Sports & Diabetes

Highlights of a Survey of Children and Teenagers living with Diabetes, their Parents and their Coaches and Gym teachers

Introduction

Children, teenagers and young adults diagnosed with diabetes sometimes struggle to continue with their sporting activities in the same way as they did before their diagnosis, while parents, teachers and coaches also sometimes lack the necessary knowledge, training and/or confidence to ensure that children and youths living with diabetes can participate in all sporting activities safely and to their optimal performance.

To address this, a consortium of sports clubs from various European countries – TSV Bayer Leverkusen (Germany), HAŠK Mladost (Croatia), Lazio Volley (Italy), Olympiacos (Greece), WSC (Austria) – and a Federation representing people living with diabetes (PwD) and healthcare professionals, the International Diabetes Federation Europe, have joined forces to develop a publication which will address the main questions and concerns of all key stakeholders – children and youths 25 and under, and their parents as well as coaches and trainers. Disseminating this publication widely will help ensure that people living with diabetes can enjoy equal opportunities and full inclusion in sport. The project is co-funded by the Erasmus+ programme of the European Union. More information can be found on the project website.

To inform this publication, the Sports & Diabetes consortium has conducted a survey to determine which are the main concerns and questions of these main stakeholder groups. To date, 566 people have responded to the survey, which will run until the end of the year, and can be found here in English, German, Croatian, Italian and Greek.

Top-line highlights of the survey results to date are presented over the next few pages. The full survey analysis will be published in early 2022.
**Perspectives from coaches & trainers and school gym teachers**

Some 160 coaches, trainers and gym teachers (later referred to as “coaches”) responded to the survey, the two main objectives of which were to evaluate their knowledge of diabetes in general, and specifically their understanding of how to handle diabetes and sports, and to examine their questions and concerns they may have when having a child/young person with diabetes in their team.

General knowledge of diabetes among this group was relatively low. While 90% of coaches knew that there is more than one type of diabetes, the proportion knowing that most children live with Type 1 Diabetes (T1D) fell to 42%, and close to half of them rated their knowledge of T1D as either poor or very poor.

This lack of knowledge did not translate into major negative concerns relating to coaching youths and children. A vast majority of coaches (71%) did not have any concerns or worries that there might be issues with young PwD engaging in sporting activities. Nevertheless, 44% suggested they had questions regarding the need to treat youngsters living with diabetes in their team differently from other players.

A high proportion of coaches felt quite confident that they would know how to deal with a problem during practice/games involving a young person living with diabetes. That said, close to 40% reported not being confident about it, suggesting that there is a real need for more education to help coaches better understand diabetes and create a safe environment for young people with diabetes.
Dealing with low (hypoglycaemia) and high (hyperglycaemia) blood sugar levels were coaches’ most prominent concerns, reported by around 60% of them each.

With regard to the prerequisites to maintaining adequate blood sugar levels, coaches expressed most interest in understanding more how to manage hypo- and hyperglycaemia and the mechanics of blood sugar levels.

### AREAS OF MOST INTEREST TO THE COACHES, RELATING TO MAINTAINING ADEQUATE BLOOD SUGAR LEVELS

- The best foods to increase blood sugar levels
- The insulin pump/sensor during exercise
- Getting hyperglycaemia (high blood sugar) during/after training
- Getting hypoglycaemia (low blood sugar) during/after training
- The mechanics of how blood sugar increases/decreases
- Knowing whether a child/young person can still train based on a given blood sugar level (before, during, after)
- Knowing how a child/young person can adapt blood sugar levels to the exercise (before, during, after)
**Perspectives from children between 6 and 12 years old**

Some 80 children, aged six to 12 years of age, took part in the survey. The survey’s main objective for this age group was to understand how they felt in relation to engaging in sporting activities.

Overall, more than three-quarters of children reported that their diabetes had not prevented them from engaging in sport.

Nevertheless, close to two-thirds were wondering whether the coach/trainer would know what to do if a problem occurred. A high proportion was also not sure how to manage their blood sugar levels, since this is often still done for them by their parents or caregivers.
Experiencing low blood sugar was a major worry for just over 60% of children. A slightly lower proportion also worried about having too high sugar levels. Related to this, close to half the children did not like having to manage their blood sugar during practice/games.

I WAS WORRIED ABOUT HAVING TOO LOW BLOOD SUGAR LEVELS DURING EXERCISE

- Yes: 62%
- No: 18%

I WAS WORRIED ABOUT HAVING TOO HIGH BLOOD SUGAR LEVELS DURING EXERCISE

- Yes: 45%
- No: 55%

I DO NOT LIKE HAVING TO MANAGE MY DIABETES (BLOOD SUGAR LEVELS)

- Yes: 47%
- No: 53%

Having to stop playing during practice/games was also of much concern to children who were worried that they would let their friends down.

I WORRY ABOUT HAVING TO STOP DURING THE EXERCISE/GAME (AND LETTING MY FRIENDS DOWN)

- Yes: 53%
- No: 47%
Perspectives from children young people between 13 and 25 years old

Some 138 teenagers (13 to 25) took part in the survey. As with the younger age group, the survey’s main objective for this age group was to understand how they felt in relation to engaging in sporting activities, and what barriers they may encounter that would discourage them from taking part.

Just under 60% of teens in the survey practiced sport at school or in a club. Living with diabetes did not appear to be a major obstacle to participation, as more than three-quarters of them reported that their diabetes had not prevented them from engaging in sport.

Some 15% reported that, at some point, they had not been able to practice sports because of the fact that their teacher/coach did not let them do it.

A high 40% of participants did have concerns about their ability to take part in sport while living with diabetes, and an even greater proportion worried that not all sports would be suitable for them.
Some 40% of teenagers also wondered if they would be welcome by the coach to join the team if the coach knew they lived with diabetes, and a much greater proportion than in the younger age group questioned the ability of their coaches to know how to deal with any problems arising from their diabetes.

This is all the more important to address than more than half the teenagers reported not being confident of managing their blood sugar well during and around sporting time.

Having to stop during practice/games because of the need to manage their diabetes was a burden for 56% of people in this group.
Hypo- and hyperglycaemia were two strong concerns.

**HOW CONCERNED ARE YOU OF GETTING HYPO (LOW BLOOD GLUCOSE) DURING/AFTER TRAINING**

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<th>Concern Level</th>
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**HOW CONCERNED ARE YOU OF GETTING HYPER (HIGH BLOOD GLUCOSE) DURING/AFTER TRAINING**

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Perspectives from parents of children/young people living with diabetes

Some 188 parents of children living with diabetes responded to the survey, the main focus of which was to understand how they felt about their child participating in sport and what their views were on how their children themselves perceived it and what their key areas of concerns are.

Some 83% of parents reported that their child participate in sport. This was despite 40% of them being concerned about their child’s welcome by the coach/teacher, and 48% wondering whether their child would be treated differently from the other players in the team.

Outlining the complexity of diabetes management and the potential seriousness of hypoglycaemic events, 86% of the parents wondered if the coach would be able to deal with problems arising from a child’s diabetes.

For that matter, the possibility for their child to experience hypoglycaemia was a concern for 83% of parents.
Conversely, only about a quarter of parents were concerned about public reactions to their child managing their diabetes in public.
For more information, please visit the project website: www.sportsanddiabetes.eu
or contact us: idfeurope@idf-europe.org

Project partners

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