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GUIDE TO SPORT FOR AUTISTIC PEOPLE AND THEIR RELATIVES

















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SUMMARY

This little guide was developed in parallel with our sport programme adapted to autistic people which is broken down into a guide for professionals in sports structures. It is intended for autistic people and their relatives to raise their awareness of sport and its benefits and give them advice on how to overcome the challenges they may face.

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CONCLUSION AND RESOURCES

























INTRODUCTION

PRESENTATION OF THE GUIDE

This guide is produced as part of the Sacree project (Sport and Autism, from scientific diagnosis to the CREation of a European educational model). This project is funded by the Erasmus+ Sport programme of the European Commission and has a dual aim:

- Enhancing the quality of life for autistic people by fostering participation in sports activities through the development of a model for sports programs suited to their needs.
- Addressing the existing gap in scientific knowledge regarding the relationship between sport and autism.

This little guide was developed in parallel with our sport programme adapted to autistic people which is broken down into a guide for professionals in sports structures. It is intended for autistic people and their relatives to raise their awareness of sport and its benefits, and give them advice on how to overcome the challenges they may face.

This guide will provide:

- A presentation of the beneficial effects of sport for autistic people,
- Guidance and tips to assist you in selecting a sport tailored to your needs,
- Strategies to support the well-being of autistic individuals in sports.

We express our deepest gratitude to all individuals who contributed to the creation of this document: those who participated in our online questionnaire regarding the experiences of autistic individuals, those who generously shared their insights through interviews, those who dedicated their time to review our documents and provided valuable feedback through a questionnaire assessing its quality, and those who realised the tests.

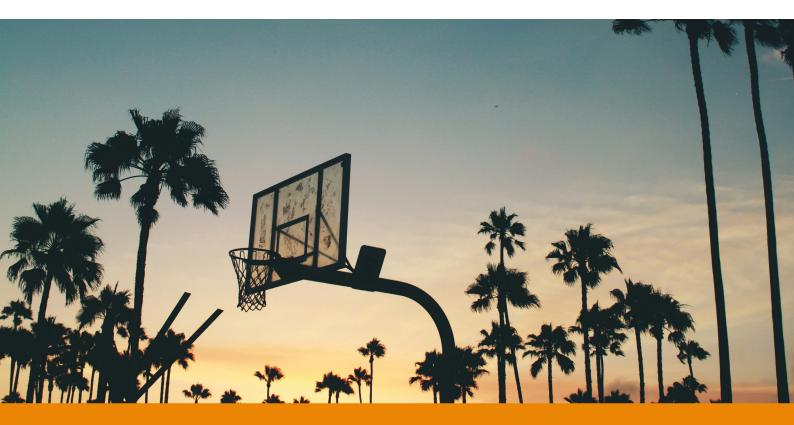
Your support and collaboration have been invaluable in shaping this document, and we extend our warmest thanks to each and every one of you.







This guide the sports sector has been translated into the languages of the Sacree project partners, including English (this document), French, Croatian, Portuguese, and Italian. These links direct you to the "Documents to Download" section on our website, https://sacree.eu/, where you can access all the translated documents.



The Sacree program aims at improving the daily lives of autistic people by promoting the inclusive practice of sport activities. Running for 36 months (June 2022 to June 2025), the project is funded by the European Commission's Erasmus+ Sport Programme.

Visit www.sacree.eu





PRESENTATION OF THE PARTNERS

Created in 1898, the ASPTT Fédération Omnisports (FSASPTT) represents today 240 multi-sport clubs that propose 200 sports and cultural activities to 200 000 members. Recognised by the Ministry of Sports, and the CNOSF (French National Olympic and Sports Committee), the FSASPTT is an active member of the sporting world. It proposes sport activities to all audiences, regardless of age, physical abilities, and condition. Since 2016, the FSASPTT and its clubs has been running a sports project for the inclusion of autistic children.

Website: https://asptt.com/





Autism-Europe (AE) is an international association created in 1983 whose main objective is to advance the rights of autistic people and their families and to help them improve their quality of life. It ensures effective liaison among almost 90 member autism organisations from 40 European countries, governments and European and international institutions. It plays a key role in raising public awareness, and in influencing the European decision-makers on the rights of autistic people. Website: https://www.autismeurope.org/

Inovar Autismo (IA) is an association for Citizenship and Inclusion founded in 2016 and has the status of IPSS and NGPD. The association defends the rights of autistic people, striving to empower society to embrace difference as something "normal". To promote the full participation of autistic people in society, the association encourages the inclusion of all people, defending the maxim that it is not people who must adapt to contexts, but that contexts must be "rehabilitated" to include all human diversity. Website: https://www.inovarautismo.pt/

inovarautismo.





The Croatian Union of Associations for Autism (CUAA) is a non-governmental organisation that unites 14 member organisations spread in Croatia, all dedicated to the shared goal of enhancing the lives of autistic individuals and their families. Their overarching goal is to promote the well-being and quality of life of autistic individuals while actively encouraging the establishment of a comprehensive network of services and support systems for autistic individuals throughout Croatia. Website: https://www.autizam-suzah.hr/





SS Romulea (SSR) is a historic Italian football club located in Rome founded in 1922 for all youth categories (500 members from 5 to 19 years old, male and female). The club supports them into professional football, which through the Romulea Autistic Football Club promotes football also among young people and adults on the autism spectrum in an inclusive way with a mixed team composed of players on the autism spectrum and other players who also have support functions: volunteer educators, parents and friends.

Website: https://autisticfootball.club

The laboratory Culture, Sport, Health and Society (C3S) is a research unit (label EA4660) of the University of Bourgogne-Franche-Comte (France). The team brings together researchers, including 20 Professors and Associate professors, and 30 doctoral multidisciplinary students around the study of physical activity and sport. Scientists dedicate their research on the effects of several types of sports activities and training modalities on psychomotor and physiological factors, sociological and psychological behaviours.







Website: http://laboratoire-c3s.fr/



PART 1:

WHY ENGAGE IN SPORTS? THE BENEFICIAL EFFECTS OF SPORTS FOR AUTISTIC INDIVIDUALS





1.1 The positive impact of sports for autistic people

In the framework of the Sacree project, a literature review on the effect of sport on autistic people was written by the laboratory C3S of the University of Franche Comté published in the journal Sports Medicine. The article is based on the study of 92 articles which implement complete sport programs with pre-to-post analyses. The findings indicate that autistic people can benefit from sports across a wide range of physical, psychological and social factors. Thus, sport has effect on:

- On specific characteristics:: The potential impact of sports participation on autistic characteristics is remarkable, with reported reductions in composite autism scores of up to 25% after 3 months of regular practice (Tabeshian, Roza et al., 2022).
- On social aspects: A diverse array of sport activities has demonstrated efficacy in enhancing social and communication skills. Moreover, the benefits of regular sports participation on social skills may extend beyond the sports arena. For example, research by Duan G and al. (2022) indicates that a rhythmic gymnastics program showed improved classroom engagement and attention in research (study conducted on a limited scale).
- On motor or physical performances: Autistic adults have demonstrated improvements in gross motor functions, physical fitness, and body composition following physical activity programs, regardless of the severity of autism characteristics (Yu J, Jee YS, 2020). Additionally, changes in body composition, including reductions in fat mass, have been observed in autistic children following relatively short training durations (Kozlowski KF and al. 2021), such as after a mixed aerobic-neuromuscular exercises training program (Ferreira JP and all., 2018) or a mixed coordination-strength program (Ferreira JP and all., 2018). Importantly, engaging in sports also influences daily physical activity, as evidenced by increased activity levels (monitored through actimetry) observed even after short-duration sports participation (Garcia JM and al., 2020).
- On cognitive performances: Sports training can induce significant physiological changes in the brain: working memory, cognitive flexibility, sensory processing, reaction times, etc (Phung JN, Goldberg WA, 2019).
- On psychological factors: Engaging in sports activities can yield significant benefits, as physical exercise is well-established for its potential in alleviating symptoms of depression (Shaphe MA, Chahal A.2020). Sports participation can also influence other psychological factors, such as improvements in self-esteem (Todd T et al. 2010).
- On family and caregivers: While research in this area is not very extensive, there are notable findings in the literature showing the potential influence of sports activities on the well-being of autistic people and their families and caregivers (Zhao M and al., 2021).







To read the complete article:

- Click <u>here</u> to read it in English
- Click here to read it in French

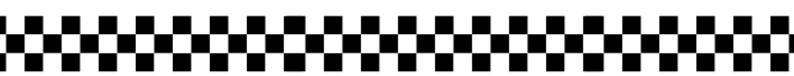
Additionally, engagement in sports serves as a means to counter sedentary habits, reducing the risk of chronic health issues and mitigating the side effects of medications. Indeed, Sport and physical activity offer lifelong preventive and therapeutic benefits for all individuals, including autistic people.

For chronic diseases, **sport and physical activity decreased relative risk** by:

- 29-41% for premature mortality (ANSES, 2016; INSERM, 2018),
- 20-30% for Type 2 Diabetes in targeted populations (Gill and Cooper, 2008),
- 25% for colon cancer (Wollin, 2009) and breast cancer (INSERM, 2018),
- 45% for Alzheimer's disease and 18% for Parkinson's disease(Hamer and Chida, 2009).

Sports also play a role in preventing complications, reducing relapses, and managing decline:

- In coronary diseases, the relative risk for death decreases by 16% (e.g., from 60 minutes/day of physical activity, Loprinzi and Addoh, 2016).
- For cancer, physical activity improves treatment outcomes and fatigue tolerance, and reduces the relative risk of relapses (e.g., by 20% with 2 hours/week of physical activity, INSERM, 2018).
- In **mental health**, the relative risk of depression relapse decreases by **51%** (Babyak et al., 2000).
- For neurodegenerative diseases, physical activity slows sensorimotor and cognitive declines, optimising quality of life (Mahalakshmi et al., 2020).





1.2 Autistic Perspectives: Insights on the Benefits of Sports

Sport has a positive effect on the life of autistic people, here you can find a small selection of the positive testimonials received during our questionnaire and interview campaign aimed at better understanding the relationship between autistic people and sport.

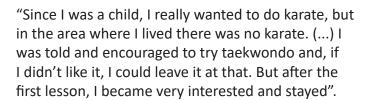
"It's important because he needs to expend an enormous amount of physical energy compared with other children. And there are lots of other reasons, it's important for inclusion, for his enjoyment, for the fact that he sleeps at night because when he does sport during the day he sleeps at night. "

(Mother of a french non-verbal autistic child and president of an autism association)



"I see sports as a form of distraction (...) it helps in self-esteem". He goes to the gym and considers that he subscribes to the saying "Healthy mind, healthy body."

(Autistic Portuguese adult)



(Although he didn't know he was autistic at the time, one young Portuguese adult said he loved practising taekwondo and only stopped because he got injured)





"Surpass myself by forgetting my difficulties and always improve"

(A 62-year-old autistic person from France about the sports he practises - pétanque, table tennis, archery, mountain biking, hiking)

"I love practising outdoor sports throughout the year, both individual and team sports, participating in competitions too, my quality of life has increased, starting with my physical and psychological well-being; I do it regularly and more often now as an adult than when I was young because at the time I was unaware of my condition and faced inclusion difficulties."

(52-year-old man on the autism spectrum from Italy)

"In hiking, I like the fact that you can go at your own pace, and the discovery of new landscapes (I love nature). In boxing, I like the release that this sport provides, and it helps me feel stronger and more combative on a daily basis (I have little selfconfidence)"

(A 31-year-old autistic woman from France)

"They [autistic children] love it [sport] so it actually allows us to make them learn things without them realising it, because with good instructions they learn to wait, they learn to follow instructions. instructions, they learn to imitate. It's endless, we can really put in good programs and make them really progress and not just on gross motor skills, on all points."

(Mother of a 10-year-old autistic child from France and president of an association for autism)







PART 2:

WHICH SPORT IS RIGHT FOR YOU?





A sheet to discover and choose a sport

The aim of this section is to present sport and its main characteristic to help you to choose a sport suitable for you.

For each sport, you can check information on the following criteria:

- 1. Interior or exterior: Does the activity is mostly played outside (natural environment) or insight (e.e. gymnasium)?
- 2. Opposing Sport: : Does the activity involve a direct confrontation to one or several opponents?
- 3. Required Equipment: Does the activity require you to manipulate a tool during the whole activity?
- 4. Level of motor skill required in the sport (coordination, agility, body control): low, medium or high?
- 5. Effect on the senses (such as loud noises, light, crowd): How the sport affects the senses (loud noises, light, crowd).
- 6. Requirement for concentration, strategy, or thinking: Complexity and number of information to manage, requirement for concentration, strategy, or thinking.
- 7. Impact on emotional regulation: Presence of potentially stressful or anxiety generating situations (examples stress, frustration management).
- 8. Level of social interaction required: low, medium or high?
- 9. Advantages for autistic people: Skills and areas developed through this sport

Finally, Don't forget that the main criteria is the personal preferences!







Swimming

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior

No

Yes (swimsuit, goggles, cap)

Medium

Medium

Low

Low

Low

Coordination, motor skills, balance, stress management



Cycling

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress, etc.):

Level of social interaction required

Advantages for autistic people:

Exterior

No

Yes (Bike)

Medium

Low

Low

Low

Low

Coordination, motor skills, endurance, balance







Running

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress, etc.):

Level of social interaction required

Advantages for autistic people:

Exterior

No

No (shoes)

Low

Low

Low

Low

Low

Endurance, cardio, motor skills, stress management



Hiking

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress, etc.):

Level of social interaction required

Advantages for autistic people:

Exterior

No

No (Shoes, backpack)

Low

Low

Low

Low

Low

Endurance, balance, motor skills, stress management







Yoga

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior

No

No (mat)

Low

Low

Low

Low

Level of social interaction required

Balance, stress management, coordination, flexibility



Gymnastics

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior

No

Yes (bars, mats, etc.)

Hight

Low

Medium

Medium

Low

Coordination, flexibility, balance, motor skills







Archery

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior or exterior

No

Yes (bow, arrows)

Hight

Low

Medium

Medium

Low

Concentration, dexterity, patience, coordination



Climbing

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior or exterior

No

Yes (shoes, harness)

Hight

Medium

Medium

Hight

Medium

Coordination, dexterity, concentration, self-confidence







Parkour

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior or exterior

No

No

Hight

Low

Medium

Hight

Low

Coordination, flexibility, balance, motor skills, cardio



Dance

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress, etc.):

Level of social interaction required

Advantages for autistic people:

Interior

No

No

Medium

Medium

Medium

Low

Medium

Coordination, flexibility, creativity, social skills







Horse Riding

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior

No

Yes (saddle, bridle)

Low

Medium

Low

Medium

Medium

Balance, social skills, self-confidence, concentration



Soccer

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction

Advantages for autistic people:

Exterior

Yes

Yes (ball, shoes)

High

Medium

High

Medium

High

Coordination, social skills, endurance, motor skills







Fighting Sports

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior

Yes

No

Medium

High

High

High

Medium

Coordination, dexterity, self-confidence, stress management, aggression management



Handball

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior

Yes

Yes (ball)

Medium

Medium

High

High

High

Coordination, social skills, motor skills, cardio







Golf

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Exterior

No

Yes (clubs, balls)

High

Low

Medium

Low

Low

Coordination, concentration, patience, motor skills



Tennis

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior or exterior

Yes

Yes (racket, balls)

High

Low

High

High

Medium

Coordination, dexterity, concentration, motor skills







Table Tennis

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior

Yes

Yes (racket, balls)

High

Low

High

Medium

Medium

Concentration, dexterity, patience, coordination



Badminton

Interior or exterior?

Opposing sport?

Required Equipment?

Level of motor skill of the sport

Effect on the senses (loud noises, light, crowd, etc.)

Requirement for concentration, strategy, or thinking

Impact on emotional regulation (stress,etc.):

Level of social interaction required

Advantages for autistic people:

Interior

Yes

Yes (racket, shuttlecock)

High

Low

High

Medium

Low

Coordination, motor skills, reflexes, social skills



PART 3:

SOME RECOMMENDATIONS AND RESOURCES







Here are some resources you can share with your sports organisations, coaches, and teammates to help them grasp what autism is and isn't, saving you the need for detailed explanations. There are also sheets for you.

A sheet for deconstructing misconceptions about autism

TO KNOW

- Autism is not a disease, it's a neurodevelopmental condition. Unlike a disease, autism cannot be transmitted or cured, but there are ways to improve quality of life and manage certain challenging aspects of this condition.
- There is no causal link between styles of parenting and the development of autism. The causes of autism are genetic and environmental. Not all autistic individuals have an intellectual disability, and conversely, not all individuals with an intellectual disability are autistic.
- Autistic individuals may experience crises, which are not acts of caprice but often their way of expressing discomfort in response to overwhelming situations.
- Just because an autistic person is non-speaking does not imply a lack of intelligence or the inability to communicate.
- While autism may impact learning, it is not synonymous with a learning disability.
- Not all the autistic people have an intellectual disability and not all people with an intellectual disability are autistic. Many autistic people have an intellectual development similar to the average, and sometimes superior.
- No sport is off-limits for autistic individuals, although each sport offers specific benefits and may require adaptations. The suitability of an activity varies from person to person.

The document is available in the appendix.







A sheet on the definition of the autism spectrum

TO KNOW

- Autism is a spectrum condition: while common characteristics are shared among autistic individuals, each person's experience is unique (Garratt & Abreu, 2023). They may have a wide variety of support needs in different areas such as communication, executive functions, social interaction, sensory processing and perception, etc. There is not just one way for a person to be autistic.
- Autism can be associated with other disabilities and conditions that require consideration,: attention deficit disorder with or without hyperactivity (ADHD), Down syndrome, epilepsy, Rett syndrome, tuberous sclerosis, anxiety, digestive disorders, sleep disorders, intellectual disabilities, learning disability, being overweight, Tics, OCD (Obsessive compulsive disorder), schizophrenia, immunological problems (asthma, diabetes type 1, urticaria, etc).
- Autistic individuals may need adjustments in their living, learning, and working environments to accommodate their differences.
- "Stimming", or self-stimulating behaviours (stereotypies), are common among autistic individuals and serve as a means of calming or concentration. Stimming is a natural form of self-regulation, involving repetitive body movements or vocalisations, which can increase during stressful periods (Kapp et al., 2019).
- When an autistic person feels completely overwhelmed, he or she may experience a "meltdown". These behaviors always have a reason and appear to communicate something, they respond to a need, a lack, a frustration. How these reactions manifest themselves varies considerably from person to person. They can involve verbal outbursts such as shouting or crying, physical actions such as kicking or hitting, or a complete withdrawal and shutdown, known as a "shutdown". The key is to identify solutions in the environment.
- They may have a latency between the moment information is given and the moment it is processed.
- All autistic individuals can derive similar benefits from sports, even those requiring significant support and attention.

The document is available in the appendix.







A sheet with 15 fitness and nutrition tips for sports participation

Maintaining a healthy balance of fitness and nutrition is essential for supporting overall health and well-being, especially in relation to sports participation. Here are 15 easy-to-follow tips to help you stay on track and maximise your athletic performance.

- 1. Stay hydrated drink plenty of water before, during, and after sports activities to stay hydrated and maintain optimal performance.
- 2. Eat a balanced diet consume a variety of nutrient-rich foods from all food groups, including fruits, vegetables, whole grains, lean proteins, and healthy fats.
- 3. Fuel up before exercise eat a balanced meal or snack containing carbohydrates and protein before engaging in sports activities to provide energy and support muscle recovery.
- 4. Snack smart choose nutritious snacks like fruits, nuts, yoghurt, or whole grain crackers to fuel your body and keep energy levels steady throughout the day.
- 5. Optimise post-workout recovery refuel with a combination of carbohydrates and protein within 30 minutes to an hour after exercise to replenish glycogen stores and support muscle repair.
- 6. Listen to your body pay attention to hunger and fullness cues, and eat when you're hungry and stop when you're satisfied to maintain a healthy relationship with food.
- 7. Don't skip meals aim to eat regular meals and snacks throughout the day to keep your energy levels stable and prevent overeating later on.
- 8. Portion control pay attention to portion sizes to avoid overeating and ensure you're getting the right balance of nutrients without excess calories.
- 9. Limit sugary and processed foods minimise consumption of sugary snacks, sodas, and processed foods high in added sugars and unhealthy fats, as they can negatively impact performance and overall health.
- 10. Get plenty of sleep aim for 7-9 hours of quality sleep each night to support recovery, muscle growth, and overall well-being.
- 11. Focus on flexibility incorporate stretching and flexibility exercises into your routine to improve range of motion, prevent injury, and promote relaxation.
- 12. Set realistic goals establish achievable fitness and nutrition goals that align with your individual needs and abilities to stay motivated.
- 13. Seek professional guidance consult with a registered dietitian or certified fitness trainer for personalised advice and support tailored to your specific goals and requirements.
- 14. Stay consistent consistency is key to seeing results, so aim to make healthy eating and regular exercise a sustainable part of your lifestyle.
- 15. Enjoy the process remember to have fun and enjoy the journey toward improved fitness and nutrition. Celebrate your progress and embrace the positive changes you're making for your health and well-being.





30 ideas to incorporate sport and physical activity into everyday life

Incorporate physical activity into your daily routine by choosing to walk or cycle when commuting to work, school, or other destinations. It's a great way to stay active and enjoy the benefits of exercise while travelling. If you have to take the car, park a little further away than your arrival point, and if you take public transport, get off 1 stop before your stop to finish on foot.



Climbing stairs instead of taking the elevator or the escalator is a simple and effective way to incorporate physical activity into your daily routine.

Utilise technology such as stopwatches, step counters, timer apps, or other gadgets to enable self-monitoring of physical activities. These tools can help foster self-awareness and encourage engagement in regular exercise by tracking progress and providing motivation.



Take regular walks or bike rides in the neighbourhood or local park. You can take these walks with friends, family, on your own, etc.

Set up a backyard obstacle course with hurdles, cones, and ropes for a fun and challenging workout.

Have a dance party at home with family members, playing different genres of music and incorporating dance moves.

Plan a nature scavenger hunt, searching for items like leaves, rocks, and flowers while hiking or walking in the woods.



Plant a garden together, involving activities like digging, planting, watering, and harvesting.

Play classic outdoor games like tag, hideand-seek, or capture the flag with friends or siblings.



Join a community sports program, such as soccer, basketball, or baseball.

> Set up a mini-golf course in the backyard using household items like cups, sticks, and cardboard boxes.

Create an indoor minibasketball hoop using a laundry basket and foam balls for shooting practice.

- Have a friendly competition of sack races in the backyard.
- If you have a dog, take it for walks more often and for longer.
- Go for a swim at the municipal pool or take swimming lessons at a local pool or community centre.
- Try out different sports equipment, such as scooters, rollerblades, or skateboards, for outdoor fun.
- Set up a DIY outdoor gym with homemade equipment like a pull-up bar, jump rope, and balance beam.
- Plan a family camping trip with activities like hiking, fishing, and roasting marshmallows over a campfire.
- Play recreational sports like frisbee, volleyball, or tennis at a nearby park with friends or family.

Attend fitness classes, such as yoga, Pilates, or dance aerobics. There are many free sessions on the internet.

Participate in charity walks or runs to support a cause while getting exercise.



Create an outdoor play area with equipment like a swing set, climbing frame, and trampoline for active playtime.

> Have a DIY sports day at home with activities like egg and spoon races, three-legged races, and wheelbarrow races in the backyard.

Do housework and clean to music to be even more active.

Create an indoor or outdoor circuit training course with stations for activities like jumping jacks, push-ups, and squats. You can find lots of ideas on the internet.

Have a backyard water balloon fight on a hot summer day, staying active while staying cool.

Play active video games together, such as sports or dance games, for a fun indoor workout.

Create an outdoor chalk obstacle course on the driveway or sidewalk, incorporating activities like hopping, jumping, and skipping.

Go on a family paddleboarding or kayaking adventure at a nearby lake or river.

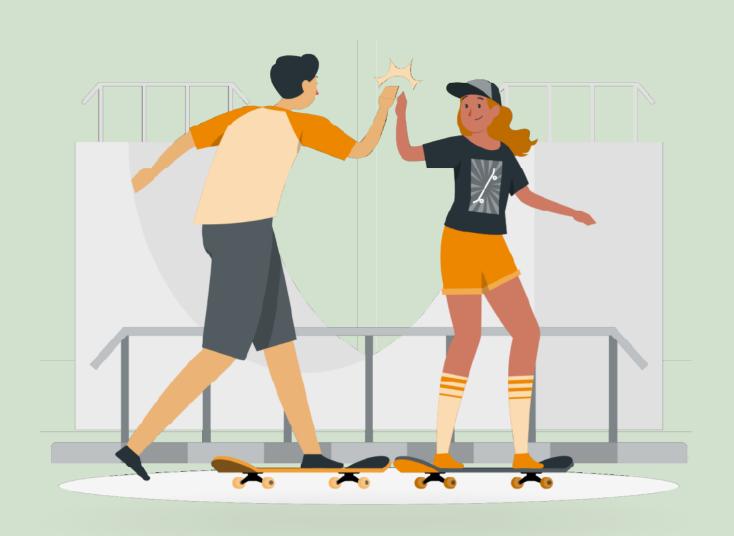
Set up a DIY backyard miniolympics with events like sprints, long jumps, and obstacle courses.





PART 4:

HOW TO FIND A SPORTS CLUB





In France:



Here are a few websites that list sports facilities accessible for autistic people:

- Annuaire Autisme Info Service: In the sports section of this directory, you can use filters such as geographical area, type of public or age group to find an association that matches your needs.
- Handi Guide des sports: The Handi Guide lists all the sports facilities for disabled people. To use it, you need to enter a location. You can then filter your search by type of disability, ticking "Autism Spectrum Disorder", by time of week, etc.
- Trouve ton parasport: It's a tool developed by the National Paralympic Committee to help you find the sport that suits you.
- <u>Fédérations membres du Comité Paralympique et Sportif Français</u>: The CPSF leads and coordinates the players who offer, in leisure and competition, a sporting offer for people with disabilities. There are 43 member federations.
- La Relève: It's a programme of the National Paralympic Committee to detect individuals aged 16 to 35 who have performance potential in one or more Paralympic sports and who have not yet been integrated into a competition circuit. It is aimed at autistic people with intellectual disabilities.
- Hello Asso: You can tap "sport and autism" and see some association on the theme sport and autism.
- ASPTT Où pratiquer?: And of course, there are some of the ASPTT clubs which have a sport programme adapted to autistic children.

In Belgium:



Some of the organisations that provide sport activities for people with disabilities, including autistic people, are:

- Handisport Belgique: lists all of the sports programmes that are adapted to different types of disabilities (including intellectual disabilities) and provides information on this topic.
- GRATTE: a Belgian organisation that provides sport activities, outings and trips for people with different disabilities, including autism. People with disabilities and people without disabilities participate together in these programmes.











In Italy there is the Italian Paralympic Committee with its special sport federations, then Special Olympics too, but they cover only one third of the autism spectrum because for accepting autistic athletes they have the requirement of intellectual disability; moreover they cover only some sport disciplines and they have sport contexts separated from mainstream sport context.

For the other portion of the autism spectrum there are not official federations, although such autistic athletes can join ordinary sport federations, they face inclusion difficulties, so that there are several sport inclusion projects by sport clubs or autism organisations in many Italian cities, but there is not a database for them.

In Portugal:





In Portugal, the focus has increasingly been on placing people with disabilities in regular community structures, which is why protocols are often established with associations such as Inovar Autismo and sports club staff are trained to work on the inclusion of autistic people.

However, there are some resources such as the <u>Portuguese Paralympic Committee</u>'s sports inclusion map, which allows you to search for the sport you want and the area of the country.

Organisations such as the <u>Institute of Sport and Youth</u> (IPDJ) also help with the search for sports clubs.

In Croatia:





In Croatia, there is currently no centralised database for available sports programs, especially those catering to autistic children. Individuals seeking information on local sports programs are encouraged to reach out to their local autism association or contact our organisation for assistance.





PART 5:

CONCLUSION AND RESOURCES







Conclusion

The practice of sports can greatly improve physical and mental well-being, fostering feelings of fulfillment and self-confidence. Moreover, sports serve as a platform to connect with like-minded individuals, promote social interaction, and encourage new relationships.

We are aware that individuals with autism may face challenges in participating in sports, primarily due to external factors such as limited awareness of autism and a lack of suitable sports programs. It is important to emphasize that these difficulties are not inherent to the individuals themselves. This guide aims to offer a series of strategies and adjustments to overcome these obstacles and enable individuals with autism to fully enjoy the benefits of sports.

When considering participating in a sport, it is essential to identify activities that personally suit you. Take into account your preferences, interests, and strengths when choosing a sport. The guide we offer provides valuable information and resources to help you in this process, guiding you through the exploration of various sporting options and helping you understand how they align with your preferences and abilities. Whether it's individual activities like swimming or running, which allow you to progress at your own pace, or team sports like football or basketball, which foster camaraderie and teamwork, the guide enables you to make informed decisions that meet your specific needs and interests.

Regardless of your abilities or challenges, it is crucial that you feel welcomed and supported within the sports community. Feel free to openly communicate with coaches or program leaders about your needs when joining a sports program. By addressing your challenges and exploring solutions together, you can enhance your sports experience. Our guide provides a variety of tools, such as information sheets and documents, designed to assist you in this process.

Finally, it is important to remember that fun should be the primary goal of participating in sports, regardless of the outcomes. Set achievable goals and celebrate your successes, both big and small, as sports offer invaluable opportunities for personal growth, learning, and enjoyment.

Resources (available in appendices):

Fact sheet: preconceived ideas about autism

Fact sheet: What is the autism spectrum?







Bibliography

- 1.Alexander, M. G. F., Dummer, G. M., Smeltzer, A., & Denton, S. J. (2011). Developing the Social Skills of Young Adult Special Olympics Athletes. Education and Training in Autism and Developmental Disabilities, 46(2), 297-310. http://www.jstor.org/stable/23879699
- 2. Alhowikan A. Benefits of physical activity for autism spectrum disorders: A systematic review. Saudi J Sport Med [Internet]. 2016 [cited 2023 Mar 5];16:163. Available from: https://www.researchgate.net/ publication/305802380 Benefits of physical activity for autism spectrum disorders A systematic review
- 3. American **Psychiatric** Association. DSM-5 Task Force. (2013). Diagnostic and statistical manual of mental disorders: DSM-5™ (5th ed.). American Psychiatric Publishing, Inc.. https:// doi.org/10.1176/appi.books.9780890425596
- 4. Arnell, S., Jerlinder, K., & Lundqvist, L. O. (2018). Perceptions of physical activity participation among adolescents with autism spectrum disorders: A conceptual model of conditional participation. Journal of Autism and Developmental Disorders, 48(5), 1792-1802. https://doi.org/10.1007/s10803-017-3436-2
- 5. Ausderau, Karla K et al. "Sensory subtypes in children with autism spectrum disorder: latent profile transition analysis using a national survey of sensory features." Journal of child psychology and psychiatry, and allied disciplines vol. 55,8 (2014): 935-44. doi:10.1111/jcpp.12219
- 6. Ayvazoglu, Nalan R et al. "Determinants and challenges in physical activity participation in families with children with high functioning autism spectrum disorders from a family systems perspective." Research in developmental disabilities vol. 47 (2015): 93-105. doi:10.1016/j. ridd.2015.08.015
- 7. Babyak, M et al. "Exercise treatment for major depression: maintenance of therapeutic benefit at 10 months." Psychosomatic medicine vol. 62,5 (2000): 633-8. doi:10.1097/00006842-200009000-00006
- 8. Botha, Monique et al. "Does Language Matter? Identity-First Versus Person-First Language Use in Autism Research: A Response to Vivanti." Journal of autism and developmental disorders vol. 53,2 (2023): 870-878.

doi:10.1007/s10803-020-04858-w

- 9. Boucher, Troy Q et al. "Facilitators and Barriers to Physical Activity Involvement as Described by Autistic Youth with Mild Intellectual Disability." Advances in neurodevelopmental disorders, 1-13. 12 Dec. 2022, doi:10.1007/s41252-022-00310-5
- 10. Boué, S. (2022). Am i Autistic?. BOM (Birmingham Open Media): Birmingham.
- 11. Bremer, Emily et al. "A systematic review of the behavioural outcomes following exercise interventions for children and youth with autism spectrum disorder." Autism: the international journal of research and practice vol. 20,8 (2016): 899-915. doi:10.1177/1362361315616002
- 12. Carlsson, E. (2019). Aspects of Communication, Language and Literacy in Autism: Child Abilities and Parent Perspectives (Thesis). Gothenburg (Sweden): University of Gothenburg: https://gupea.ub.gu.se/ bitstream/handle/2077/58237/gupea 2077 58237 1. pdf?sequence=1&isAllowed=y
- 13. Case-Smith, Jane et al. "A systematic review of sensory processing interventions for children with autism spectrum disorders." Autism: the international journal of research and practice vol. 19,2 (2015): 133-48. doi:10.1177/1362361313517762
- 14. Cheung, Phoebe Pui Pui, and Benson Wui Man Lau. "Neurobiology of sensory processing in autism spectrum disorder." Progress in molecular biology and translational science vol. 173 (2020): 161-181. doi:10.1016/bs.pmbts.2020.04.020
- 15. Corvey, Kathryn et al. "Obesity, Physical Activity and Sedentary Behaviors in Children with an Autism Spectrum Disorder." Maternal and child health journal vol. 20,2 (2016): 466-76. doi:10.1007/s10995-015-1844-5





- 16. Crompton CJ, Sharp M, Axbey H, Fletcher-Watson S, Flynn EG and Ropar D (2020) Neurotype-Matching, but Not Being Autistic, Influences Self and Observer Ratings of Interpersonal Rapport. Front. Psychol. 11:586171. doi: 10.3389/fpsyg.2020.586171
- 17. Dan Keefe, Tracy Rowland, Steve Vasey, Jon White: Booklet All about autism, all about me, staff at Clare Mount Specialist Sports College, https:// www.youthsporttrust.org/media/z3fflo2m/all_about_ autism1.pdf
- 18. Department for Health and Social Care [DHSC] (2019). Core Capabilities Framework for Supporting Autistic People. UK: UK Government.
- 19. Dreyer Gillette, Meredith L et al. "Prevalence and Health Correlates of Overweight and Obesity in Children with Autism Spectrum Disorder." Journal of developmental and behavioral pediatrics : JDBP vol. 36,7 (2015): 489-96. doi:10.1097/ DBP.0000000000000198
- 20. Dreyer Gillette, Meredith L et al. "Prevalence and Health Correlates of Overweight and Obesity in Children with Autism Spectrum Disorder." Journal of developmental and behavioral pediatrics : JDBP vol. 36,7 (2015): 489-96. doi:10.1097/ DBP.0000000000000198
- 21. Duquette, M. M., Carbonneau, H., Roult, R., & Crevier, L. (2016). Sport and physical activity: Facilitating interventions with young people living with an autism spectrum disorder. Physical Activity Review, (4), 40-49.
- 22. Evans, E Whitney et al. "Dietary Patterns and Body Mass Index in Children with Autism and Typically Developing Children." Research in autism spectrum disorders vol. 6,1 (2012): 399-405. doi:10.1016/j. rasd.2011.06.014
- 23. Ferreira JP, Andrade Toscano CV, Rodrigues AM, Furtado GE, Barros MG, Wanderley RS, et al. Effects of a physical exercise program (PEP-Aut) on autistic

- children's stereotyped behavior, metabolic and physical activity profiles, physical fitness, and health-related quality of life: a study protocol. Front Public Heal. 2018:6
- 24. Garcia, Jeanette M et al. "Brief Report: Preliminary Efficacy of a Judo Program to Promote Participation in Physical Activity in Youth with Autism Spectrum Disorder." Journal of autism and developmental disorders vol. 50,4 (2020): 1418-1424. doi:10.1007/ s10803-019-04338-w
- 25. Garratt, K. i Abreu, L. (2023). Autism: Overview of policy and services. London: The House of Commons Library.
- 26. Gill, Jason M R, and Ashley R Cooper. "Physical activity and prevention of type 2 diabetes mellitus." Sports medicine (Auckland, N.Z.) vol. 38,10 (2008): 807-24. doi:10.2165/00007256-200838100-00002
- 27. Greaves-Lord, Kirstin et al. "Innovations of the ICD-11 in the Field of Autism Spectrum Disorder: A Psychological Approach." Clinical psychology in Europe vol. 4,Spec Issue e10005. 15 Dec. 2022, doi:10.32872/ cpe.10005
- 28. Hage, Simone Vasconcelos Rocha et al. "Social Communication and pragmatic skills of children with Autism Spectrum Disorder and Developmental Language Disorder." CoDAS vol. 34,2 e20210075. 17 Dec. 2021, doi:10.1590/2317-1782/20212021075
- 29. Hamer, M, and Y Chida. "Physical activity and risk of neurodegenerative disease: a systematic review of prospective evidence." Psychological medicine vol. 39,1 (2009): 3-11. doi:10.1017/S0033291708003681
- 30. Happé, Francesca, and Uta Frith. "Annual Research Review: Looking back to look forward - changes in the concept of autism and implications for future research." Journal of child psychology and psychiatry, and allied disciplines vol. 61,3 (2020): 218-232. doi:10.1111/jcpp.13176





- 31. Healy, Sean et al. "Physical Activity, Screen-Time Behavior, and Obesity Among 13-Year Olds in Ireland with and without Autism Spectrum Disorder." Journal of autism and developmental disorders vol. 47,1 (2017): 49-57. doi:10.1007/s10803-016-2920-4
- 32. Holingue, Calliope et al. "Gastrointestinal concerns in children with autism spectrum disorder: A qualitative study of family experiences." Autism: the international journal of research and practice vol. 26,7 (2022): 1698-1711. doi:10.1177/13623613211062667
- 33. Huseyin O. (2019). The impact of sport activities on basic motor skills of children with autism. Pedagogics, psychology, medical-biological problems of physical training and sports, (3), 138-144.
- 34. Hyman, Susan L et al. "Identification, Evaluation, and Management of Children With Autism Spectrum Disorder." Pediatrics vol. 145,1 (2020): e20193447. doi:10.1542/ peds.2019-3447
- 35. Lemmi, V., Knapp, M. i Ragan, I. (2017). The Autism Dividend: Reaping the Rewards of Better Investment. National Autism Project
- 36. Keating, Connor Tom et al. "Autism-related language preferences of English-speaking individuals across the globe: A mixed methods investigation." Autism research : official journal of the International Society for Autism Research vol. 16,2 (2023): 406-428. doi:10.1002/aur.2864
- 37. Kelly, C.(.n.d). Communicating with parents. The autism helper. https://theautismhelper.com/communicating-withparents
- 38. Kenny, Lorcan et al. "Which terms should be used to describe autism? Perspectives from the UK autism community." Autism: the international journal of research and practice vol. 20,4 (2016): 442-62. doi:10.1177/1362361315588200

- 39. Kimber, A., Burns, J., & Murphy, M. (2023). "It's all about knowing the young person": Best practice in coaching autistic athletes. Sports Coaching Review, 12(2), 166-186.
- 40. Kozlowski, Karl F et al. "Feasibility and Associated Physical Performance Outcomes of a High-Intensity Exercise Program for Children With Autism." Research quarterly for exercise and sport vol. 92,3 (2021): 289-300. doi:10.1080/02701367.2020.1726272
- 41. Kunzi, K. (2015), Improving Social Skills of Adults With Autism Spectrum Disorder Through Physical Activity, Sports, and Games: A Review of the Literature. Adultspan Journal, 14: 100-113. https://doi.org/10.1002/adsp.12008
- 42. Kozlowski, Karl F et al. "Feasibility and Associated Physical Performance Outcomes of a High-Intensity Exercise Program for Children With Autism." Research quarterly for exercise and sport vol. 92,3 (2021): 289-300. doi:10.1080/02701367.2020.1726272
- 43. Mahalakshmi, B et al. "Possible Neuroprotective Mechanisms of Physical Exercise in Neurodegeneration." International journal of molecular sciences vol. 21,16 5895. 16 Aug. 2020, doi:10.3390/ijms21165895
- 44. Mantzalas, Jane et al. "What Is Autistic Burnout? A Thematic Analysis of Posts on Two Online Platforms." Autism in adulthood: challenges and management vol. 4,1 (2022): 52-65. doi:10.1089/aut.2021.0021
- 45. Marco, Elysa J et al. "Sensory processing in autism: a review of neurophysiologic findings." Pediatric research vol. 69,5 Pt 2 (2011): 48R-54R. doi:10.1203/ PDR.0b013e3182130c54
- 46. McCoy, Stephanie M, and Kristen Morgan. "Obesity, physical activity, and sedentary behaviors in adolescents with autism spectrum disorder compared with typically developing peers." Autism: the international journal of research and practice vol. 24,2 (2020): 387-399. doi:10.1177/1362361319861579





- 47. Memari, A H et al. "Physical activity in children and adolescents with autism assessed by triaxial accelerometry." Pediatric obesity vol. 8,2 (2013): 150-8. doi:10.1111/j.2047-6310.2012.00101.x
- 48. Menear, K. S. & Neumeier, W. H. (2015) Promoting Physical Activity for Students with Autism Spectrum Disorder: Barriers, Benefits, and Strategies for Success, Journal of Physical Education, Recreation and Dance, 86:3, 43-48, DOI: 10.1080/07303084.2014.998395
- 49. Mills, R. i McCreadie, M. (2018). SYNERGY: Knowing me – knowing me. Changing the story around 'behaviours of concern'. Promoting self-awareness, self-control and a positive narrative. UK:AT-Autism
- 50. Milton, D. E. M. (2012). On the ontological status of autism: the "double empathy problem." Disability & Society, 27(6), 883-887. doi:10.1080/09687599.2012.710 800
- 51. Mohd Nordin, Ashikin et al. "Motor Development in Children With Autism Spectrum Disorder." Frontiers in pediatrics vol. 9 598276. 15 Sep. 2021, doi:10.3389/ fped.2021.598276
- 52. Murray, Dinah et al. "Attention, monotropism and the diagnostic criteria for autism." Autism: the international journal of research and practice vol. 9,2 (2005): 139-56. doi:10.1177/1362361305051398
- 53. Must, Aviva et al. "Comparison of sedentary behaviors between children with autism spectrum disorders and typically developing children." Autism: the international journal of research and practice vol. 18,4 (2014): 376-84. doi:10.1177/1362361313479039
- 54. Must, Aviva et al. "Barriers to Physical Activity in Children With Autism Spectrum Disorders: Relationship to Physical Activity and Screen Time." Journal of physical activity & health vol. 12,4 (2015): 529-34. doi:10.1123/ jpah.2013-0271

- 55. Nicolaidis, Christina et al. "An Expert Discussion on Autism and Empathy." Autism in adulthood: challenges and management vol. 1,1 (2019): 4-11. doi:10.1089/ aut.2018.29000.cjn
- 56. Obrusnikova, I., & Cavalier, A. R. (2011). Perceived barriers and facilitators of participation in after-school physical activity by children with autism spectrum disorders. Journal of Developmental and Physical Disabilities, 23(3), 195-211.
- 57. Ohara, Reiko et al. "Association between Social Skills and Motor Skills in Individuals with Autism Spectrum Disorder: A Systematic Review." European journal of investigation in health, psychology and education vol. 10,1 276-296. 12 Dec. 2019, doi:10.3390/ejihpe10010022
- 58. Pan, C. Y. (2012). Motor proficiency and physical fitness in adolescent males with and without autism spectrum disorders. Autism, 18(2), 156–165. doi:10.1177/1362361312458597
- 59. Pan, C. Y., Hus, P. J., Chung, I. C., Hung, C. S., Liu, Y. J., & Lo, S. Y. (2015). Physical activity during the segmented school day in adolescents with and without autism spectrum disorders. Research in Autism Spectrum Disorders, 15–16, 21–28. doi:10.1016/j. Rasd.2015.04.003.
- 60. Pierantozzi, Emanuela et al. "Effects of a Long-Term Adapted Judo Program on the Health-Related Physical Fitness of Children with ASD." International journal of environmental research and public health vol. 19,24 16731. 13 Dec. 2022, doi:10.3390/ijerph192416731
- 61. Phung, Janice N, and Wendy A Goldberg. "Promoting Executive Functioning in Children with Autism Spectrum Disorder Through Mixed Martial Arts Training." Journal of autism and developmental disorders vol. 49,9 (2019): 3669-3684. doi:10.1007/s10803-019-04072-
- 62. Potvin, Marie-Christine et al. "Recreational participation of children with High Functioning Autism." Journal of autism and developmental disorders vol. 43,2 (2013): 445-57. doi:10.1007/s10803-012-1589-6





- 63. Pusponegoro, Hardiono D et al. "Gross Motor Profile and Its Association with Socialization Skills in Children with Autism Spectrum Disorders." Pediatrics and neonatology vol. 57,6 (2016): 501-507. doi:10.1016/j. pedneo.2016.02.004
- 64. Raymaker, Dora M et al. ""Having All of Your Internal Resources Exhausted Beyond Measure and Being Left with No Clean-Up Crew": Defining Autistic Burnout." Autism in adulthood: challenges and management vol. 2,2 (2020): 132-143. doi:10.1089/aut.2019.0079
- 65. Ryan, Stephanie et al. "Patterns of sport participation for youth with autism spectrum disorder and intellectual disability." Journal of applied research in intellectual disabilities: JARID vol. 31,3 (2018): 369-378. doi:10.1111/ jar.12414
- 66. Sansi, Ahmet et al. "Effects of an Inclusive Physical Activity Program on the Motor Skills, Social Skills and Attitudes of Students with and without Autism Spectrum Disorder." Journal of autism and developmental disorders vol. 51,7 (2021): 2254-2270. doi:10.1007/s10803-020-04693-z
- 67. Shaphe, Mohammad Abu, and Aksh Chahal. "Relation of Physical Activity with the Depression: A Short Review." Journal of lifestyle medicine vol. 10,1 (2020): 1-6. doi:10.15280/jlm.2020.10.1.1
- 68. Stevenson, P. (2008). High Quality Physical Education for Pupils with Autism. UK: Youth Sport Trust: https:// www.afd.org.uk/wp-content/uploads/2013/09/AUTISM-BOOKLET v5.pdf
- 69. Silverman, Joel J et al. "The American Psychiatric Association Practice Guidelines for the Psychiatric Evaluation of Adults." The American journal of psychiatry vol. 172,8 (2015): 798-802. doi:10.1176/appi. ajp.2015.1720501

- 70. Srinivasan, Sudha M et al. "Current perspectives on physical activity and exercise recommendations for children and adolescents with autism spectrum disorders." Physical therapy vol. 94,6 (2014): 875-89. doi:10.2522/ ptj.20130157
- 71. Stanish, Heidi et al. "Enjoyment, Barriers, and Beliefs About Physical Activity in Adolescents With and Without Autism Spectrum Disorder." Adapted physical activity quarterly: APAQ vol. 32,4 (2015): 302-17. doi:10.1123/ APAQ.2015-0038
- 72. Tabeshian, Roza et al. "The Effect of Tai Chi Chuan Training on Stereotypic Behavior of Children with Autism Spectrum Disorder." Journal of autism and developmental disorders vol. 52,5 (2022): 2180-2186. doi:10.1007/ s10803-021-05090-w
- 73. Tyler, Kiley et al. "Physical activity and physical fitness of school-aged children and youth with autism spectrum disorders." Autism research and treatment vol. 2014 (2014): 312163. doi:10.1155/2014/312163
- 74. Van der Eycken W, Hoogduin K, Emmelkamp P. Handboek psychopathologie. Deel 1: Basisbegrippen [Internet]. 2008 [cited 2023 Mar 6]. Available from: https://www.researchgate.net/publication/254876690 Handboek psychopathologie Deel 1 Basisbegrippen
- 75. Van der Gaag, R.-J. (2017) Autism Spectrum Disorders: Developmental History of a Concept. In: Barahona Corrêa, B. and van der Gaag, R.-J., Eds., Autism Spectrum Disorders in Adults, Springer International Publishing, Cham, 1-27.

https://doi.org/10.1007/978-3-319-42713-3_1

76. Veereman G, Holdt Henningsen K, Eyssen M, Benahmed N, Christiaens W, Bouchez M-H, De Roeck A, Deconinck N, De ligne G, Dewitte G, Gheysen T, Hendrix M, Kagan C, Magerotte G, Moonen M, Roeyers H, Schelstraete S, Soncarrieu M-V, Steyaert J, Tolfo F, Vrancken G, Willaye E, Wintgens A, Wouters S, Croonenberghs J. (2014). Management of autism in children and young people: a good clinical practice guideline. Good Clinical Practice (GCP) Brussels: Belgian Health Care Knowledge Centre (KCE). KCE Reports 233. D/2014/10.273/87.





- 77. Vuksan, R. i Stošić, J. (2018). Bihevioralni pristup podučavanju jezika – metoda verbalno ponašanje. Logopedija, 8(1), 21-27.
- 78. Todd, Teri et al. "Cycling for students with ASD: selfregulation promotes sustained physical activity." Adapted physical activity quarterly: APAQ vol. 27,3 (2010): 226-41. doi:10.1123/apaq.27.3.226
- 79. Toscano, Chrystiane V A et al. "Exercise Effects for Children With Autism Spectrum Disorder: Metabolic Health, Autistic Traits, and Quality of Life." Perceptual and motor skills vol. 125,1 (2018): 126-146. doi:10.1177/0031512517743823
- 80. Walker, N. (2021). Neuroqueer Heresies: Notes on the Neurodiversity Paradigm, Autistic Empowerment, and Postnormal Possibilities. Autonomous Press.
- 81. Webster, A. (2018). Autism, sport & physical activity: Practical strategies to implement in your delivery of sport and physical activity when working with autistic people. UK: The National Autistic Society: https://englandathletics-prod-assets-bucket.s3.amazonaws.com/2018/11/ National-Autism-Society-Autism-sport-physical-activity-PDF-2.1MB-.pdf
- 82. Welch, Christie et al. "Living in autistic bodies: bloggers discuss movement control and arousal regulation." *Disability and rehabilitation* vol. 43,22 (2021): 3159-3167. doi:10.1080/09638288.2020.1729872
- 83. Whitehouse AJO, Evans K, Eapen V, Wray J. (2018). A national guideline for the assessment and diagnosis of autism spectrum disorders in Australia. Summary and

- recommendations. Brisbane: Cooperative Research Centre for Living with Autism.
- 84. Whiteley, Paul et al. "Research, Clinical, and Sociological Aspects of Autism." Frontiers in psychiatry vol. 12 481546. 29 Apr. 2021, doi:10.3389/fpsyt.2021.481546
- 85. Whyatt, C. P., & Craig, C. M. (2011). Motor Skills in Children Aged 7-10 Years, Diagnosed with Autism Spectrum Disorder. Journal of Autism and Developmental Disorders, 42(9), 1799–1809. doi:10.1007/s10803-011-1421-8
- 86. Williams, Gemma L et al. "Mutual (Mis)understanding: Reframing Autistic Pragmatic "Impairments" Using Relevance Theory." Frontiers in psychology vol. 12 616664. 29 Apr. 2021, doi:10.3389/fpsyg.2021.616664
- 87. Yu, Jieun, and Yong-Seok Jee. "Educational exercise program affects to physical fitness and gross motor function differently in the severity of autism spectrum disorder." Journal of exercise rehabilitation vol. 16.5 410-417. 27 Oct. 2020, doi:10.12965/jer.2040688.344
- 88. Zampella, Casey J et al. "Motor Skill Differences in Autism Spectrum Disorder: a Clinically Focused Review." Current psychiatry reports vol. 23,10 64. 13 Aug. 2021, doi:10.1007/s11920-021-01280-6
- 89. Zhao, Mengxian et al. "Effects of a Web-Based Parent-Child Physical Activity Program on Mental Health in Parents of Children with ASD." International journal of environmental research and public health vol. 18,24 12913. 7 Dec. 2021, doi:10.3390/ijerph182412913

















TO KNOW

- Autism is not a disease, it's a neurodevelopmental condition. Unlike a
 disease, autism cannot be transmitted or cured, but there are ways to
 improve quality of life and manage certain challenging aspects of this
 condition.
- There is no causal link between styles of parenting and the development of autism. The causes of autism are genetic and environmental. Not all autistic people have an intellectual disability, and conversely, not all individuals with an intellectual disability are autistic.
- Autistic people may experience crises, which are not acts of caprice but often their way of expressing discomfort in response to overwhelming situations.
- Just because an autistic person is non-speaking does not imply a lack of intelligence or the inability to communicate.
- While autism may impact learning, it is not synonymous with a learning disability.
- Not all the autistic people have an intellectual disability and not all people with an intellectual disability are autistic. Many autistic people have an intellectual development similar to the average, and sometimes superior.
- No sport is off-limits for autistic people, although each sport offers specific benefits and may require adaptations. The suitability of an activity varies from person to person.









SHEET ON THE DEFINITION OF THE AUTISM SPECTRUM

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