



Be Your Best : The Challenge of healthy lifestyles for young with a disability



Guide facilitating interventions in sport and physical activity among young people with a

INTELLECTUAL DISABILITY

2013 Edition

Translated 2016

PRODUCED BY

UQTR



Université du Québec
à Trois-Rivières



AN
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OF



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FINANCIAL SUPPORT OF



WRITTEN BY:

- ❖ ANDRÉANNE BÉDARD, research assistant, Université du Québec à Trois-Rivières (UQTR)
- ❖ MARIE-JOSÉE DROLET, professor, UQTR, research associate for the 'Be Your Best' project research team

IN COLLABORATION WITH:

- ❖ HÉLÈNE CARBONNEAU, professor, UQTR, supervisor of the 'Be Your Best' project research team
- ❖ RESEARCH TEAM of the 'Be Your Best' project : the challenge of healthy lifestyle for young with disabilities



THE LOGO OF THE 'LABORATOIRE
EN LOISIR ET VIE COMMUNAUTAIRE'

TRANSLATED BY:

- ❖ JESSICA POITRAS-QUIGLEY

LAYOUT BY :

- ❖ ISABELLE BRUNET

THE PHOTOS ON THE FRONT PAGE SHOW A YOUNG GIRL RUNNING, A YOUNG BOY THROWING A WEIGHT, A YOUNG BOY SHOWING HIS PRIDE AFTER FINISHING A SWIMMING COMPETITION AND A YOUNG GIRL DOING GYMNASTICS WITH A RHYTHMIC RIBBON

THE PICTURES PRESENTED IN THIS GUIDE WERE TAKEN AS PART OF THE DÉFI SPORTIF ALTERGO . THEY DO NOT NECESSARILY REPRESENT YOUNG PEOPLE WITH THE DISABILITY OR THE DISORDER WHICH IS THE SUBJECT OF THIS GUIDE

THANKS TO JEAN-BAPTISTE BENAVENT, FRANÇOIS LACASSE AND ALAIN RAKOTOMANANA FOR THE PICTURES PRESENTED ON THE FRONT PAGE AND THROUGHOUT THE GUIDE

Table of contents

INTRODUCTION.....	5
1. PHYSICAL ACTIVITY AS VIEWED BY PEOPLE WITH AN INTELLECTUAL DISABILITY AND THOSE CLOSE TO THEM.....	6
1.1 Characteristics of young people with an intellectual disability	6
1.2 Physical.....	9
1.3 Psychological	9
1.4 Social	11
2. BENEFITS OF SPORT AND PHYSICAL ACTIVITY	13
2.1 Physical.....	13
2.2 Psychological	13
2.3 Social	14
3. CONSTRAINTS TO PARTICIPATION IN SPORT AND PHYSICAL ACTIVITY..	18
3.1 Constraints relating to young people with intellectual disabilities	18
3.2 Constraints relating to the activity	19
3.3 Constraints relating to the environment.....	20
a) Constraints relating to the microsystem	20
b) Constraints relating to the mesosystem	20
c) Constraints relating to the macrosystem	21
4. PROGRAMS AND TOOLS AVAILABLE	25
4.1 Supporting a healthy lifestyle	25
4.2 Supporting participation in sport and physical activity	26
4.3 Recommendations from professionals	30
a) Recommendations relating to young people	30
b) Recommendations relating to the activity.....	33
c) Recommendations relating to the environment	34
5. KEY POINTS TO SUPPORT SPORT AND PHYSICAL ACTIVITY.....	35
REFERENCES.....	37

List of tables

Table 1: Difficulties of young people with an ID	7
Table 2: Benefits of sport and physical activity according to young people with an ID and their parents	12
Table 3: Benefits of sport and physical activity according to the scientific literature..	16
Table 4: Summary of constraints that may restrict participation of young people with an ID in sport and physical activity	24
Table 5: Web sites about healthy lifestyles	25
Table 6: Organizations and programs that support the participation of young people with an ID in sport and physical activity	27
Table 7: Foundations that support the participation of young people with an ID in sport and physical activity	29
Table 8: Means to overcome constraints relating to young people with an ID.....	31
Table 9: Communication strategies	32
Table 10: Means to overcome constraints relating to the activity	33
Table 11: Means to overcome constraints relating to the environment	34

Men and women with intellectual disabilities are full members of our society. Like everyone else, they want to move forward in life, have dreams, complete projects, and simply be happy. More than others, they need attentive and warm support: from a father, a mother, a brother, a sister, a relative, of course, but also from the whole community (Government of Québec, 2001, p. 5)¹.

INTRODUCTION

There are many benefits to sport and physical activity^{2, 3}. However, young people with functional limitations may be restricted in their participation in sport and physical activity⁴. This includes young people with intellectual disabilities (ID)⁵. According to the Québec office for people with disabilities (*Office des personnes handicapées du Québec*, 2011), 3% of the population of Québec has an ID⁶. Among children with a disability, nearly 30% have an ID⁶. According to the Report on the study of factors facilitating the adoption of a healthy lifestyle and participation of young people with disabilities in sport and physical activity (*Rapport sur l'étude des facteurs facilitant l'adoption de saines habitudes de vie et la pratique d'activités physiques et sportives par les jeunes ayant une limitation fonctionnelle*)⁵, young people with an ID are restricted in their participation in sport and physical activity. It is therefore relevant to identify the benefits of sport and physical activity for these young people, the constraints that restrict their participation in these activities and the means to overcome these obstacles.

This guide — developed using interviews with young people with an ID, parents, and professionals, as well as a review of the literature — aims to support parents of young people with an ID as well as the physical educators and coaches who work with these young people. A total of 16 interviews were conducted. These interviews support the literature and identify means to overcome the constraints that these young people face when they wish to participate in sport and physical activity. This guide is divided into six sections. The first presents the characteristics of young people with an ID, including the difficulties they face. The second relates the benefits of sport and physical activity as viewed by young people with an ID and their parents. The third describes the benefits of such activities for young people in general and young people with an ID as described in the scientific literature. The fourth describes the constraints young people with an ID face when participating in sport and physical activity. The fifth presents the programs and tools available for young people with an ID to promote healthy living, which includes sport and physical activity. The final section is composed of key points to remember to encourage young people with an ID to participate in sport and physical activity. Finally, appendices include tables listing the available resources throughout the various regions of Québec in order to promote participation in sport and physical activity for young people with limitations.

1. PHYSICAL ACTIVITY AS VIEWED BY PEOPLE WITH AN INTELLECTUAL DISABILITY AND THOSE CLOSE TO THEM

Before demonstrating the importance and benefits of sport and physical activity for young people with an ID, we must first define ID and establish the main characteristics of young people with an ID, including their difficulties.

1.1 Characteristics of young people with an intellectual disability

Intellectual disability (ID) is not an illness but a permanent condition diagnosed before the age of 18⁷. This condition is characterized by lower than average intellectual functioning, which represents an IQ of 70 or less⁸. Moreover, “intellectual disability is characterized by significant limitations in both intellectual functioning and adaptive behaviour that cover conceptual, social and practical skills”⁹.

In general, ID is associated with language, motor and behavioural difficulties⁷. Physical and mental health issues may also be associated with this condition. For example, young people with an ID often have heart disease, hypothyroidism, hyperthyroidism¹⁰ are overweight or obese¹¹. Sometimes, this condition is associated with personality disorders such as bipolarity, for example¹². Mental health issues are 3 to 4 times higher in people with an ID than in the general population¹².

In short, this permanent condition creates difficulties in various aspects of life, such as communication, autonomy, domestic life, social and interpersonal skills, the use of environmental resources, individual responsibility, the use of academic knowledge, work, leisure, health and safety⁸ as well as adaptive behaviour⁹. The table below shows a summary of the difficulties young people with an ID often face. Examples are provided so as to illustrate each of these difficulties, whose presence or absence and degree vary from one person to another.

Table 1: Difficulties of young people with an ID

Areas affected	Difficulties ¹²	Examples
Cognitive	Ability to learn	Must repeat and practice completing a task several times to assimilate it.
	Adaptability	In a new environment, has difficulty completing the same activity that was previously successfully completed.
	Attention	Manipulates objects or does something else while someone gives instructions.
	Communication	Rarely expresses needs. Makes few requests. May also find it difficult to understand long instructions.
	Conceptualization	Has difficulty mentally visualizing the task at hand.
	Difficulty comprehending abstract concepts	Is distracted by background noise and movement during the activity.
	Memory	Has difficulty remembering the sequence of the activity the following week.
	Motivation	Wants to stay home rather than participate in the activity but enjoys the activity.
	Motor planning	Has difficulty identifying movements to be performed in the correct order before completing the task
	Problem solving	Asks for help or stops the activity when facing a problem.
	Reasoning	Cannot explain why, in baseball, it is necessary to run to first base before running to second, third, and home plate.
	Remembering instructions and rules	Has difficulty repeating instructions that were just given.
	Self-criticism	Claims to be successfully carrying out the activity while significant difficulties can be observed.
Understanding instructions and rules	Remains seated once instructions are given. Explanations have to be given differently in order to be understood.	

¹ Difficulties are listed in alphabetical order

² The difficulties and examples listed in this table were taken from the interviews as well as the following sources: Bédard (2013), Duquette and Lesage (2013).

Table 1 (Cont.)

Areas affected	Difficulties ³⁴	Examples
Physical	Endurance	Shows fatigue a few minutes into the activity.
	Eye coordination	Tracks ball with eyes but drops it nonetheless because doesn't bring hands together at the right time.
	Fine motor skills	Has difficulty tying skates.
	Hypotonia	Drops ball or baseball bat due to a lack of strength in hands.
	Non-differentiated movements	Uses entire arm rather than only the wrist to aim the basketball towards the hoop.
	Ocular pursuit	Has difficulty tracking an object with his or her eyes.
	Perceptual motor coordination	Drops the ball if it is not thrown directly in his or her hands.
	Planning movements	Confuses the order of different movements required when time comes to complete the task.
	Postural control	Leans forward during the activity, which affects the accuracy of movements.
	Postural reaction	Falls forward and doesn't adjust posture to keep from falling.
	Visual fixation	Constantly moves eyes when looking at someone. This can be difficult when examples are provided.
Social	Adapted and appropriate behaviours	Runs and jumps everywhere during a ballet or gymnastics class.
	Following instructions and rules	Stands up constantly when asked to remain seated.
	Respect for authority	Continues behaviour when asked to stop.
	Social skills	Interacts in an inappropriate manner, such as cuddling to make contact with others.

³ Difficulties are listed in alphabetical order

⁴ The difficulties and examples listed in this table were taken from the interviews as well as the following sources: Bédard (2013), Duquette and Lesage (2013).

Interviews carried out with young people with an ID and their parents indicate that while it can sometimes be difficult to live with an ID, sport and physical activity has many benefits for these young people. According to the testimonials, participating in sport and physical activity has physical, psychological and social benefits for young people with an ID. The following paragraphs present excerpts from interviews conducted with young people and parents who demonstrate the benefits of participating in such activities for young people.

1.2 Physical

Given the physical health of young people with an ID, some respondents claim that participating in sport and physical activity improves gross motor skills and muscle strength of young people. In this regard, the mother of a young girl with an ID (who figure skates and goes to the gym) noted that these activities have contributed to improving her daughter's motor skills and strengthening her leg muscles, ankles, and feet. From the young people's perspective, many argue that participating in sport and physical activity meets a need to move and be active. For example, when asked the question: "*Why did you choose to play soccer?*" one of them answered: "*It's nice, we can run!*" When asked the question: "*What do you enjoy most about soccer?*" another answered: "*Running after the ball.*" A mother added that athletics allow her daughter to focus "*her excess energy.*"

These are the main physical health benefits that emerge from the interviews with young people with an ID and their parents.

1.3 Psychological

The benefits of sport and physical activity on the psychological health of young people with an ID were also reported by the young people themselves as well as the parents interviewed, as illustrated by the following excerpts. For example, as stated by the parents and young people, these benefits relate to the joy young people feel when they participate in such activities and the overall virtues of these activities. When referring to the joys of participating in sport and physical activity, a young person said: "*It's fun...I like it, I've always done it.*" In the same vein, when asked the following question: "*What do you think of him walking so much?*" a mother said: "*Well, I'm happy...he likes it [so] I don't want to stop him.*" On the contrary, not being able to participate in an activity due to an injury or accident, for example, can lead to sadness. Like this young girl said:

“Of course I have regrets about my skating, [...meaning that] knowing that at my age, [I] had to stop skating, it broke my heart because I told myself that this could end my skating career.”

This quotation shows that young people with an ID can also dream about sport and physical activity and that not being able to fulfill those dreams can be very difficult for them. In this regard, another mother claimed that her daughter has the following dreams: *“She wants to go to the World Championships; she wants to go to the Olympics.”* However, she said that if her daughter does not win any medals, it will be difficult for her because she is used to being successful in competitions.

In terms of the overall virtues of sport and physical activity, those interviewed stated that these activities enable young people with an ID to surpass themselves, let off steam, be proud of themselves, positively deal with their emotions, and to be involved in activities that give meaning to their life.

In fact, sport and physical activity can represent an opportunity for these young people to surpass themselves. In this regard, a girl said: *“I took private step classes [...and] that forced me to go beyond my limits.”*

These activities are also privileged moments to let off steam and evacuate negative stress, as this young girl stated: *“You walk into the centre, and you’re frustrated: you want to cry. You walk out: you have a big smile.”*

Another girl had this to say about the sense of pride after succeeding in an activity: *“I’ve done so many good things [that] I should be proud.”* After having won medals at the *Jeux du Québec* in Shawinigan, another added: *“Yes, I won four silver medals!”* When asked the question: *“What do you like most about playing soccer?”* a boy answered: *“scoring goals”*. Indeed, experiencing success when participating in these activities is not only a source of pride for these young people, but also an opportunity to increase their self-worth.

Several participants mentioned that sport and physical activity enables young people to deal with their emotions in a positive way and to fight boredom. The mother of a boy stated that since her son started to be more active: *“he is less aggressive, he is in a better mood, he talks to many people [and] he wants to get involved in many things. For example, he’ll be hiking Mount Godefroy soon.”* She also added that her son is so busy participating in sport and physical activity that *“he doesn’t have time to be bored”*. In the same vein, a young girl explained that since the accident that prevents her from training and skating, she doesn’t know what to do in her free time to fight boredom.

Finally, for some young people, sport and physical activity gives meaning to their life. The mother of a boy said:

“I think that’s what saves him; [knowing that] he’s active. I think that’s what helps him a lot. [It’s what helps him] be well, and to be more independent too, [meaning that] he can manage on his own.”

On the same topic, a girl explained that figure skating has been: *“one of [her] treasures!”* which illustrates just how important participating in sport and physical activity can be in the life of a young person with an ID.

1.4 Social

In addition to promoting the physical and psychological health of young people with an ID, sport and physical activity can contribute to their social health. In fact, interviews conducted with young people with an ID and parents showed that participating in these activities helps overcome shyness, provides opportunities to make new friends and opportunities for those around them to support them emotionally. To support this, a mother said that skating has helped her daughter *“overcome her shyness”*.

Young people stated that they play sports because they want to spend time with their friends. Moreover, a girl said that she prefers soccer over kayak because this way, she can be with her friends. In fact, many of the young people interviewed prefer team sports over individual sports. These group activities with their peers with an ID are pleasant and rewarding moments to socialize that contribute to their interest in these types of activities. The emotional bonds established between some young people and their coaches are also meaningful, as shown by what this young girl had to say:

“My coach and I have a great relationship. She’s what, 21 years old, maximum, and she’s so nice. She’s attentive and [if] there’s a day [when] I don’t feel well, we train and talk about what’s going on at the same time.”

Finally, the young people interviewed stated that they appreciate being emotionally supported by their parents, coaches, friends, etc. when they participate in sport and physical activity. In fact, all the young people interviewed are greatly supported and encouraged by those around them to participate in these activities.

In short, the interviews conducted with young people with an ID and parents show that participating in sport and physical activity contributes to the physical, psychological and social health of young people with an ID, as summarized in Table 2. The relevance of participating in these activities is also documented in the scientific literature, as outlined in the following section.

Table 2: Benefits of sport and physical activity according to young people with an ID and their parents

Areas	Benefits
Physical health	<ul style="list-style-type: none"> Helps to focus energy Improves gross motor skills Improves muscle strength Satisfies a need to move and be active
Psychological health	<ul style="list-style-type: none"> Gives meaning to life Fights boredom Helps positively manage emotions Allows one to fulfill their dreams Allows one to surpass oneself Helps let off steam Allows one to be proud of oneself Brings joy
Social health	<ul style="list-style-type: none"> Helps overcome shyness Provides the opportunity to make new friends Provides an opportunity to be supported by family and professionals



The photo shows a team cheering after a caucus.

2. BENEFITS OF SPORT AND PHYSICAL ACTIVITY

For a number of years, physical activity has been known to have health benefits for individuals, including the health of children and adolescents², which also includes young people with an ID¹³⁻²¹. This section summarizes the benefits of participating in sport and physical activity for young people with an ID, as documented in the literature.

2.1 Physical

In general, taking part in sport and physical activity from an early age helps the body develop properly²² by allowing the young person to continue to develop their balance, perceptual skills, sensorimotor skills (such as body image), and locomotor skills²³. Participating in sport and physical activity during growth is important because it allows the individual to acquire a basis for staying healthy by developing a suitable lifestyle²⁴. Physical activity has a positive effect on the body of the child and young adult, including preventing injury, obesity, metabolic syndrome and cardiovascular diseases².

More specifically, the benefits of sport and physical activity for young people with an ID are similar to those in typically developing young people¹³⁻²¹. In addition, the scientific literature indicates that sports helps increase bone mass^{14, 16}, muscle strength, balance, and body flexibility of these young people^{18, 19, 21}. Also, these activities reduce fat mass^{18, 25}. This element is interesting, given that “the prevalence of excess weight and obesity is...respectively twice and four times higher in preadolescents, adolescents and young adults with intellectual disabilities than in ‘ordinary’ adolescents” (p. 343)¹¹. In fact, being overweight is more common among people with an ID than the general population^{26, 27}. Also, participating in sport and physical activity improves the athletic abilities required to perform this activity^{15, 17, 28, 29}. Finally, improved athletic abilities enable young people to gain greater autonomy in their everyday lives^{17, 28, 29}.

2.2 Psychological

From a psychological perspective, participating in sport and physical activity can contribute to the development of a positive self-image, which in turn improves self-esteem and confidence in young people³⁰. Participating in sport and physical activity can contribute to the management of emotions such as impulsivity, anger and aggressiveness^{25,26}. This activity time is used as an outlet, a moment of release to achieve a state of relaxation and well-being, both physically and psychologically³⁰. Sport and physical activity can also contribute to the development of autonomy and independence³¹⁻³³.

More specifically, studies conducted with young people with an ID confirm the positive effects of sport and physical activity on their self-esteem^{13, 15, 17, 20}. For example, the successes experienced during these activities can enhance the positive perception of their abilities and their personal value¹⁵. Also, participating in sport and physical activity with typically developing peers allows young people with an ID to have a more realistic perception of their athletic abilities^{17, 34}. Because young people with an ID sometimes tend to overestimate their skills^{17, 34}, this aspect can be interesting.

2.3 Social

In general, participating in sport and physical activity can have benefits on the social health of young people, including preventing and combating various forms of violence against oneself (suicide, anorexia), against others (aggressiveness, sexism, racism) and against property (vandalism)³⁵. Team sports and physical activities take place in a context that somewhat resembles a micro society where young people can learn to improve their ability to interact with their peers^{32, 33, 36, 37}. This environment fosters the development of responsible attitudes and behaviours because the young person learns to become integrated, build healthy relationships, get along with teammates, compete against an opponent and work as a team³⁶. Thus, the young person learns to communicate adequately with others, to open up to others and to develop more appropriate social interactions. In short, participating in sport and physical activity helps learn how to live in society because it allows one to live experiences with others, to assert oneself, to communicate, to feel valued, to be part of a team, and to feel useful and accepted. Also, according to Marcellini (2006), learning body control by participating in sport and physical activity fosters social inclusion³⁸.

Specifically, studies conducted with young people with an ID showed that participating in sport and physical activity increases the frequency of adapted behavior and decreases the frequency of maladapted behavior sometimes present in these young people, both during the activity itself and after, meaning at school and at home^{13, 15, 29}. Consequently, participating in sport and physical activity improves interpersonal relationships^{13, 15, 20, 28, 39}. In addition, young people with an ID who engage in such activities make more friends^{28, 29, 39} and are generally better accepted by their peers¹⁷, especially when these activities take place with typically developing young people^{17, 20}. Moreover, participating in sport and physical activity improves the relationship between young people and their parents because they share moments of pride and happiness with their child^{15, 29}. Similarly, these young people become more accepting of authority figures and, in doing so, interact more appropriately with them^{13, 15, 17, 20, 28, 29, 39}.

In short, regardless of the chosen sport or physical activity, it is likely that it will have a positive effect on the development and health of young people with an ID. The various benefits of participating in these activities are interrelated and can affect the young person's physical, psychological and social health. Participating in these activities contributes to acquiring and maintaining a healthy lifestyle because they prevent complications caused by inactivity. Also, engaging in these types of activities

contributes to achieving psychological well-being particularly because these activities bring these young people joy and satisfaction.

In sum, the comments of the young people and parents are consistent with the results of the research that has been conducted with young people with an ID who participate in sport and physical activity. Indeed, many elements documented in the literature were reported by the young people and parents interviewed as part of this study. Table 3 below provides a summary of the benefits that have been described in more detail in the previous paragraphs.



The photo shows young people and their coaches celebrating.

Table 3: Benefits of sport and physical activity according to the scientific literature

Areas	Benefits ⁵
Physical	<ul style="list-style-type: none"> Boosts energy Fights obesity by reducing fat mass Helps the body develop properly and prevents injuries Improves athletic abilities Improves autonomy in everyday life Improves balance Improves endurance Improves flexibility Improves locomotor skills Improves muscle strength Improves perceptual skills Improves sensorimotor skills (body image) Increases bone mass Prevents cardiovascular disease Prevents metabolic syndrome Provides physical well-being
Psychological	<ul style="list-style-type: none"> Allows one to develop Brings joy Creates discipline Decreases anxiety Decreases depression factors Develops strategies Enables the achievement of goals Fights boredom Helps let off steam Helps relax Improves body image, self-esteem and self-confidence Improves listening skills, attention and concentration

⁵ The difficulties and examples listed in this table were taken from the literature cited and are listed in alphabetical order.

Table 3 (Cont.)

Areas	Benefits ⁶
Psychological (cont.)	<ul style="list-style-type: none"> Helps become more aware of the body's strengths and limitations Improves management of impulsivity, anger and aggressiveness Improves sense of self-efficacy Increases will to live Offers better psychological and emotional stability Provides psychological well-being Provides realistic perception of abilities Reduces the effects of bad stress
Social	<ul style="list-style-type: none"> Allows one to better accept authority figures Allows one to communicate appropriately Creates social support networks Develops responsible attitudes and behaviours Fosters social inclusion Helps develop social skills Helps establish healthy relationships with others Helps learn how to live in society Helps make new friends Helps open up to others Improves family ties Increases the frequency of adapted behaviour Prevents violence against oneself, others, and property Promotes teamwork Provides opportunities to participate in various activities Reduces frequency of maladaptive behaviour

⁶ The difficulties and examples listed in this table were taken from the literature cited and are listed in alphabetical order.

3. CONSTRAINTS TO PARTICIPATION IN SPORT AND PHYSICAL ACTIVITY

This section documents the constraints to participating in sport and physical activity for young people with an ID. These constraints may be related to young people themselves, the activity or the environment.

3.1 Constraints relating to young people with intellectual disabilities

Although participation in sport and physical activity is, as seen above, beneficial to the health of young people with an ID, the characteristics of these young people can, in some cases, restrict their participation in these activities. Three elements are documented in the scientific literature and are partly discussed by the young people, parents and professionals who were interviewed for this study. They include the degree of ID of the young person, their level of motivation and the health conditions associated with their ID.

A mother interviewed mentioned that her daughters face few barriers when participating in sport and physical activity due to the fact that they have a mild ID (not a moderate or severe ID). A survey of occupational therapists working with young people with an ID corroborates this reality, namely that a mild ID offers the greatest potential in terms of sport and physical activity, whether these activities are carried out individually or as a team⁴⁰. However, as shown by Bédard (2013), moderate to severe ID further hinder participation in such activities, given that it is more difficult for these young people to remember the rules, learn tasks and show interest in these activities, for example. These difficulties are due to the fact that a more severe disability means more significant cognitive and communicative deficits²⁹. In addition, mood, motivation and preferences of young people with an ID can influence participation in sport and physical activity⁴¹.

On a similar note, young people with a mild ID generally have less difficulty getting motivated to undertake sport and physical activity than young people with a more severe ID⁴⁰. However, it is more difficult for young people with an ID to demonstrate the motivation to participate in sport and physical activity than it is for their typically developing peers, as shown in this excerpt from a transcript. When asked the question: *“What hinders his/her participation [in sport and physical activity]?”*, a mother said this about her daughter: *“Motivation [...]; like training [...], she lacked a bit of motivation to go”*. In fact, as of adolescence, young people with an ID tend to opt for a sedentary lifestyle at the expense of an active lifestyle⁴². This is why these young people need more support from those around them and more information on the virtues of physical activity than their typically developing peers to engage in sport and physical activity⁴².

A final element relating to young people with an ID that may restrict their participation in such activities are health conditions that may be associated with their ID. Several authors reported that young people with an ID frequently have physical or mental health problems in addition to their ID. With regard to physical health issues, as stated earlier, these young people often have heart problems (as mentioned by a

young girl interviewed) or thyroid problems¹⁰. Also, as previously specified, these young people battle with being overweight or even obese¹¹. Some also have respiratory problems, ligamentous laxity, hypotonia, vertebral abnormalities, strabismus, epilepsy (as in the case of a young interviewee) or sensory impairments⁴⁰. Regarding mental health problems, it is worth noting that Frances and Ross (1996) indicate that these young people sometimes have behavioural problems or personality disorders (including bipolarity). These authors also claim that young people with an ID are often labelled, rejected, are victims of segregation, infantilism and victimization, which can negatively affect their self-esteem¹². These health conditions associated with ID can complicate the adaptation of sport and physical activity to the cognitive, physical and social abilities of these young people (see table 1 for a summary of the difficulties of these young people).

3.2 Constraints relating to the activity

Some constraints may also be related to the activity itself, including the level of difficulty of the activity, whether it is adapted or integrated, and the nature of the activity (in groups or individually).

The level of difficulty of the activities may hinder the participation of young people with an ID. In this regard, an occupational therapist interviewed stated that it is important to reduce the complexity of activities to adapt them to the cognitive abilities of the young people. That being said, a teenager interviewed explained that we should avoid infantilizing young people with an ID by oversimplifying activities or offering activities that are “too childish”, meaning activities designed for much younger typically developing people.

Another constraint relating to the activity is the fact that the sport can be adapted or integrated. Adapted sports are sports that only young people with an ID participate in, while integrated sports bring together young people with an ID and their typically developing peers⁴³. Interviews conducted showed that young people with an ID and their parents prefer adapted activities over integrated activities because the young people are more successful and feel included and appreciated. In this regard, one mother stated: *“Over there [adapted activities], she felt like she belonged; like she was part of a family, while here at school [integrated activities], the regular sector sometimes looks at her in a strange way.”*

Finally, it is easier to adapt individual sports and physical activities than group activities because they are adapted to the abilities of a single young person rather than the different abilities of many young people⁴⁰. That being said, group activities have many advantages, such as the complementary use of everyone’s strengths, the creation of an atmosphere of mutual support, the development of young people’s social skills, and opportunities to make new friends⁴⁰. To facilitate the organization of group activities, it is advisable to bring together young people with similar abilities.

3.3 Constraints relating to the environment

The majority of constraints to the participation of young people with an ID in sport and physical activity relate to the environment. Unlike young people with physical disabilities, the environmental constraints of young people with an ID are generally social and political, rather than physical. An analysis of the interviews with young people, parents and professionals showed that these constraints affect the three dimensions of the environment described by Bronfenbrenner and Ceci (1994), namely: the microsystem, the mesosystem and the macrosystem⁴⁴. The scientific literature confirms this analysis of the constraints relating to the environment encountered by young people with an ID.

a) Constraints relating to the microsystem

Constraints relating to the microsystem relate to the immediate social environment of the young person with an ID, namely those involving parents, friends, and extended family.

Although the majority of parents interviewed as part of this study support the participation of their child/children with an ID — by encouraging and motivating them and participating in activities with them — some parents may, at times, restrict participation of young people in such activities. In fact, low parental support can be a constraint to the participation of young people with an ID in sports¹⁵. Also, a young person stated that parental overprotection may restrict participation in such activities. Generally, when parents of these young people value sports and physical activity, they tend to make more time in their schedule to support their child's participation in these activities⁴⁰.

Similarly, friends and other family members can play a key role in encouraging young people with an ID to get involved in sport and physical activity, as illustrated by these excerpts: *"My boyfriend bowled...He said: do you want to try it? I said yes. I have been playing for four years"; "A friend of my brother did karate, then...we decided to do karate with him."* On the other hand, the absence of these key players in the immediate social environment of young people is a constraint to their participation.

b) Constraints relating to the mesosystem

Constraints relating to the mesosystem relate to the young person's wider social environment, including peer attitudes that may limit their participation in sport and physical activity.

Parents interviewed said that their child with an ID is often teased and excluded by typically developing young people, as supported by the following excerpts. When asked the question: *"What hinders his/her participation?"* a mother answered: *"Being laughed at"*. Another mother said: *"He would get teased; kids would make fun of him"*. On the same topic, a mother made this eye-opening remark: *"When he was younger,*

I signed him up for day camp, and parents didn't want them [their children] getting close to him because they thought it was contagious".

Although several scientific studies and occupational therapists interviewed reported that typically developing young people are generally open to including their peers with an ID ^{17, 20, 39, 40, 45}, the statements of parents interviewed as part of this study show that even today, young people with an ID are teased and socially excluded when they participate in integrated sports, partly because typically developing young people lack knowledge about ID ⁴⁵. As noted earlier, young people with an ID are often labelled, rejected, are victims of segregation, infantilization and victimization ¹², which was confirmed by the young people and parents interviewed during this study. Finally, coaches sometimes feel helpless when dealing with these young people ²⁹, partly because they lack the knowledge and resources to support their participating in sport and physical activity. A competition-based culture can also be a constraint to the participation of young people with an ID in sports.

c) Constraints relating to the macrosystem

Other elements of the social and political environment restrict the participation of young people with an ID in sport and physical activity. These elements relate to the macro-environment, which includes the funding sources of adapted or integrated activities, opportunities available for young people with an ID, and the attitudes of the general public toward people with an ID and their social inclusion.

Funding sources

While all parents appreciate the financial support they receive from the local community service center (CLSC) in their area, they are unanimous in acknowledging that this support is limited and that additional assistance is required. In this regard, a mother said: *"Of course the CLSC provides an amount, [...but] the amount doesn't last long"*. Another added: *"[Not all] parents who have children with disabilities have the means to provide what it takes [financially, to enable them to participate in sports]."* Professionals interviewed agreed, as shown in these excerpts. *"We are a community service; we do not really have a big budget to [adapt activities]". "I think it's about money. If we had more money, we would make more improvements [such as] new [training] equipment and more field trips"*. In short, there is a lack of financial resources both for families and communities to better support the participation of young people with an ID in sport and physical activity.

Opportunities available

All parents said that they appreciate the services offered by organizations that offer them respite, even if they have to pay for these services. They like these services, especially because they allow their children to participate in sport and physical activity that contribute to their development as well as their physical and psychological well-being. Here are a few excerpts of interviews that demonstrated this: *"At the respite home...he made many friends; he has plenty of projects...On Saturdays, they go bowling and do lots of things"; "He likes it. He loves it. When he leaves on Fridays, bye Mom, see you Sunday. There are plenty of activities, so there is no time to be*

bored". Although these respite opportunities enable young people with an ID to be active during weekends or summer camps, few opportunities to play sports are offered to these young people in their daily lives ⁴¹. When speaking of activities offered at school, a boy interviewed stated that: *"we can't sign up for things like soccer, cheerleading...because we are not part of the regular [sector], and we're too old"*. Similarly, a parent said:

To my knowledge, there is no volleyball [or other sports] for them. Maybe [his daughters with an ID] should go to the regular [sector] but if the regular sector doesn't want them there, they have to move out of the way because kids in the regular sector are prejudiced.

In terms of the opportunities for young people with an ID to participate in sport and physical activity, parents complained that they are not always available in their communities. In other words, the distance between home and the location of the activities is sometimes a constraint ²⁹. A young girl confirmed this by saying: *"I'm fed up: Shawinigan/Trois-Rivières, it's far!"* The distance between home and the activity can affect the young person's motivation to engage in sports. On the same topic, a mother said: *"It was annoying...We always had to go to Montreal"*.

The attitude of the population

Although Quebec has policies and laws regarding social inclusion and the rights of people with disabilities, which include young people with an ID (Québec office for people with disabilities: *Office des personnes handicapées du Québec*, 2009), attitudes are only slowly following the evolution of existing legal instruments⁴⁶. For example, stereotypes about people with an ID still exist and the potential of these young people is not well known, even today (p. 23) ⁴⁶. On this subject, all participants who took part in the study reported that the general population of Québec knows little about what it means to live with an ID and sometimes has negative attitudes towards young people with an ID. In addition, although they are increasingly open to the social inclusion of people with limitations, they know very little about ID and the potential of young people living with this disability ⁴⁰. Also, the importance society places on performance, competition and standardization restricts the inclusion of young people with an ID in sports teams ⁴⁰. Finally, young people with an ID reported that they receive little support from the population when they engage in sport and physical activity ⁴¹.

In sum, young people with an ID face various obstacles that limit their participation in sport and physical activity. These barriers relate to the young people themselves, the activity or the environment as summarized in Table 4.



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The photo shows a young boy swimming backstroke.

Table 4: Summary of constraints that may restrict participation of young people with an ID in sport and physical activity

Type of constraints	Constraints ⁷
Relating to young people	Level of ID (mild, moderate or severe) Level of motivation Related health conditions Cognitive, physical and social difficulties (see table 1)
Relating to the activity	Level of difficulty of the activity Type of activity (adapted or integrated) Nature of the activity (team or individual)
Relating to the environment	Low parental support Parental overprotection Lack of participation in sport and physical activity Negative attitude of typically developing peers Lack of knowledge and resources of professionals Competition-based culture Lack of funding Few opportunities (few activities available) Negative attitude of the population regarding these young people and their social inclusion Importance placed by society on performance, competition and standardization

⁷ Constraints identified in this table were taken from the literature cited in this section as well as the statements of young people, parents, and professionals interviewed during this study.

4. PROGRAMS AND TOOLS AVAILABLE

The aim of this section is twofold. Firstly, to present a range of services available to support a healthy lifestyle and the participation of young people with an ID in sport and physical activity. Secondly, to present the recommendations of professionals who participated in the study and those found in the scientific literature in order to overcome the constraints to participation in sport and physical activity for young people with an ID

4.1 Supporting a healthy lifestyle

“Adopting a healthy lifestyle, especially a lifestyle where one is physically active and maintains a healthy diet, is a key factor to being healthy”⁴⁷. Documents and online resources are available to support families who wish to adopt a healthy lifestyle. Table 5 provides a non-exhaustive list of relevant websites that can be consulted for information on healthy lifestyles.

Table 5: Web sites about healthy lifestyles

Web sites
http://www.msss.gouv.qc.ca/professionnels/saines-habitudes/index.php [french only]
http://www.0-5-30.com/0530.asp [french only]
http://veilleaction.org/fr/ [french only]
http://extranet.santemonteregie.qc.ca/sante-publique/direction/communications/outils-communications-saines-habitude-vie.fr.html [french only]
http://sante.gouv.qc.ca/en/conseils-et-prevention/alimentation-saine-et-equilibree/

Few resources are specifically intended for young people with an ID and their parents. This is cause for concern given that individuals with an ID are generally less healthy than the general population⁴⁸⁻⁵⁰, even more so since deinstitutionalization⁵¹. In general, people with an ID don't eat as healthily as individuals without an ID^{52, 53} and, as seen in the previous section, face constraints that restrict their participation in sport and physical activity.

4.2 Supporting participation in sport and physical activity

In the province of Québec, the number of organizations (associations, foundations, groups, CLSC, CSSS⁸, CRDITED⁹, etc.) and programs that are available to support the participation of young people with an ID in sport and physical activity appears significant at first glance. However, when we take a closer look at each administrative region, we see that the number of organizations and programs varies considerably from one area to another. In fact, some areas provide more opportunities than others for young people with an ID. Tables 6 and 7 below provide a list of organizations and foundations that help young people with an ID to participate in sport and physical activity and consequently, to overcome the constraints that restrict their participation in these activities.

The document “Guide to resources per region” lists various organizations and programs in Québec that support young people with functional limitations and their families. Foundations that support the participation of these young people in sport and physical activity are also listed. A list of organizations and programs per region in Québec that can support the participation of young people with functional limitations in sport and physical activity is also included. This information is relevant to all types of functional limitations. Finally, the activities coordinated by these organizations might not be located near the family home, the range of activities offered might not suit the preferences of young people, and organizations may charge fees to take part in the activities.

⁸ Health and social services centres.

⁹ Rehabilitation centre for persons with intellectual impairment and pervasive developmental disorder.

Table 6: Organizations and programs that support the participation of young people with an ID in sport and physical activity

Name of the organization or program ¹⁰	Web site or phone number of the organization or program	Role of the organization or program
Aide aux enfants handicapés de Blainville/Deux-Montagnes	450 472-2670	Specialized centre that offers help to children with an ID in the <i>Laurentides</i> area.
Amis de l'Est pour la Déficience Intellectuelle	http://www.lesamisdelest.com/ [french only]	Provides various services to people with an ID in the Montréal area.
Apprenti-Loisirs	http://www.apprenti-loisirs.org/ [french only]	Provides recreational services to people with an ID in order to foster their social integration in the National Capital region.
Association pour l'Intégration Sociale- Région des Bois-Francs	819 758-0574	Helps and supports people with an ID and their family in the <i>Centre-du-Québec</i> region.
Association de parents pour la déficience intellectuelle et le trouble envahissant du développement (APDITED)	http://www.apdited.com [french only]	Promotes and defends the interests of these people in order to protect and improve their quality of life. Educates parents and citizens about the reality of these people.
Association du Québec pour l'Intégration sociale	http://www.agis-igdi.qc.ca/ [french only]	Supports people with an ID and their families in their social integration process and the recognition of their rights.
Centre Miriam	http://www.centre-miriam.ca/CENTREMIRIAM_WEB/US/fPublicAccueil.awp	Rehabilitation centre for people with an ID in the Montréal area.
Centre de Réadaptation de l'Ouest de Montréal	http://crom.ca/en/	Offers the necessary support and expertise to people with an ID or autism spectrum disorder to enable them to maximize their potential and to enjoy a good quality of life in the Montréal area.

¹⁰ Organizations and programs are listed in alphabetical order

Table 6 (Cont.)

Name of the organization or program ¹¹	Web site or phone number of the organization or program	Role of the organization or program
Centre Serge Bélair	819 648-2242	Provides respite care for families living with someone with an ID in the <i>Outaouais</i> region.
Comité Régional des Associations pour la DI	http://www.cradi.com/ [french only]	Defends the rights and promotes the interests of people with an ID, autism or autism spectrum disorder as well as their families.
Gang à Rambrou	514 859-2245 extension 229	Offers various sport and cultural activities that include people with a mild ID or autism spectrum disorder in the Montréal area.
Loisirs Récréatifs et Communautaires de Rosemont	www.loisirsstjean.vianney.qc.ca/ [french only]	Offers a host of recreational activities adapted to young people with an ID and provides support to their parents in the Montréal area.
Le Magnifique	http://www.lemagnifique.ca/lemagnifique [french only]	Provides integration services to people with an ID in the National Capital region.
La Maison du CLDI de l'Érable	http://www.cldi.ca/index.php [french only]	Offers cultural, sport, recreational and social activities to people with an ID in the <i>Centre-du-Québec</i> region.
La Maison Marie-Rivier (Répit)	http://www.maisonmrd.org/Accueil/ [french only]	Offers many services in collaboration with the <i>CSSS Drummond</i> and the <i>CRITED</i> to people with an ID in the <i>Centre-du-Québec</i> region.
Olympiques spéciaux	http://www.olympiques.speciaux.qc.ca/en/index.sn	Through sports, strives to enrich the lives of people with an ID. Promotes and facilitates access to regular and adapted sports programs.
Prolongement à la Famille de Montréal	514 504-7989	Allows people with an ID to develop their physical and mental abilities and autonomy through several activities in the Montréal area.

¹¹ Organizations and programs are listed in alphabetical order

Table 7: Foundations that support the participation of young people with an ID in sport and physical activity

Name of the foundation ¹²	Web site	Role of the foundation
Fondation Butters	http://fondationbutters.ca	Promotes the integration of people with an ID or autism syndrome by providing financial support, for example.
Fondation des Ressources Alternatives Salaberry (FRAS)	www.lafras.com	Provides financial support to enable these children to reach their full potential and to be active members of their communities. Also provides support to organizations and educates the community about their rights.
Fondation du CRDI de Québec	http://www.crdiq.gc.ca/fondation.html [french only]	Raises awareness of the needs of these young people. Provides financial and material support to improve their quality of life and autonomy.
Fondation québécoise de la déficience intellectuelle (FQDI)	http://www.lesupport.ca/en	Raises funds to support the organizations working to integrate and improve the quality of life of people with an ID.
Fondation Roger Roy	http://fondationrogerroy.over-blog.com/ [french only]	Provides financial support so people with an ID can participate in activities.

¹² Foundations are listed in alphabetical order

4.3 Recommendations from professionals

Scientific literature and interviews conducted with professionals have revealed means to overcome constraints to participation in sport and physical activity for young people with an ID. Like the constraints, the means identified are threefold. Indeed, the recommendations apply to the young people themselves, the activity or environment.

a) Recommendations relating to young people

Table 8 presents recommendations discussed in the literature and expressed by the professionals in order to overcome constraints relating to the young people themselves.

It is important to be aware of the level of the ID of the young person (mild, moderate or severe) and their stage of development to adapt the activities to their abilities ⁴⁰. Knowing the young person's abilities involves identifying their strengths and difficulties (refer to Table 1 on pages 7 and 8) ^{37, 54}. In order to successfully adapt the activity to the abilities of the young person, we must not only be aware of their abilities (strengths and difficulties), but the requirements of the activity ⁵⁵. In order to achieve a balance between the requirements of the activity and the abilities of the young person, the activity must be broken down into tasks or a sequence of tasks that are then taught and carried out according to the young person's abilities. Young people who have an ID need more time than their typically developing peers to understand and learn ⁴⁰. We must take enough time to facilitate their participation in sport and physical activity. The use of appropriate communication strategies facilitates their understanding of instructions and rules as well as their ability to learn the concepts taught (see Table 8). Because the attention span and ability to concentrate of young people with an ID tend to be weak or below average, it is generally advisable to avoid overstimulation (too many words, sounds, images, etc.) and to establish clear, simple and easily achievable objectives ^{54, 56}. It is also advisable to repeat instructions and rules when necessary.

Table 8: Means to overcome constraints relating to young people with an ID

Constraints ¹³	Means
Level of ID	Know the young person's abilities Consider the stage of development Adapt the activity to the young person's abilities Take enough time to explain and demonstrate Use effective communication strategies Avoid overstimulation (too many words, sounds, images, etc.) Have clear, simple, and easily achievable objectives Repeat instructions and rules when necessary
Level of motivation	Present appropriate challenges (not too easy nor too difficult) Encourage the young person Acknowledge their success Avoid being overprotective Aim for the highest possible level of autonomy Adopt a playful attitude Be passionate and committed Be gentle but firm Be consistent in your requests and expectations
Related health conditions	Know the young person's medical condition Take it into consideration Consult a physician if necessary

In order for young people with an ID to be motivated to engage in sport and physical activity, they must be presented with challenges that are tempting, meaning that they are neither too difficult nor too easy. It is also advisable to encourage them, to acknowledge their success (positive reinforcement) and to aim for the highest possible level of autonomy, which implies avoiding being overprotective⁴⁰. Adopting a playful attitude by making the activity both interesting and fun is a winning approach⁴⁰. Also, young people with an ID find it reassuring when a parent, coach or physical education teacher is fully engaged in the activity and adopts a firm yet gentle attitude⁴⁰. It is also advisable to be consistent in your requests and expectations^{54, 56}.

¹³ The recommendations listed in this table were taken from the interviews as well as the following sources: Bédard (2013), Duquette and Lesage (2013).

Finally, since ID is often associated with various health problems, it is advisable to be fully aware of the young person's medical condition in order to suggest activities that are adapted to their general health condition and to quickly detect problems that may arise.

Table 9: Communication strategies

Communication strategies	Examples
Get the young person's attention	<ul style="list-style-type: none"> Use the young person's name Make eye contact Control background noise Support the message using gestures and mimes, when possible Emphasize important words in the instructions by changing intonation and facial expressions
Adapt the message, explanations, and learning activities	<ul style="list-style-type: none"> Decrease the amount of information given Give one simple instruction at a time Use concrete, familiar language Speak more slowly Demonstrate Avoid long explanations Use concrete examples Adopt a routine
Check the young person's verbal comprehension	<ul style="list-style-type: none"> Allow time for the person to understand and answer the question Allow the young person to repeat what was said Ask questions Reword when necessary
Reformulate explanations and concepts taught	<ul style="list-style-type: none"> Use replication, repetition and reformulation Use visual cues (gestures, writing, drawings, pictograms, etc.)
Let the young person express him/herself	<ul style="list-style-type: none"> Let the young person have a turn to speak during a discussion Use visual aids Encourage the young person to use gestures to complete their message Check your understanding by rewording Encourage all efforts and attempts

b) Recommendations relating to the activity

The means suggested by professionals to overcome constraints relating to the activity vary according to the level of difficulty of the activity, the type of activity (adapted or integrated) and the nature of the activity (in groups or individually). Table 10 summarizes the means that can be used to overcome constraints relating to the activity.

Table 10: Means to overcome constraints relating to the activity

Constraints ¹⁴	Means
Level of difficulty of the activity	Use appropriate teaching strategies Use effective communication strategies
Type of activity (adapted or integrated)	Establish a relevant set of game and safety rules Adjust instructions and rules when necessary
Nature of the activity (in groups or individually)	Adapt instructions and rules to the young people

When supervising a sport and physical activity with young people with an ID, it is important to use appropriate teaching strategies. For example, occupational therapists recommend using visual cues (demonstrations, pictograms, photographs, images, drawings, signs, etc.) to support verbal instructions that must be simple, short and to the point ⁴⁰. It is also advisable to use proprioceptive cues with young people, in other words to touch them and to guide their movements (hand-on-hand) and to consider reducing the number of different stimuli ⁴⁰. It is also advisable to break down the activity into steps and to create routines. It is a good idea to place young people with similar characteristics in the same group and to carefully select the type of activity (adapted or integrated) according to the young person's abilities. It is also a good idea to establish a relevant set of game and safety rules; in other words, simple rules that are adapted to the attention span and ability to understand of the young people, as well as instructions relating to expected behaviors ⁴⁰.

¹⁴ The recommendations listed in this table were taken from the interviews as well as the following sources: Bédard (2013), Duquette and Lesage (2013).

c) Recommendations relating to the environment

Table 11 below summarizes the recommendations of professionals to overcome obstacles relating to the environment that may restrict the participation of young people with an ID in sport and physical activity.

Table 11: Means to overcome constraints relating to the environment

Constraints ¹⁵	Means
Low parental support	Support parents of young people with an ID.
Parental overprotection	Aim for the highest possible level of autonomy of young people with an ID.
Lack of participation in sport and physical activity	As a society, value the importance of sport and physical activity and encourage initiatives that support this.
Negative attitude of peers	Educate and raise awareness among young people and the general population.
Lack of knowledge and resources of professionals	Support professionals and guide them towards qualified professionals.
Competition-based culture	Value participation over competition.
Lack of funding	Advocate for more funding.
Few opportunities (few activities available)	Advocate for more opportunities for young people with an ID.
Negative attitude of the population regarding these young people and their social inclusion	Educate and raise awareness among young people and the general population of the realities of individuals, including young people with an ID.
Importance placed by society on performance, competition and standardization	Value participation over performance and competition as well as difference over standardization. Develop a society that is more inclusive of young people with an ID

¹⁵ The recommendations listed in this table were taken from the interviews as well as the following sources: Bédard (2013), Duquette and Lesage (2013). Because professionals identified means without going into much detail, they are listed without additional information.

5. KEY POINTS TO SUPPORT SPORT AND PHYSICAL ACTIVITY

- ❖ Approximately 3% of the population of Québec has an ID. Among young people with a disability, nearly 30% have an ID.
- ❖ ID is a permanent condition characterized by significant limitations both in intellectual functioning and adaptive behaviour. ID causes cognitive, physical and social difficulties, including communication difficulties.
- ❖ Participating in sport and physical activity has benefits on the physical, psychological and social health of young people with an ID. These benefits are transferrable to the daily lives of these young people.
- ❖ However, young people with an ID can face constraints when participating in sport and physical activity that may be due to the ID, the activity itself, or the family, social, or political environment of the young people.
- ❖ There are different ways to reduce constraints and improve the way we deal with young people with an ID.



François Lacroix © Défi sportif AlterGo 2016
The photo shows a young boy making a high five to his coach.

❖ Key recommendations to remember when dealing with young people with an ID:

- Know the young person's abilities (strengths and difficulties).
- Adapt the requirements of the activity to the young person's abilities.
- Stimulate motivation by adopting a fun, gentle but firm attitude.
- Consider the associated health conditions that may interfere with the young person's participation.
- Use effective communication strategies: for example, getting the young person's attention, adapting the message to their abilities, checking their comprehension, rephrasing explanations and concepts taught, and letting them express themselves.
- Use appropriate teaching strategies: for example, use visual cues (demonstrations, pictograms, photographs, images, drawings, signs, etc.) and proprioceptive cues (hand-on-hand) to support instructions.
- Break down the activities into steps.
- Create routines.
- Place young people with similar characteristics in the same group.
- Choose an adapted or integrated activity depending on the young person's abilities.
- Use simple game rules.
- Establish safety rules according to expected behaviour.
- Support parents.
- Aim for the young person's highest level of autonomy.
- Empower everyone to participate in sport and physical activity.
- Educate and raise awareness among the population of the realities of young people with an ID.
- Consult a qualified professional if necessary.
- Value participation over competition.
- Advocate for more funding for sport and physical activity for young people with an ID.
- Value difference and social inclusion of young people with disabilities, which includes young people with an ID.

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