D2.1 – DIGITALISED MATERIALS ON DOING SPORT WITH DIABETES

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1. Introduction

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1. Introduction

The DiaPS project addresses one of the key barriers faced by people living with diabetes: **the lack of accessible, practical, and sport-specific knowledge.** As highlighted during the project development phase, fear, uncertainty, and insufficient understanding often lead individuals, especially young athletes, **to reduce or completely stop their participation in sport.**

To respond to this need, the project developed a digitalised educational environment providing **structured, accessible, and user-friendly materials** focused on managing diabetes in the context of sport and physical activity. The educational materials build on the handbook developed within the initial Sports & Diabetes project (available in print and PDF format), and have been further expanded and enriched with newly developed content.

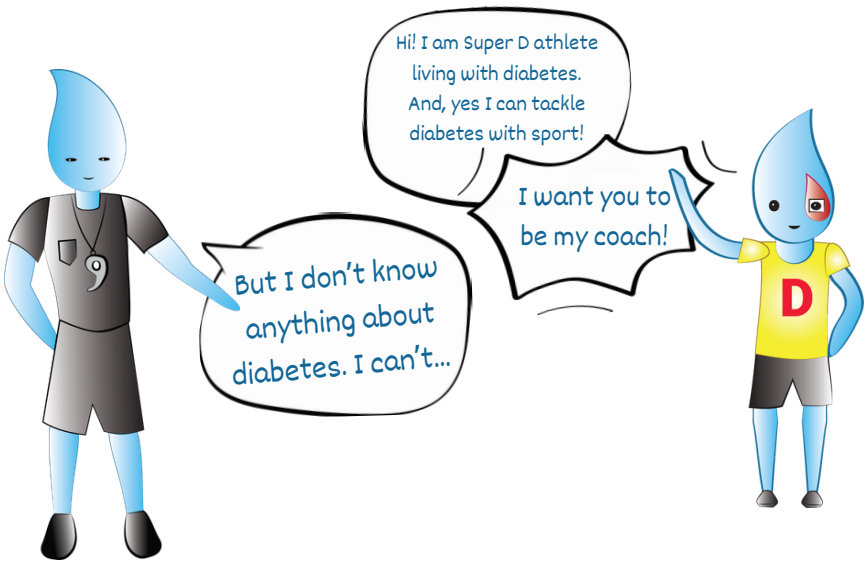
These materials are designed to:

- increase confidence in managing diabetes during sport,
- provide practical, real-life applicable knowledge,
- support not only athletes, but also coaches, parents, and professionals.

Importantly, this digital knowledge base is:

- freely accessible without the need for user registration, and
- fully integrated into the DiaPS digital solution (mobile application).

Fear, isolation, and lack of knowledge push athletes living with diabetes out of sport — we're here to change that.



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2. Overview of Digitalised Materials

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The educational materials are available through the **DiaPS web platform:** https://app.sportsanddiabetes.eu/

The platform acts as a central knowledge hub, designed to ensure that **educational content is not limited to the mobile application,** but **remains openly accessible to all users**, regardless of their willingness or ability to use the app.

A key principle guiding the development of the digitalised materials was to avoid creating a "closed system" in which knowledge is locked within the application environment. Instead, the project adopted an open-access approach, ensuring that users can access educational resources directly via the web, without the need to download the app or create an account. This approach aligns with the broader expectations of EU-funded projects, where educational resources are expected to be freely accessible and widely usable.

This decision was also strongly influenced by user behaviour and real-life scenarios identified during the project. Many users—such as athletes, parents, or coaches—may be hesitant to adopt new digital tools or **download additional applications**. By providing a **web-based version** of the materials, the project ensures that these users are not excluded and can still **benefit from the knowledge provided**.

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2. Overview of Digitalised Materials

An important practical use case further reinforced this approach: users often need to share information with others in their environment. For example, an athlete may want to share guidance with their coach, or a parent with a school or support network. In such cases, requiring all involved parties to download and use the application would create an unnecessary barrier. The web platform enables easy sharing of content via direct links, allowing information to circulate more naturally and efficiently.

This principle is also reflected in the app functionality itself. When users choose to share content from within the application, the system generates and shares a web link to the specific material, rather than restricting the content to the app environment. This ensures consistency between the app and web experience and further supports accessibility and dissemination.

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2. Overview of Digitalised Materials

From a functional perspective, the web platform also allows for more efficient content management and long-term sustainability. Educational materials are structured as a dynamic knowledge base, including articles, visual elements, and additional resources, which require continuous updates, improvements, and expansion. A web-based system enables easier editing, organisation, and scaling of content compared to a purely app-based solution.

Additionally, the structure of the platform supports discoverability and navigation, allowing users to search and explore content based on their needs, level of knowledge, or specific situations. This reinforces the role of the platform not only as a support tool within the app, but as an independent educational resource.

In this way, the DiaPS digitalised materials operate within a dual approach:

- as a standalone, openly accessible web-based knowledge hub, and
- as an integrated part of the DiaPS mobile application experience.

This combined model ensures maximum accessibility, flexibility, and long-term impact of the developed materials.

3. Content Structure and Key Topics

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3. Content Structure and Key Topics

The materials are developed in a clear, practical, and user-oriented format, ensuring accessibility for users with different levels of prior knowledge.

The digitalised materials are organised into clearly defined thematic sections, allowing users to navigate content based on their needs, level of knowledge, and current situation.

The structure follows a logical learning pathway, starting from basic understanding and progressing towards more specific and practical guidance. Each section is designed to be concise, practical, and directly applicable in real-life situations.

The main sections include: Quick Guide, Diabetes Basics, How to: Sport & T1D, Managing T1D During Sport, Beyond Sports & T1D, Coping with Sports & T1D, Glossary, Resources

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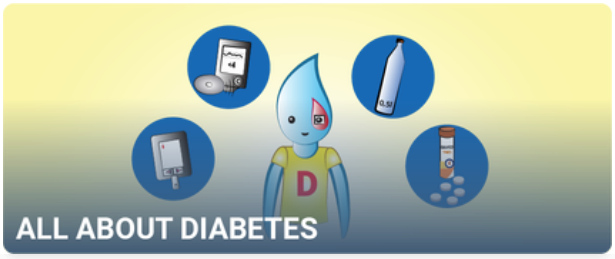
3. Content Structure and Key Topics

Quick Guide

This section provides an accessible entry point for users who are newly diagnosed or unfamiliar with managing diabetes in the context of sport. It offers simplified, essential information that allows users to quickly understand key principles without being overwhelmed.

- Understanding Diabetes Basics
- Low-Blood-Glucose Level: A Step-by-Step Quick Guide
- High Blood Glucose Levels: A Step-by-Step Quick Guide
- Inspirational Stories



- What is Diabetes and How to Manage?
- Busting Myths About Diabetes
- Low Zones: Hypo in Sport
- High Zones: Hyper in Sport
- Diabetes Technology in Sports: Gear That Keeps Your Glucose Game Ready

Diabetes Basics

This section builds foundational knowledge required for safe participation in sport. It covers core topics such as understanding diabetes, recognising and managing hypoglycaemia (hypo) and hyperglycaemia (hyper), as well as introducing users to commonly used diabetes technologies.

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3. Content Structure and Key Topics

How to: Sport & T1D

This section focuses on the relationship between different types of physical activity and blood glucose levels. It explains how aerobic, anaerobic, and mixed forms of exercise can affect the body differently, helping users anticipate changes and better prepare for activity.

- Differences Between Physical Activity, Exercise and Sport
- Endurance: Aerobic Exercise
- Power Mode: Anaerobic Exercise
- Hybrid Zone: Mixed Exercise
- T1D in Different Sports
- High Performance Sports Guide

- Warm-up: T1D Challenges in Sports
- Activity Tracking and Essential Tips
- Essential Preparation: T1D Before Sport
- In the Zone: T1D During Sport
- Recovery: T1D After sport
- Strategies for Managing Diabetes During Sport

Managing T1D During Sport

One of the most practical sections of the platform, this part provides structured guidance around the three key phases of activity: before, during, and after sport. It includes practical tips, common scenarios, and recommended approaches that users can adapt to their own routines.

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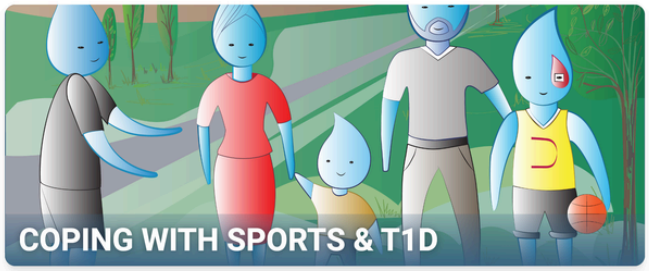
3. Content Structure and Key Topics

Beyond Sports & T1D

This section expands the perspective beyond physical activity alone, addressing additional factors such as nutrition, hormonal changes, and lifestyle elements that influence diabetes management.

- Sports Nutrition
- On the Road: Travelling with Diabetes
- Anti-Doping Regulations
- Impact of Hormones
- The Remission Phase



- Voices for Super D Heros
- Voices for Coaches and Teachers
- Voices for Parents
- Voices for Friends & Family
- Coping Strategies

Coping with Sports & T1D

This section addresses the psychological and emotional aspects of living with diabetes in sport, supporting users in building confidence, managing stress, and communicating with others.

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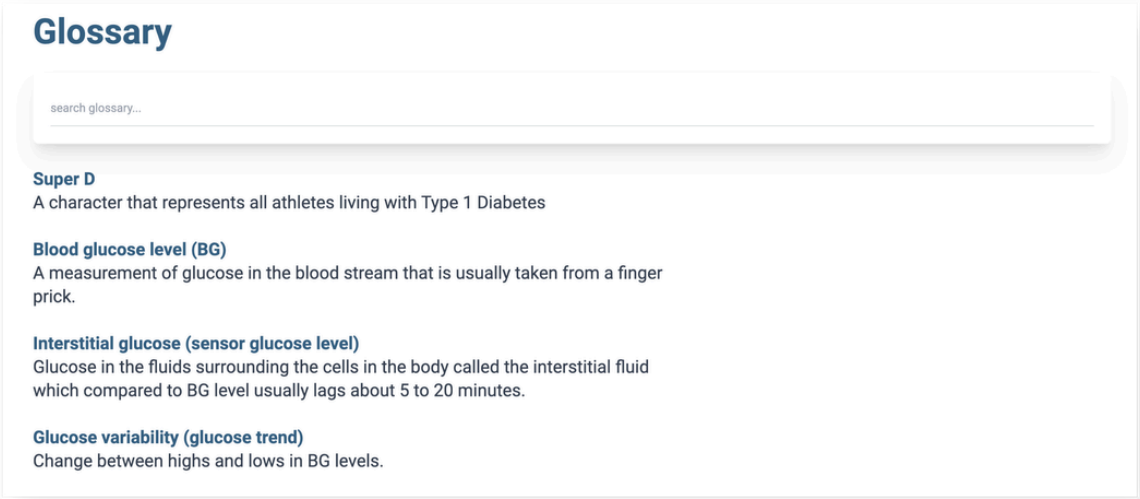
3. Content Structure and Key Topics

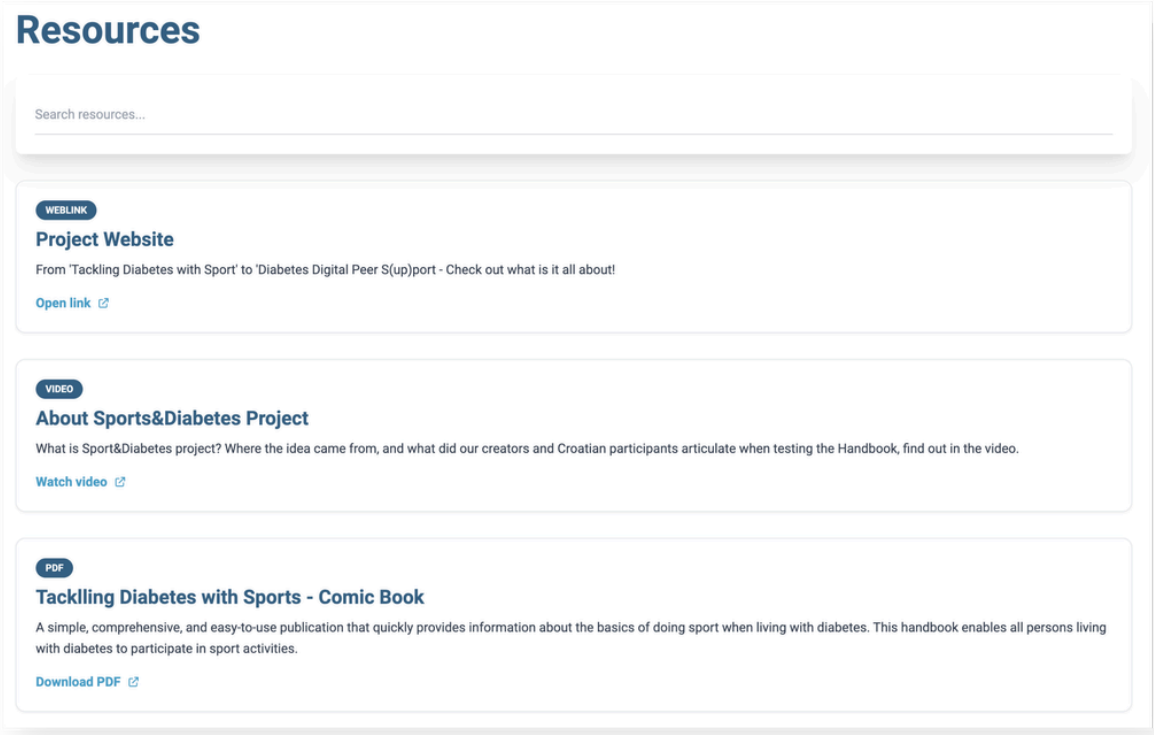
Glossary

A collection of simplified explanations of key terms, supporting users in understanding the content and terminology.



Resources

Additional materials and references for further learning and deeper exploration of the topic.



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4. Formats and Accessibility

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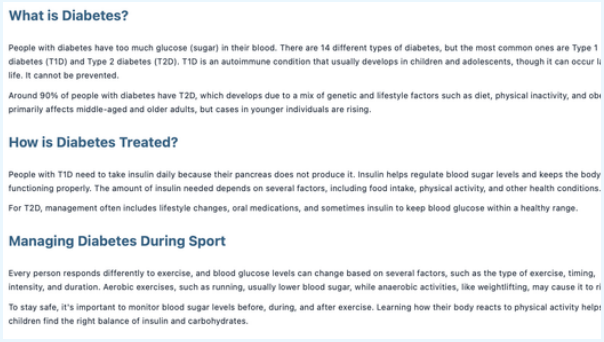
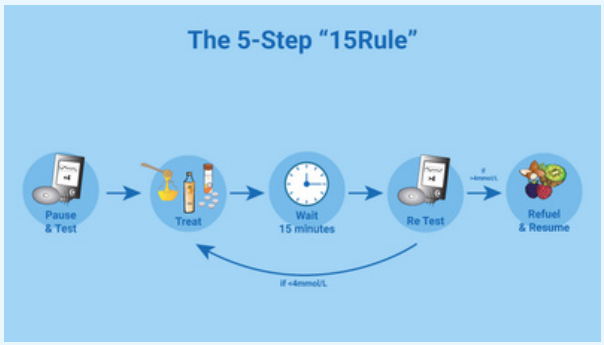
To ensure that the materials are **engaging, accessible, and suitable** for different learning preferences, the content is delivered in a variety of formats.

The platform includes:

- **written articles** providing structured explanations,

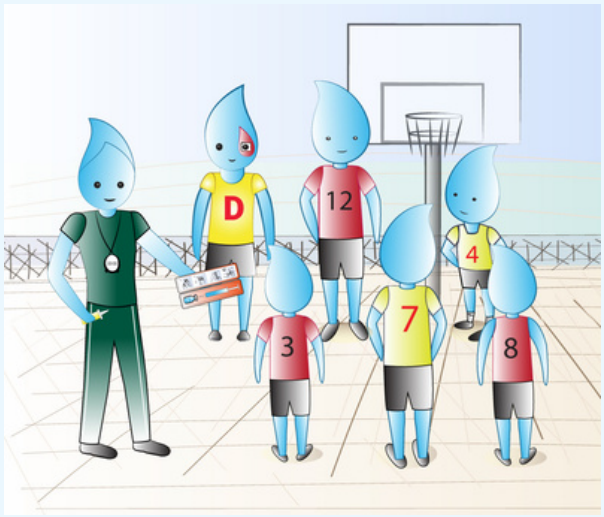


- **visual elements and illustrations** supporting comprehension,



- **flashcards** enabling quick learning and revision,

- **images** simplifying complex concepts.



This combination allows users to interact with content in a **flexible way**, depending on their needs.

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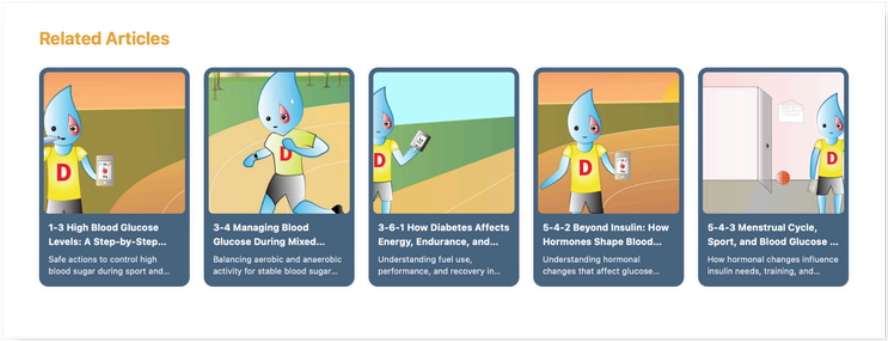
4. Formats and Accessibility

At the end of each article, users are provided with links to related materials and additional content. This feature encourages continuous exploration of the platform and supports a deeper understanding of the topic by guiding users through connected themes and articles.



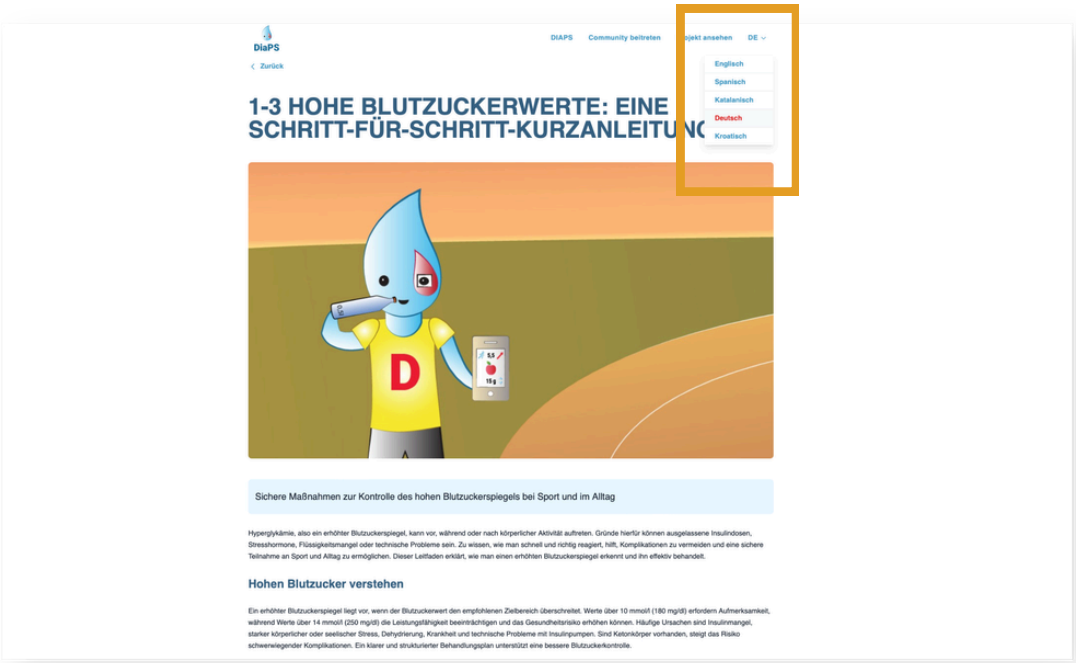
Future development of the platform includes:

- video-based content,
- interactive learning elements.

The materials are available in multiple languages:

- English
- Spanish
- Catalan
- German
- Croatian

This multilingual approach supports **accessibility and scalability across Europe.**



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5. Integration within the DiaPS Ecosystem

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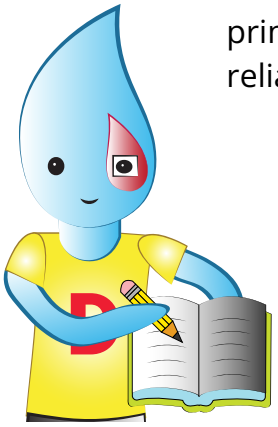
5. Integration within the DiaPS Ecosystem

A key strength of the DiaPS project lies in the clear structuring of its digital ecosystem, where educational content and user interaction are intentionally separated, yet closely connected.

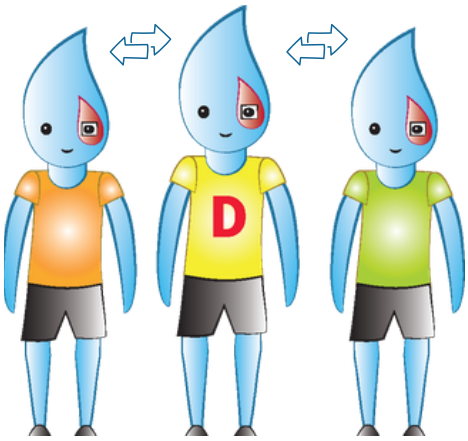
The digitalised materials function as an open-access knowledge layer, available through the web platform and accessible to all users without barriers. This ensures that essential information on managing diabetes in sport is always available, regardless of users' engagement with the mobile application.

At the same time, the DiaPS mobile application builds on this foundation by providing an interactive environment where users can engage with the content in a more dynamic way. Within the app, users can connect with peers, ask questions, and apply the knowledge from the materials in real-life situations.

This complementary structure allows the platform to serve both:



users who are primarily looking for reliable information



users who wish to actively engage, share experiences, and seek support.

By separating the knowledge base from the interactive features, the project ensures:

- maximum accessibility of educational content,
- flexibility in how users access and use the materials, and
- a scalable structure that can evolve over time.

In this way, the DiaPS ecosystem combines learning and interaction without limiting access to knowledge, creating a balanced and user-oriented digital solution.

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5. Integration within the DiaPS Ecosystem

Disclaimers and EU Visibility

As part of the DiaPS digital ecosystem, key disclaimers and transparency elements are integrated to ensure responsible use of the platform and compliance with EU visibility requirements.

All content available within DiaPS, including educational materials and user-generated posts, is intended for educational and peer-support purposes only and does not constitute medical advice. Users are advised to consult a qualified healthcare professional before making any decisions related to their treatment or diabetes management.

In addition, information regarding EU support - including the statement that the project is co-funded by the Erasmus+ Programme of the European Union, along with the standard EU disclaimer - is clearly displayed in the footer of the platform, ensuring visibility in line with communication and dissemination requirements.

6. Future Development & Sustainability

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The digitalised materials are designed as a long-term, evolving resource rather than a static output of the project.

A key priority is to ensure that the content remains relevant, accurate, and responsive to the needs of users. This will be achieved through:

- regular content updates and reviews,
- incorporation of user feedback and expert input, and
- expansion of topics based on emerging needs and trends.

The web-based structure of the materials plays a crucial role in this process, allowing for efficient content management, updates, and continuous improvement without technical barriers. This ensures that the platform can be maintained and further developed beyond the project duration.

Future development will focus on:

- introducing new content formats (such as video and interactive elements),
- further localisation and language expansion,
- improving content navigation and discoverability, and
- strengthening connections between educational materials and practical application in sport environments.

From a sustainability perspective, maintaining open access to the materials remains a core principle. By ensuring that content is freely available and easy to access, the project maximises its long-term impact and usability across different user groups and contexts.

The platform is therefore designed not only as a project output, but as a continuously growing knowledge resource supporting individuals involved in sport and diabetes management.

7. Conclusion

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7. Conclusion

The Digitalised Materials developed within the DiaPS project represent a fundamental component of the overall digital solution, addressing a critical gap in accessible, practical knowledge on diabetes and sport.

By combining expert-driven content with a clear, structured, and user-oriented approach, the platform enables users to better understand, manage, and navigate the challenges of physical activity with diabetes.

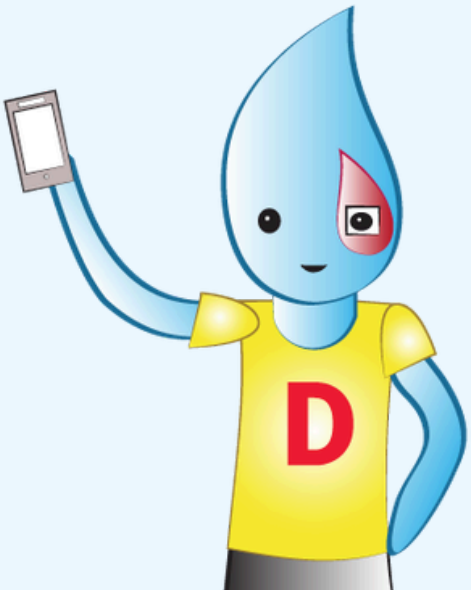
The decision to provide the materials through an open-access web platform ensures that knowledge is not restricted by technology or user preferences, but remains widely available to athletes, parents, coaches, and professionals alike. This significantly increases the reach, usability, and real-world impact of the project.

At the same time, the integration of these materials within the broader DiaPS ecosystem allows users to move from information to action — from learning to applying knowledge in practice, supported by a community environment.

Together, this approach creates a sustainable and scalable solution that not only supports individuals in managing diabetes in sport today, but also contributes to a more informed, confident, and inclusive sporting environment in the long term

Check it online!

app.sportsanddiabetes.eu



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