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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.

Disclaimer

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INTRODUCTION

Presentation of the guide

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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 program** of the **European Commission** and has a dual aim:

- Enhancing the **quality of life of autistic individuals** by **fostering participation in sports activities** through the development of a model for sports programs suited to their needs across the EU,
- 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.

This version is preliminary and not the final, definitive guide. The **completed guide will be released by the project's conclusion in 2025**. We are working day by day to improve it. Additionally, an e-learning tool will soon be accessible.

Please share any recommendations or advice by contacting us at sacree.project.autism@gmail.com.

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 Version 1.1 of our sports program tailored for autistic individuals and provided valuable feedback through a questionnaire assessing its quality.

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





About the layout: All of the graphic designers who created the icons in this document are mentioned in the Credits section of this document, in accordance with the conditions of use indicated on the Flaticon website.

Guide available in other languages



The first version of the guide for autistic individuals and their families has been translated into the languages of the Sacree project partners, including English (this document), French, Croatian, Portuguese, and Italian.

The guide for autistic people in French :	The guide for autistic people in Italian :
<u>click here</u>	click here
The guide for autistic people in Croatian :	The guide for autistic people in
<u>click here</u>	Portuguese : <u>click here</u>

These links direct you to the 'Documents to Download' section on our website, https://sacree.eu/, where you can access all the translated documents.



Presentation of the partners

FEDERATION OMNISPORTS *cultivons vos envies*

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 ASPTT 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 ASPTT has been running a sports project for the inclusion of autistic children.

Website: https://asptt.com/

STAPS Structure de volume de Structure de STAPS Structure de STAPS



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/



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



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 from organisations 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/



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/

inovarautismo.

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/



PART 1: WHY ENGAGE IN SPORTS? THE BENEFICIAL EFFECTS OF SPORTS FOR AUTISTIC INDIVIDUALS

<u>1.1 Lifelong preventive and therapeutic effects of sport</u>

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Sport and physical activity offer lifelong preventive and therapeutic benefits for all individuals, including autistic people.

For chronic diseases, sport and physical activity have been shown to decrease the relative risk as follows:

- 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).





<u>1.2 Effects of sport on autistic people</u>



This section has not been finalised and is currently being drafted by the scientific team.

The findings indicate that **engaging in sports can provide autistic individuals a range of physical, psychological, and social advantages**. Physically, sports promote motor skill development, coordination, and overall physical fitness, which can enhance the individuals' overall well-being. Interestingly, there is no full contra-indication for any activity, although some require a specific preparation. Each could provide benefits in a specific area. While we wait for this part to be finalised, take a look at our initial conclusions.

Studies have identified a number of **benefits** of sport and physical activity for autistic people, including **improvement** in, for instance:

- Social skills (Alexander et al., 2011), but it is only a single-subject case study,
- Motor skills (Huseyin, 2019),
- Quality of sleep (Wachob and Lorenzi, 2015),
- Fitness (Pierantozzi et al., 2022),
- Community involvement (Kunzi, 2015).

Participating in sports not only develops physical abilities but also **fosters crucial life skills essential in everyday living**. Activities involved in self-care, such as dressing, tying shoelaces, and maintaining personal hygiene, can be generalised from sports, thereby positively impacting their independence and overall quality of life (Huseyin, 2019).

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. This active involvement aids in managing prevalent conditions like anxiety, depression, and obesity often experienced by autistic individuals (Kunzi, 2015).





1.3 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)

"Since I was a child, I really wanted to do karate, but in the area where I lived there was no karate. (...) I was told and encouraged to try taekwondo and, if I didn't like it, I could leave it at that. But after the first lesson, I became very interested and stayed". (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)

"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 old man on the autism spectrum from Italy)

"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)





 \bigtriangledown

"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 self-confidence)" (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?

 Σ This section is provisional because the final version is still being written, it will be completed for our final guide in 2025.

Here are the key points to consider:

D No sport is contraindicated for autistic individuals, although each sport offers specific benefits and may require adaptations.

It's essential to recognize that while one activity may be suitable for one autistic person, it may not be for another.

This is illustrated by the results of a questionnaire campaign in which autistic people were asked about the sport they practise (from most practised to least practised among respondents): swimming, fitness, multisports, soccer, walking, biking, martial art, climbing, running, horse riding, rugby, track and field, basket-ball, dance, yoga, tennis, fencing, table tennis, golf, handball, volleyball, archery, badminton, boxing, surf, parkour, etc.

2 Regardless of the level of support required, all autistic individuals can benefit from sport to a similar extent, even if they need significant assistance and attention.

To have more information, we invite you to wait for the publication of a narrative review on the effect of sport on autistic people, written by the University of Franche Comté, one of the partners of the Sacree project. The link to the article will be included in the final version of this guide.

3 Therefore, the most important step is to find a sport that **fits your needs and preferences**.

To aid you in this process, we have created a **Sport Preference Questionnaire tailored for Autistic Individuals** (available in appendix), along with a complementary **Guide to Making the Right Choice** (available in appendix and on our website). These resources provide valuable insights to guide you towards finding the perfect sport for your needs and preferences.





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

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- 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.

-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

- Autism is a **spectrum condition**: while common characteristics are shared among autistic individuals, each person's experience is unique. 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, including but not limited to: attention deficit hyperactivity disorder (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).

- **Executive functions challenges**, which involve planning, behaviour control, and adapting to social situations, can present in various forms, including **difficulties in information processing**, **attention**, and **emotional regulation** (van der Gaag, 2017).

- Autistic individuals may **need adjustments** in their living, learning, and working environments to accommodate their unique differences.

-"**Stimming**", or **self-stimulating behaviours**, 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 autistic people feel completely overwhelmed, they may experience a **meltdown**. This can involve verbal outbursts like shouting or crying, physical actions such as kicking or hitting, or withdrawing and shutting down completely, known as a "shutdown". It's important to distinguish meltdowns and shutdowns from tantrums or deliberate anger, as they are involuntary responses and not motivated by a desire to achieve or avoid something. **The way these reactions manifest and the solutions to help vary greatly from person to person**.

- 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

- 1. 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.
- 2. Climbing stairs instead of taking the elevator or the escalator is a simple and effective way to incorporate physical activity into your daily routine.





- **3.** 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.
- **4.** Take regula**r walks** or bike rides in the neighbourhood or local park. You can take these walks with friends, family, on your own, etc.



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

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



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

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







- **9.** Play classic outdoor games like tag, hide-and-seek, or capture the flag with friends or siblings.
- **10.** Join a community sports program, such as soccer, basketball, or baseball.



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

12. Create an **indoor mini-basketball hoop using a laundry basket** and foam balls for shooting practice.





13. Have a **friendly competition** of sack races in the backyard.

14. If you have a dog, take it for walks more often and for longer.

15. Go for a **swim** at the municipal pool or take swimming lessons at a local pool or community centre.

16. Try out different sports equipment, such as scooters, rollerblades, or skateboards, for outdoor fun.

17. Set up a **DIY outdoor gym** with homemade equipment like a pull-up bar, jump rope, and balance beam.

18. Plan a family **camping trip** with activities like hiking, fishing, and roasting marshmallows over a campfire.

19. Play **recreational sports** like frisbee, volleyball, or tennis at a nearby park with friends or family.









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



- **21.** Participate in **charity walks or runs t**o support a cause while getting exercise.
- **22.** Create an **outdoor play area** with equipment like a swing set, climbing frame, and trampoline for active playtime.



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

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



25. 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

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

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

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



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





30. Set up a **DIY backyard mini-olympics** with events like sprints, long jumps, and obstacle courses.







PART 4: HOW TO FIND A SPORTS CLUB



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

- <u>Annuaire Autisme Info Service</u>: 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.
- <u>Handi Guide des sports</u>: 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.
- <u>Trouve ton parasport</u>: 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.
- <u>La Relève</u>: 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.
- <u>Hello Asso</u>: You can tap "sport and autism" and see some association on the theme sport and autism.
- <u>ASPTT Où pratiquer ?</u>: And of course, there are some of the ASPTT clubs which have a sport programme adapted to autistic children.



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

- <u>Handisport Belgique</u>: lists all of the sports programmes that are adapted to different types of disabilities (including intellectual disabilities) and provides information on this topic.
- <u>GRATTE</u>: 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 <u>Italian Paralympic Committee</u> with its special sport federations, then <u>Special</u> <u>Olympics</u> 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, 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 Portuguese <u>Paralympic Committee's sports</u> 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 (IPDJ)</u> also help with the search for sports clubs.



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.





CONCLUSION AND RESSOURCES

Conclusion

Participating in sports can greatly enhance both physical and mental well-being, fostering feelings of fulfilment and self-assurance. Additionally, sports serve as a platform for connecting with like-minded individuals, fostering social interaction, and fostering new relationships.

We recognize that autistic individuals may face barriers in engaging in sports, primarily due to external factors such as limited autism awareness and a lack of tailored sports programs. It is crucial to underscore that these challenges are not inherent to the individuals themselves. This guide aims to offer a range of strategies and adjustments to overcome these obstacles, empowering autistic individuals to fully enjoy the benefits of sports.

When contemplating participation in sports, it is vital to identify activities that resonate with you personally. Consider your preferences, interests, and individual strengths when selecting a sport. The guide we've provided offers valuable insights and resources to assist in this process, offering guidance on exploring different sports options and understanding how they align with your preferences and abilities. Whether it be individual pursuits like swimming or running, which allow for self-paced progress, or team sports such as soccer or basketball, fostering camaraderie and teamwork skills, the guide empowers you to make informed decisions that cater to your unique needs and interests.

Irrespective of your capabilities or challenges, feeling welcomed and supported within the sports community is paramount. Don't hesitate to communicate openly with coaches or program leaders about your requirements when joining a sports program. By addressing your specific challenges and exploring solutions together, you can enhance your sports experience. Our guide provides a variety of tools, such as fact sheets and informative materials, designed to support you along this path.

Lastly, it's important to remember that enjoyment should be the primary focus of sports participation, irrespective of outcomes. Set achievable goals and celebrate your accomplishments, big and small, as sports offer invaluable opportunities for personal growth, learning, and enjoyment.

Ressources (available in the appendix)

- Sheet: misconceptions about autism
- Sheet: what is the autism spectrum
- Guide to choose the appropriate activity (available in appendix)
- Sport Preference Questionnaire for Autistic Individuals (available in appendix)





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<a href="<u>https://www.flaticon.com/fr/icones-gratuites/activites</u>" title="activités icônes">Activités icônes créées par Freepik - Flaticon

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APPENDIX - Sacree guide for autistic people and their families

- Appendix 1: Sport Preference Questionnaire for Autistic Individuals
 - Appendix 2: Guide to choose the appropriate sports activity
 - Appendix 3: Sheet misconceptions about autism
 - Appendix 4: Sheet what is the autism spectrum





APPENDIX 1- Sport Preference Questionnaire for Autistic Individuals





Sport Preference Questionnaire for Autistic Individuals

This questionnaire is all **about you and your personal preferences** when it comes to sports and physical activities. There are no right or wrong answers, so please answer honestly based on what you enjoy and feel comfortable with.

By completing this questionnaire, you'll gain valuable insights into the types of sports that best suit your needs and interests. Whether you're looking for a team sport, individual activity, or something in between, this questionnaire will help guide you in the right direction.

After completing this questionnaire, we invite you to explore our "Guide to Making the Right Choice". This resource is designed to help you discover the sport that best aligns with your preferences and interests.

1.	What types of physical activities do you enjoy participating in?

Team sports (e.g., soccer, basketball, volleyball)

□ Individual sports (e.g., swimming, running, cycling)

□ Martial arts (e.g., karate, taekwondo)

□ Gymnastics or dance

□ Outdoor activities (e.g., hiking, rock climbing, kayaking)

Other (please specify): ______

2. Are there any sports or physical activities you have tried in the past and enjoyed?

🗆 Yes

🗆 No

\Box If yes, please list:	

3. Do you prefer team sports, individual sports, or activities that can be done alone?

□ Team sports

□ Individual sports

 \Box Activities that can be done alone





□ No preference

- 4. Are there any specific sports or activities you have always wanted to try?
 - \Box Yes

🗆 No

🗆 If yes, please list	:
-----------------------	---

5. How do you feel about competitive sports versus non-competitive activities?

 \Box Prefer competitive sports

□ Prefer non-competitive activities

- \Box No preference
- 6. Do you have any physical limitations or health concerns that may affect your choice of sport?

🗆 No

7. Are there any sensory sensitivities or preferences that should be considered when choosing a sport?

Yes (please specify): ______

🗆 No

- 8. Do you prefer sports or activities that involve structured routines and rules, or ones that allow for more flexibility and creativity?
 - □ Prefer structured routines and rules
 - \Box Prefer flexibility and creativity
 - \Box No preference
- 9. Are you interested in learning new skills and techniques, or do you prefer activities that are more familiar and comfortable?

□ Interested in learning new skills

□ Prefer activities that are familiar and comfortable

Document developed as part of the Sacree project





□ No preference

10. Do you have any preferences regarding the environment where the sport is played (indoors/outdoors, noisy/quiet, crowded/uncrowded)? Circle what you prefer.

- \circ Indoors/outdoors
- Noisy/quiet
- Crowded/uncrowded
- No preference
- **11.** How do you feel about social interaction during sports activities? Do you prefer working independently or interacting with others?
 - □ Prefer working independently
 - \Box Prefer interacting with others
 - \Box No preference
- **12.** Are there any specific goals or outcomes you hope to achieve through participating in sports or physical activities?

Yes (please specify): ______

🗆 No

13. How do you typically cope with stress or anxiety? Are there any sports or activities that help you feel calm and relaxed?

Yes (please specify): ______

🗆 No

- 14. Do you have any preferences regarding the duration and intensity of physical activity sessions? Circle what you prefer.
 - Short duration, low intensity
 - Long duration, high intensity
 - No preference


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15. Are there any logistical considerations (such as transportation, cost, or scheduling) that may impact your ability to participate in certain sports or activities?

Yes (please specify): ______

🗆 No





APPENDIX 2 - Guide to choose the appropriate sports activity

A GUIDE TO THE RIGHT CHOICE

Appendix to the Sacree model



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Disclaimer:

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

This guide, attached to the project Sacree, aims to provide a simple tool for parents, siblings, coaches, autistic persons, to select the best activity that suits them.

Because there is no universal recipe to find the sport activity that would make you enjoy practicing, here are some tips on which criteria to focus on.

How to read the directory?

The directory is based on the classification of sports on two (or three) categories of criteria.

CHARACTERISTICS OF THE ACTIVITY

INDOOR OUTDOOR	Does the activity is mostly played outside (e.g. natural environment) or inside (e.g. gymnasium)							
TEAM INDIVIDUAL	Whether the activity is a team or an individual sport							
TOOL FREE HAND	If the activity involves to manipulate a tool during the whole activity (e.g. a racket), or ponctually (e.g. a ball)							
FACE-TO-FACE OPPOSITION	If the activity involves a direct confrontation to any/several oponents							
CONTACT	The degree of which the activity involves to get in contact with partners/opponents							
OPEN CLOSED	Open practices : high levels of uncertainty, regarding the environment and/or the type of actions to perform. Closed activities : participants develop their skills within a very stable environment designed for their sport.							

How to read the directory?

The directory is based on the classification of sports on two (or three) categories of criteria.

SPECIFIC NEEDS

Motor	The degree of fine motor skills the player has to manage. Temporal pressure, the manipulation of tools, the open aspect, are criteria
Sensory	The degree of sensorial informations (mostly tactile) that participants has to tolerate. Contact with other participants is one of the main criteria.
Cognitive	The complexity and number of informations that participants have to manage at the same time. The complexity of decision-making process.
Psychology	Presence of stressfull and anxiety-generating situations. Presence of a score, a direct confrontation to any or several opponent, risk of fall, are one of the main criteria.
Adaptability	The degree of uncertainty regarding the progress of the activity, that requires high adaptation/flexibility skills. Temporal pressure, associated to the open-skills aspect, are ones of the main criteria.
Social aspects	The degree of interactions with partner and/or opponents, which require communication skills.

How to read the directory?

The directory is based on the classification of sports on two categories of criteria.

PERSONNAL PREFERENCE

Fullfill it yourself

Personnal preferency

□ Since of the main criteria is, ultimately, that the participant has a personnal attraction toward an activity, this is one of the main criteria. Fullfill the column with you own notations, from – (I don't like it a all), to +++ (I love it)

	CHARACTERISTICS							Fullfill it yourself					
SPORT	INDOOR OUTDOOR	TEAM INDIVIDUAL	TOOL FREE HAND	FACE-TO-FACE OPPOSITION	CONTACT	OPEN CLOSED	Motor	Sensory	Cognitive	Psychology	Adaptability	Social aspects	Personnal preferency
SWIMMING	INDOOR	INDIV	FREE	NO	-	CLOSED	+++	++	+	+	+	+	
ARCHERY	BOTH	INDIV	TOOL	NO	-	CLOSED	++++	+	++	++	+	+	
BADMINTON	INDOOR	BOTH	TOOL	YES	-	OPEN+	+++	+	+++	++	+++	++	
BASKET-BALL	INDOOR	TEAM	BOTH	YES	+	OPEN+	++++	++	+++	+++	+++	+++	
CYCLING	OUTDOOR	INDIV	TOOL	NO	-	OPEN	++	+	+	+	++	++	
BOXE	INDOOR	INDIV	TOOL	YES	++	OPEN+	++	+++	+++	+++	+++	++	
CLIMBING	BOTH	INDIV	BOTH	NO	-	OPEN	+++	+	++	+++	++	++	
DANSE	INDOOR	BOTH	FREE	NO	+	CLOSED	++	+	+	+	+	++	
FENCING	INDOOR	INDIV	TOOL	YES	+	OPEN+	++++	++	+++	++	+++	++	
FITNESS	INDOOR	INDIV	FREE	NO	-	CLOSED	+	+	+	+	+	+	
GOLF	OUTDOOR	INDIV	TOOL	NO	-	CLOSED	+++	+	+	+	+	+	
GYMNASTICS	INDOOR	INDIV	FREE	NO	-	CLOSED	+++	+	+	++	+	+	
HANDBALL	INDOOR	TEAM	BOTH	YES	+	OPEN+	++	++	+++	+++	+++	+++	
HORSE RIDING	OUTDOOR	INDIV	TOOL	NO	-	OPEN	+	+++	+	++	++	++	
MARTIAL ART	INDOOR	INDIV	BOTH	YES	++	OPEN+	+	+++	++	+++	+++	+++	
PARKOUR	BOTH	INDIV	FREE	NO	-	OPEN	+++	+	++	+++	+++	+	
RUGBY	OUTDOOR	TEAM	BOTH	YES	++	OPEN+	+++	+++	+++	+++	+++	++++	
RUNNING	OUTDOOR	INDIV	FREE	NO	-	OPEN	+	+	+	+	+	+	
SOCCER	OUTDOOR	TEAM	BOTH	YES	+	OPEN+	+++	++	+++	++	+++	++++	
SURF	OUTDOOR	INDIV	TOOL	NO	-	OPEN	+++	++	+	++	++	+	
TABLE TENNIS	INDOOR	BOTH	TOOL	YES	-	OPEN+	+++	+	+++	+	+++	++	
TENNIS	BOTH	BOTH	TOOL	YES	-27	OPEN+	+++	+	+++	+	+++	++	
TRACK AND FIELD	BOTH	INDIV	BOTH	NO	-	CLOSED	+	+	+	+	+	+	
VOLLEYBALL	INDOOR	TEAM	BOTH	YES	+	OPEN+	+++	+	+++	++	+++	+++	
WALKING	OUTDOOR	INDIV	FREE	NO	-	CLOSED	+	+	+	+	+	+	
YOGA	INDOOR	INDIV	FREE	NO	-	CLOSED	+	+	+	+	+	+	



In the next part please find some examples to illustrate the different continuums that exist between activities, regarding the specific needs of autistic persons.

MOTOR CONTEXT



SENSORY CONTEXT



COGNITIVE CONTEXT



PSYCHOLOGICAL CONTEXT



SOCIAL CONTEXT



ADAPTABILITY CONTEXT



PERSONAL CONTEXT









APPENDIX 3 - Sheet misconceptions about autism





MISCONCEPTIONS ABOUT AUTISM

- 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.

- 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.





APPENDIX 4 - Sheet what is the autism spectrum





WHAT IS THE AUTISM SPECTRUM

- Autism is a **spectrum condition**: while common characteristics are shared among autistic individuals, each person's experience is unique. 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, including but not limited to: attention deficit hyperactivity disorder (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).

- Executive functions challenges, which involve planning, behaviour control, and adapting to social situations, can present in various forms, including difficulties in information processing, attention, and emotional regulation (van der Gaag, 2017).

- Autistic individuals may **need adjustments** in their living, learning, and working environments to accommodate their unique differences.

-"Stimming", or self-stimulating behaviours, 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 autistic people feel completely overwhelmed, they may experience a **meltdown**. This can involve verbal outbursts like shouting or crying, physical actions such as kicking or hitting, or withdrawing and shutting down completely, known as a "shutdown". It's important to distinguish meltdowns and shutdowns from tantrums or deliberate anger, as they are involuntary responses and not motivated by a desire to achieve or avoid something. The way these reactions manifest and the solutions to help vary greatly from person to person.

- All autistic individuals can derive similar benefits from sports, even those requiring significant support and attention.