpharmacological strategies to reduce blood pressure in older adults: a systematic review and meta-analysis. **Journal of the American Society of Hypertension**: JASH, New York, v. 12, n. 4, p. 248-267, Apr. 2018.
- HESKETH, K. R. *et al.* Barriers and facilitators to young children's physical activity and sedentary behaviour: a systematic review and synthesis of qualitative literature. **Obesity Reviews**, Oxford, v. 18, p. 987-1017, Sept. 2017.
- HIDAYAT, K.; ZHOU, H. J.; SHI, B. M. Influence of physical activity at a young age and lifetime physical activity on the risks of 3 obesity-related cancers: systematic review and meta-analysis of observational studies. **Nutrition Reviews**, Washington, D.C., v. 78, n. 1, p. 1-18, Jan. 2020.
- HILLAND, T. A. *et al.* Correlates of walking among disadvantaged groups: A systematic review. **Health & Place**, [s. l.], v. 63, p. 1-10, May 2020.
- HINKLEY, T. *et al.* Preschool children and physical activity: a review of correlates. **American Journal of Preventive Medicine**, New York, v. 34, p. 435-441, 2008.
- HINO, A. A. F. *et al.* Accessibility to public spaces for leisure and physical activity in adults in Curitiba, Parana State, Brazil. **Cadernos de Saúde Pública**, Rio de Janeiro, v. 35, n. 12, p. e00020719, 2019.
- HOFFMANN, J. *et al.* Effects of a Lifestyle Intervention in Routine Care on Short- and Long-Term Maternal Weight Retention and Breastfeeding Behavior—12 Months Follow-up of the Cluster-Randomized GeliS Trial. **Journal of Clinical Medicine**, Basel, v. 8, n. 6, p. 876, June 2019.
- HOWELLS, K. *et al.* Efficacy of Group-Based Organised Physical Activity Participation for Social Outcomes in Children with Autism Spectrum Disorder: A Systematic Review and Meta-analysis. **Journal of Autism and Developmental Disorders**, New York, v. 49, n. 8, p. 3290-3308, Aug. 2019.
- HOYOS-QUINTERO, A.; GARCÍA-PERDOMO, H. Factors Related to Physical Activity in Early Childhood: A Systematic Review. **Journal of Physical Activity & Health**, Champaign, IL, v. 16, n. 10, p. 925-936, Oct. 2019.

HUANG, Y.; LIU, X. Improvement of balance control ability and flexibility in the elderly Tai Chi Chuan (TCC) practitioners: a systematic review and meta-analysis. **Archives of Gerontology and Geriatrics**, Amsterdam, v. 60, n. 2, p. 233-238, 2015.

IKEDA, E. *et al.* Associations of children's active school travel with perceptions of the physical environment and characteristics of the social environment: A systematic review. **Health & place**, [s. l.], v. 54, p. 118-131, 2018.

JAARSMA, E. A. *et al.* Barriers to and facilitators of sports participation for people with physical disabilities: a systematic review. **Scandinavian Journal Medicine Science Sports**, Copenhagen, v. 24, n. 6, p. 871-881, Dec. 2014.

JONES, R. A. *et al.* Interventions promoting active transport to school in children: A systematic review and meta-analysis. **Preventive Medicine**, [s. l.], v. 123, p. 232-241, 2019.

JONES, R. A.; OKELY, A. D. Physical Activity Recommendations for Early Childhood. *In*: REILLY, J. J. (ed.). **Encyclopedia on Early Childhood Development**. 2020. p. 10-17. Disponível em: <http://www.child-encyclopedia.com/physical-activity/according-experts/physical-activity-recommendations-early-childhood>. Acesso em: 5 ago. 2020.

JONES, R. A.; OKELY, A. D. Sedentary Behaviour Recommendations for Early Childhood. *In*: REILLY, J. J. (ed.). **Encyclopedia on Early Childhood Development**. 2020. p. 23-30. Disponível em: <http://www.child-encyclopedia.com/physicalactivity/according-experts/sedentary-behaviour-recommendations-early-childhood>. Acesso em: 5 ago. 2020.

JUNG, L. G.; KALINOSKI, A. X.; MARQUES, A. C. Barreiras e facilitadores para a atividade física em pessoas com déficit intelectual. **Revista Brasileira de Atividade Física e Saúde**, Londrina, v. 22, p. 362-372, 2017.

LAI, C. C. *et al.* Effects of resistance training, endurance training and whole-body vibration on lean body mass, muscle strength and physical performance in older people: a systematic review and network meta-analysis. **Age and Ageing**, London, v. 47, n. 3, p. 367-373, May 2018.

LIM, S. *et al.* What Are the Most Effective Behavioural Strategies in Changing Postpartum Women's Physical Activity and Healthy Eating Behaviours? A Systematic Review and Meta-Analysis. **Journal of Clinical Medicine**, Basel, v. 9, n. 1, p. 237, Jan. 2020.

LONSDALE, C. *et al.* A systematic review and meta-analysis of interventions designed to increase moderate-to-vigorous physical activity in school physical education lessons. **Preventive Medicine**, [s. l.], v. 56, p. 152-161, 2013.

MALTA, D. P. *et al.* Prevalência autorreferida de deficiência no Brasil, segundo a pesquisa Nacional de Saúde, 2013. **Ciência & Saúde Coletiva**, Rio de Janeiro, v. 21, n. 10, p. 3253-3264, out. 2016.

MARMELEIRA, J. F. F. *et al.* Barreiras para a prática de atividade física em pessoas com deficiência visual. **Revista Brasileira de Ciências do Esporte**, São Paulo, v. 40, p. 197-204, 2018.

MARQUES, E. A.; MOTA, J.; CARVALHO, J. Exercise effects on bone mineral density in older adults: a metaanalysis of randomized controlled trials. **Age**, Dordrecht, Netherlands, v. 34, n. 6, p. 1493-1515, Dec. 2012.

MCGARTY, A. M. *et al.* A systematic review and meta-analysis of interventions to increase physical activity in children and adolescents with intellectual disabilities. **Journal of Intellectual Disability Research**, Oxford, v. 62, n. 4, p. 312-329, 2018.

MCGARTY, A. M.; MELVILLE, G. A. Parental perceptions of facilitators and barriers to physical activity for children with intellectual disabilities: A mixed methods systematic review. **Research in Developmental Disabilities**, New York, v. 73, n. 2, p. 40-57, Feb. 2018.

MEAH, V. L.; DAVIES, G. A.; DAVENPORT, M. H. Why can't I exercise during pregnancy? Time to revisit medical 'absolute' and 'relative' contraindications: systematic review of evidence of harm and a call to action. **British Journal of Sports Medicine**, p. 1-12, 2020.

MEARS, R.; JAGO, R. Effectiveness of after-school interventions at increasing moderate-to-vigorous physical activity levels in 5-to 18-year olds: a systematic review and metaanalysis. **British Journal of Sports Medicine**, Loughborough, Inglaterra, v. 50, p. 1315-1324, 2016.

MESSING, S. *et al.* How Can Physical Activity Be Promoted Among Children and Adolescents? A Systematic Review of Reviews Across Settings. **Frontiers in Public Health**, Lausanne, v. 7, p. 55, Mar. 2019.

MORTON, K. L. *et al.* The school environment and adolescent physical activity and sedentary behaviour: a mixed-studies systematic review. **Obesity Reviews**, Oxford, v. 17, p. 142-158, 2016.

MOTTOLA, M. F. *et al.* 2019 Canadian guideline for physical activity throughout pregnancy. **British Journal of Sports Medicine**, Loughborough, Inglaterra, v. 52, n. 21, p. 1339-1346, 2018.

NORDBØ, E. C. A. *et al.* Promoting activity participation and well-being among children and adolescents: a systematic review of neighborhood built-environment determinants. **JB International Evidence Synthesis**, Philadelphia, PA, v. 18, n. 3, p. 370-458, Mar. 2020.

O'BRIEN, K. T. *et al.* Physical activity and sedentary time among preschoolers in centre-based childcare: a systematic review. **International Journal of Behavioral Nutrition and Physical Activity**, London, v. 15, p. 117, Nov. 2018.

OKELY, A. D. *et al.* A collaborative approach to adopting/adapting guidelines – The Australian 24-Hour Movement Guidelines for the early years (Birth to 5 years): an integration of physical activity, sedentary behavior, and sleep. **BMC Public Health**, [s. l.], v. 17, p. 167-190, 2017.

OLIVEIRA, A. J. *et al.* Social support and leisure-time physical activity: longitudinal evidence from the Brazilian Pró-Saúde cohort study. **International Journal of Behavioral Nutrition and Physical Activity**, London, v. 8, p. 77, 2011.

OLIVEIRA, A. R. C. de; SARTORI, S. K.; LAURINDO, E. (org.). **Recomendações para a Educação Física escolar**. [S. l.]: Sistema CONFEE/CREFs, 2014.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. **Making Physical Education Dynamic and Inclusive for 2030**: International Curriculum Analysis. [S. l.]: OECD, 2019. Disponível em: https://www.oecd.org/education/2030-project/contact/OECD_FUTURE_OF_EDUCATION_2030_MAKING_PHYSICAL_DYNAMIC_AND_INCLUSIVE_FOR_2030.pdf. Acesso em: 5 jul. 2020.

- PARRISH, A. M. *et al.* Comparing and assessing physical activity guidelines for children and adolescents: a systematic literature review and analysis. **International Journal of Behavioral Nutrition and Physical Activity**, London, v. 17, n. 1, p. 16, 2020.
- PATE, R. R. *et al.* Physical activity and health in children under 6 years of age: a systematic review. **Medicine and Science in Sports and Exercise**, Madison, Wis., v. 51, n. 6, p. 1282-1291, June 2019.
- PHELAN, S. *et al.* One-year postpartum anthropometric outcomes in mothers and children in the LIFE-Moms lifestyle intervention clinical trials. **International Journal of Obesity**, London, v. 44, n. 1, p. 57-68, Jan. 2020.
- PHYSICAL Activity and Exercise During Pregnancy and the Postpartum Period: ACOG Committee Opinion, Number 804. **Obstetrics and Gynecology**, New York, v. 135, n. 4, p. e178-e188, Apr. 2020.
- PIERCY, K. L. *et al.* The physical activity guidelines for Americans. **JAMA**, Chicago, v. 320, p. 2020-2028, 2018.
- PIVARNIK, J. M.; SZYMANSKI, L. M.; CONWAY, M. R. The elite athlete and strenuous exercise in pregnancy. **Clinical Obstetrics and Gynecology**, Hagerstown, MD, v. 59, n. 3, p. 613-619, Sept. 2016.
- POITRAS, V. J. *et al.* Systematic review of the relationships between objectively measured physical activity and health indicators in school-aged children and youth. **Applied physiology, nutrition, and metabolism**, Ottawa, v. 41, n. 6. p. S197-S239, June 2016. Suppl. 3.
- POLLARD, T. M.; WAGNILD, J. M. Gender differences in walking (for leisure, transport and in total) across adult life: a systematic review. **BMC Public Health**, [s. l.], v. 17, p. 341, Apr. 2017.
- PREDOVAN, D. *et al.* Effects of Dancing on Cognition in Healthy Older Adults: a Systematic Review. **Journal of Cognitive Enhancement**, [s. l.], v. 3, n. 2, p. 161-167, 2019.
- PROCHNOW, T. *et al.* Social network analysis in child and adolescent physical activity research: a systematic literature review. **Journal of Physical Activity & Health**, Champaign, IL, v. 17, p. 250-260, 2020.
- PROGRAMA DAS NAÇÕES UNIDAS PARA O DESENVOLVIMENTO. **Relatório de Desenvolvimento Humano Nacional – Movimento é Vida: atividades físicas e esportivas para todas as pessoas: 2017**. Brasília, DF: PNUD, 2017.
- PTAK, M. *et al.* The Effect of Pelvic Floor Muscles Exercise on Quality of Life in Women with Stress Urinary Incontinence and Its Relationship with Vaginal Deliveries: A Randomized Trial. **BioMed Research International**, [s. l.], v. 2019, p. 1-7, Jan. 2019.
- PUBLIC HEALTH AGENCY OF CANADA. **Handbook For Canada's Physical Activity Guide to Healthy Active Living**. Canada: Public Health Agency of Canada, 1998. Disponível em: <http://physicalactivityplan.org/resources/CPAG.pdf>. Acesso em: 9 out. 2020.

- RAAFS, B. M. *et al.* Physical Exercise Training Improves Quality of Life in Healthy Older Adults: A Meta-Analysis. **Journal of Aging and Physical Activity**, Champaign, IL, v. 28, n. 1, p. 81-93, Jan. 2020.
- RECH, C. *et al.* Barreiras percebidas para a prática de atividade física no lazer da população brasileira. **Revista Brasileira de Medicina do Esporte**, São Paulo, v. 24, n. 4, p. 303-309, 2018.
- REILLY, J. J. *et al.* GRADE-ADOLPMENT Process to develop 24-hour movement behavior recommendations and physical activity guidelines for the under 5s in the United Kingdom, 2019. **Journal of Physical Activity & Health**, Champaign, IL, v. 17, p. 101-108, 2020.
- RIBEIRO, E. H. C. *et al.* Latin American interventions in children and adolescents' sedentary behavior: a systematic review. **Revista de Saúde Pública**, São Paulo, v. 54, p. 59, 2020.
- RISSEL, C. *et al.* Physical Activity Associated with Public Transport Use-A Review and Modelling of Potential Benefits. **International Journal of Environmental Research and Public Health**, Basel, v. 9, n. 7, p. 2454-2478, 2012.
- RODRIGUEZ-AYLLON, M. *et al.* Role of physical activity and sedentary behaviour in the mental health of preschoolers, children and adolescents, a systematic review and meta-analysis. **Sports Medicine**, Auckland, N.Z., v. 49, p. 1383-1410, 2019.
- RODRÍGUEZ-BLANQUE, R. *et al.* Physical activity during pregnancy and its influence on delivery time: a randomized clinical trial. **PeerJ**, Corte Madera, CA, v. 7, p. e6370, 2019.
- SAEIDIFARD, F. *et al.* The association of resistance training with mortality: A systematic review and meta-analysis. **European Journal of Preventive Cardiology**, London, v. 26, n. 15, p. 1647-1665, Oct. 2019.
- SÁEZ DE ASTEASU, M. L. *et al.* Role of physical exercise on cognitive function in healthy older adults: A systematic review of randomized clinical trials. **Ageing Research Reviews**, Oxford, v. 37, p. 117-134, Aug. 2017.
- SCHIEFFER, T. M.; THOMAS, K. T. Fifteen years of promise in school-based physical activity interventions: A meta-Analysis. **Kinesiology Review**, [s. l.], v. 1, p. 155-169, 2012.
- SCHMUTZ, E. A. *et al.* Physical activity and sedentary behavior in preschoolers: a longitudinal assessment of trajectories and determinants. **International Journal of Behavioral Nutrition and Physical Activity**, London, v. 15, n. 1, p. 35, Apr. 2018.
- SCHOEPPE, S. *et al.* Efficacy of interventions that use apps to improve diet, physical activity and sedentary behaviour: a systematic review. **International Journal of Behavioral Nutrition and Physical Activity**, London, v. 13, p. 127-153, Dec. 2016.
- SERON, B. S. *et al.* Prática de atividade física habitual entre adolescentes com deficiência visual. **Revista Brasileira de Educação Física e Esporte**, São Paulo, v. 26, n. 2, p. 231-239, abr./jun. 2012.
- SERON, B. S.; ARRUDA, G. A.; GREGUOL, M. Facilitadores e barreiras percebidas para a prática de atividade física por pessoas com deficiência motora. **Revista Brasileira de Ciências do Esporte**, São Paulo, v. 37, p. 214-221, 2015.

SHAPE AMERICA. **Getting to Know Your Child's PE Program: A Parent's Guide**. 2019. Disponível em: https://www.shapeamerica.org/uploads/pdfs/2017/downloads/eguides/Parent_Checklist.pdf. Acesso em: 5 jul. 2020.

SHAPE AMERICA. **The essential components of physical education**. Author Reston, VA,: Shape America, 2015.

SHIELDS, N.; SYNNOT, J.; BARR, M. Perceived barriers and facilitators to physical activity for children with disability: a systematic review. **British Journal of Sports Medicine**, Loughborough, Inglaterra, v. 46, p. 989-997, 2012.

SHIRAZIPOUR, C. H. *et al.* Program conditions that foster quality physical activity participation experiences for people with a physical disability: a systematic review. **Disability and Rehabilitation**, London, v. 42, n. 2, p. 147-155, Jan. 2020.

SILVA, D. A. S. *et al.* Results from Brazil's 2018 report card on physical activity for children and youth. **Journal of Physical Activity & Health**, Champaign, IL, v. 15, p. S323-S325, 2018. Suppl. 2.

SILVA, F. C. *et al.* Effects of physical exercise programs on cognitive function in Parkinson's disease patients: A systematic review of randomized controlled trials of the last 10 years. **PLoS One**, [s. l.], v. 13, n. 2, p. e0193113, 2018.

SILVA, S. G. da *et al.* A randomized controlled trial of exercise during pregnancy on maternal and neonatal outcomes: results from the PAMELA study. **The International Journal of Behavioral Nutrition and Physical Activity**, London, v. 14, n. 1, p. 175, Dec. 2017.

SILVA, S. G. da *et al.* Leisure-time physical activity in pregnancy and maternal-child health: a systematic review and meta-analysis of randomized controlled trials and cohort studies. **Sports Medicine**, Auckland, N.Z., v. 47, n. 2, p. 295-317, Feb. 2017.

SINGH, A. S. *et al.* Effects of physical activity interventions on cognitive and academic performance in children and adolescents: a novel combination of a systematic review and recommendations from an expert panel. **British Journal of Sports Medicine**, Loughborough, Inglaterra, v. 53, p. 640-647, 2019.

SMITH, J. *et al.* Behavioral correlates of muscular fitness in children and adolescents: a systematic review. **Sports Medicine**, Auckland, N.Z., v. 49, p. 887-904, 2019.

SOCIEDADE BRASILEIRA DE PEDIATRIA. **Promoção da Atividade Física na Infância e Adolescência**. Brasília: SBP, 2017. (Manual de Orientação Grupo de Trabalho em Atividade Física, n. 1).

SOCOLOSCKI, T. S. *et al.* **Barreiras percebidas à prática de atividade física em idosos brasileiros: revisão sistemática**. set. 2020. No prelo.

STANLEY, R. M.; RIDLEY, K.; DOLLMAN, J. Correlates of children's time-specific physical activity: A review of the literature. **International Journal of Behavioral Nutrition and Physical Activity**, London, v. 9, n. 55, p. 1-13, Apr. 2012.

STAPPERS, N. E. H. *et al.* The effect of infrastructural changes in the built environment on physical activity, active transportation and sedentary behavior- A systematic review. **Health & Place**, [s. l.], v. 53, p. 135-149, 2018.

STEIB, S. *et al.* Dose-response relationship of resistance training in older adults: a meta-analysis. **Medicine & Science in Sports & Exercise**, Madison, Wis., v. 42, n. 5, p. 902-914, May 2010.

STOPPA, E. A.; ISAYAMA, H. F. **Lazer no Brasil: representações e concretizações das vivências cotidianas**. Campinas, SP: Autores Associados, 2017. (Coleção Educação Física e Esportes).

SUGIMOTO, D. *et al.* Effects of Neuromuscular Training on Children and Young Adults with Down Syndrome: Systematic Review and Meta-Analysis. **Research in developmental disabilities**, New York, v. 55, p. 197-206, 2016.

TAYLOR, L. M. *et al.* Active Video Games for Improving Physical Performance Measures in Older People: A Meta-analysis. **Journal of Geriatric Physical Therapy**, La Crosse, WI, v. 41, n. 2, p. 108-123, Apr. 2018.

THE COMMONWEALTH. **Model indicators on sport, physical education and physical activity and the Sustainable Development Goals**. London: Commonwealth Secretariat, 2019. Disponível em: <https://thecommonwealth.org/sites/default/files/inline/Sport%20and%20SDG%20Indicators%20v3.1.pdf>. Acesso em: 5 jul. 2020.

TOMPSETT, C. *et al.* Pedagogical approaches to and effects of fundamental movement skill interventions on health outcomes: A systematic review. **Sports Medicine**, Auckland, N.Z., v. 47, p. 1795-1819, 2017.

TREMBLAY, M. S. *et al.* Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. **Applied Physiology, Nutrition, and Metabolism**, Ottawa, v. 41, n. 6, p. S311-S327, June 2016. Suppl. 3.

UNESCO. **Diretrizes em educação física de qualidade (EFQ) para gestores de políticas**. Brasília, DF: Unesco, 2015. Disponível em: <https://unesdoc.unesco.org/ark:/48223/pf0000231963>. Acesso em: 5 jul. 2020.

UNESCO. **International Charter of Physical Education, Physical Activity and Sport**. 2015. Disponível em: <https://unesdoc.unesco.org/ark:/48223/pf0000235409>. Acesso em: 5 jul. 2020.

UNITED STATES. Department of Health and Human Services. **Physical Activity Guidelines for Americans**. 2nd ed. Washington, DC: U.S. Department of Health and Human Services, 2018.

VAN DE KOP, J. H. *et al.* School-based physical activity interventions in pre-vocational adolescents: A systematic review and meta-analyses. **Journal of Adolescent Health**, New York, v. 65, p. 185-194, Aug. 2019.

VANDERLINDEN, J.; BOEN, F.; VAN UFFELEN, J. G. Z. Effects of physical activity programs on sleep outcomes in older adults: a systematic review. **International Journal of Behavioral Nutrition and Physical Activity**, London, v. 17, n. 1, p. 11-25, Feb. 2020.

WANG, J. *et al.* Impact of exercise on maternal gestational weight gain: An updated meta-analysis of randomized controlled trials. **Medicine**, Hagerstown, Md, v. 98, n. 27, p. e16199, July 2019.

WEGGEMANS, R. M. *et al.* The 2017 Dutch Physical Activity Guidelines. **International Journal of Behavioral Nutrition and Physical Activity**, London, v. 15, n. 1, p. 58-70, June 2018.

WESTROP, S. C. *et al.* Gender differences in physical activity and sedentary behaviour in adults with intellectual disabilities: A systematic review and meta-analysis. **Journal of Applied Research in Intellectual Disabilities**: JARID, Clevedon, v. 32, n. 6, p. 1359-1374, Nov. 2019.

WORLD HEALTH ORGANIZATION. **Draft Guidelines on Physical Activity and Sedentary Behaviour for Children and Adolescents, Adults and Older Adults**. Geneva: WHO, 2020.

WORLD HEALTH ORGANIZATION. **Global action plan on physical activity 2018–2030: more active people for a healthier world**. Geneva: WHO, 2018. Disponível em: <https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf?ua=1>. Acesso em: 23 jun. 2020.

WORLD HEALTH ORGANIZATION. **Global recommendations on physical activity for health**. Geneva: WHO, 2010.

WORLD HEALTH ORGANIZATION. **Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age**. Geneva: WHO, 2019.

WORLD HEALTH ORGANIZATION. **Stay physically active during self-quarantine**. [Geneva: WHO, 2020]. Disponível em: <https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/publications-and-technical-guidance/noncommunicable-diseases/stay-physically-active-during-self-quarantine>. Acesso em: 9 out. 2020.

YARMOHAMMADI, S. *et al.* A systematic review of barriers and motivators to physical activity in elderly adults in Iran and worldwide. **Epidemiology and Health**, v. 41, p. e2019049, 2019.

ZENG, N. *et al.* Effects of physical activity on motor skills and cognitive development in early childhood: a systematic review. **BioMed Research International**, [s. l.], v. 2017, p. 1-13, 2017.

ZHAO, M. *et al.* Recommended physical activity and all cause and cause specific mortality in US adults: prospective cohort study. **BMJ**, London, v. 370, p. m2031, 2020.

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