KIDS

A project of the International Diabetes Federation
Kids & Diabetes in Schools

International Diabetes Federation

Nutrition guide for PARENTS

Educational guide on nutrition and diabetes in schools

Acknowledgements:

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Guidelines to inform the user on this section

This guide should be used in tandem with the KiDS Information Pack and is not intended to be distributed as a standalone item. A programme on diabetes education should be organised at schools around this guide.

If you wish to translate the pack into further languages or make culturally specific adaptations, please notify IDF before any changes are made: communications@idf.org with copy to kids@idf.org.

IDF and Sanofi logos must remain visible on this material. If you have a new local partner that endorses the project, make sure to seek IDF permission before adding new logos on the guide. We would appreciate your feedback on the nutrition guide usage and photos from your information sessions.

No fees will be asked for using this pack.

IDF gratefully acknowledges the support of Sanofi for this project.

TABLE OF CONTENTS

INTRODUCTION

This Nutrition and Diabetes in Schools educational guide has been developed as a complimentary resource to the Kids and Diabetes in Schools Information Pack, published by the International Diabetes Federation in 2015. This guide is an awareness and information tool created to inform teachers, parents and children of the important role of nutrition in the management and prevention of diabetes.

Nutrition plays a vital role in supporting a healthy lifestyle for children. The nutritional needs of school-age children are important as they grow significantly during this period. For children living with diabetes, choosing the right food plays an important role in maintaining healthy blood glucose levels and promoting normal growth.

It is an information resource only and is not intended to replace the advice of a healthcare provider.

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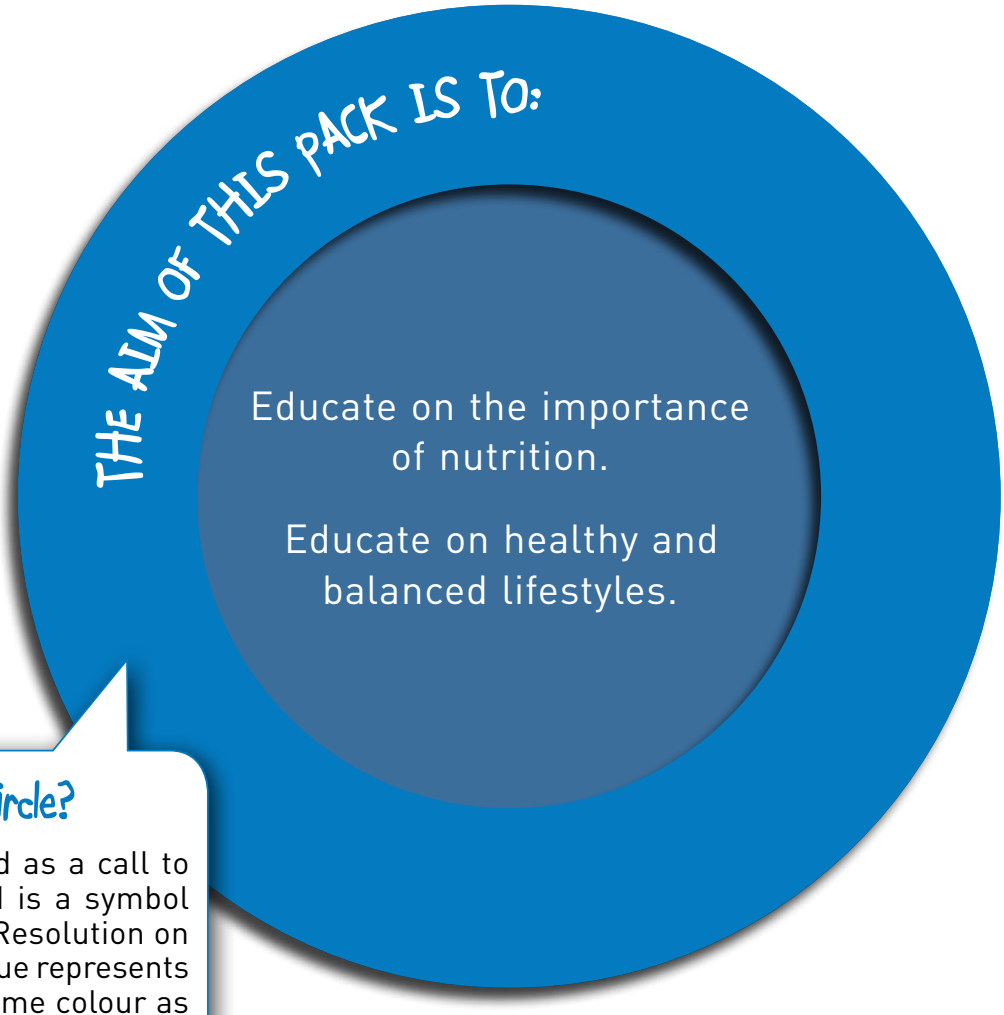

Why a blue circle?

The icon was designed as a call to unite for diabetes and is a symbol of support for the UN Resolution on Diabetes. The colour blue represents the sky and it is the same colour as the flag of the United Nations

WHAT IS THE IMPORTANCE OF EATING A HEALTHY AND BALANCED DIET?

The importance of nutrition?

DID YOU KNOW THAT
children with diabetes have the same nutritional needs as other young people of the same age!

Childhood is an important period of growth and development. Nutrition and physical activity is vital in supporting a healthy lifestyle in children. Children and adolescents have specific nutritional needs. Helping to choose the right foods at an early age helps them to develop life-long healthy habits.

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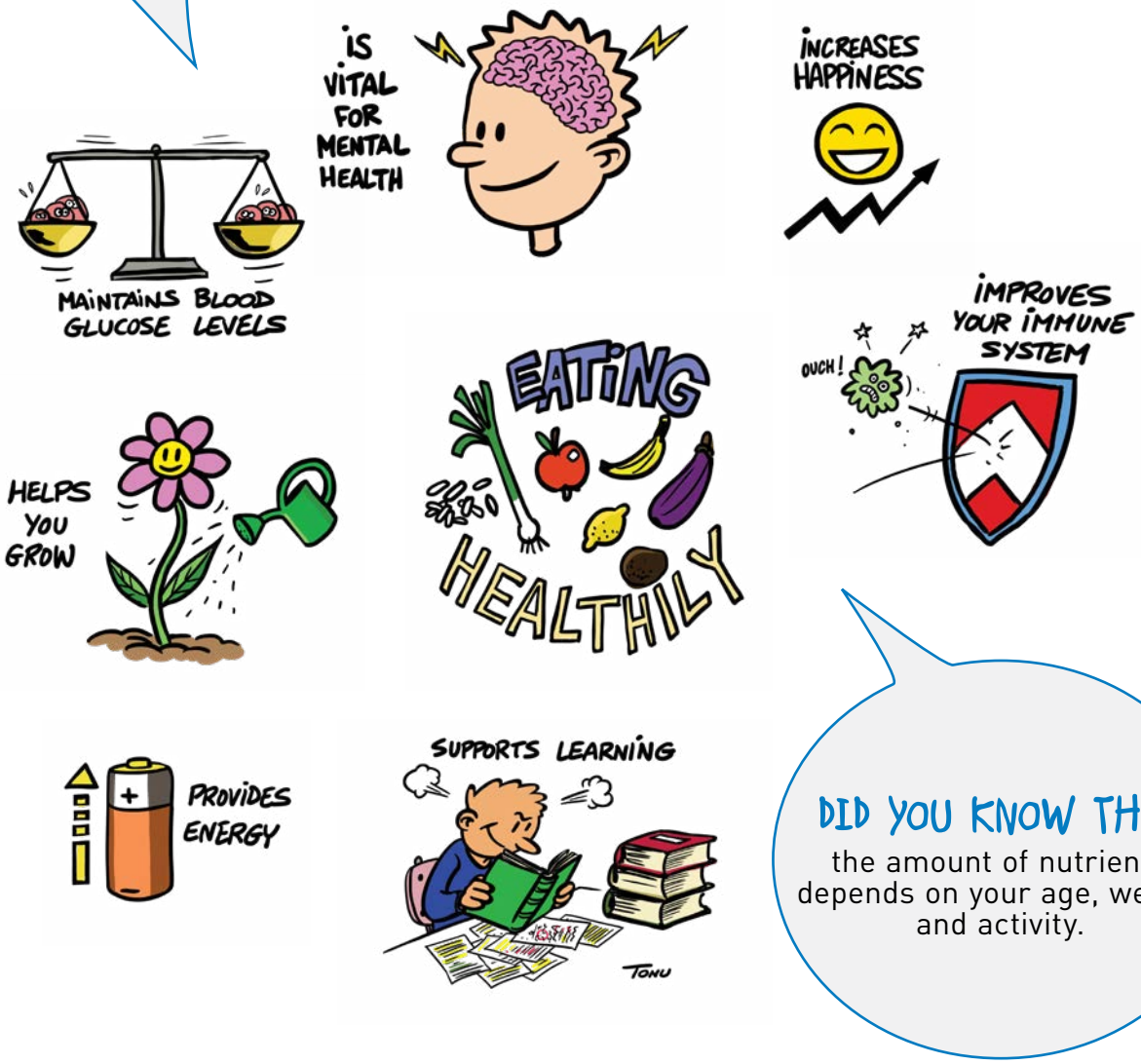
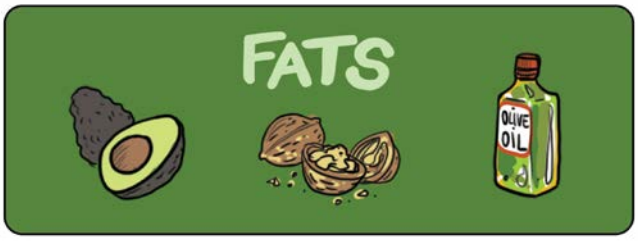


DID YOU KNOW THAT
the amount of nutrients depends on your age, weight and activity.

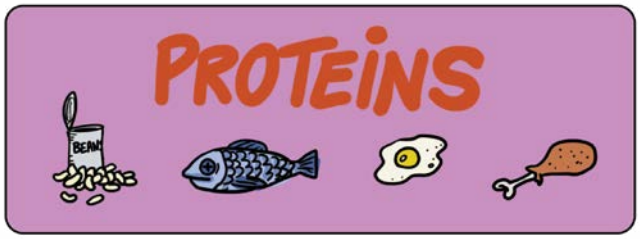
WHAT IS NUTRITION?

Our food is made up of **three main nutrients: carbohydrates, fats and proteins,** as well as other **small nutrients** such as **vitamins and minerals.**
It is essential that a daily diet provides all of these nutrients in the right quantities especially for children living with diabetes.

When carbs turn into glucose they are the main source of energy for the brain and the body



Provide energy for growth and physical activity



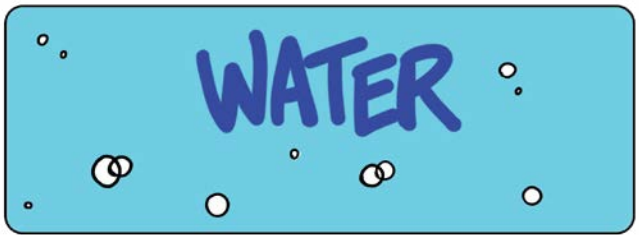
Helps growth and repair of body tissues

Regulate many body functions and keep the body healthy

Calcium keeps bones and teeth healthy

Helps to manage blood glucose levels

Keeps the gut healthy



Drinking lots of water helps the body stay hydrated

Insulin is necessary for your body's cells to use glucose for energy

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THE IMPORTANCE OF A GOOD NIGHT'S REST

DID YOU KNOW THAT

- Children and adolescents need 8 to 10 hours of sleep and rest.
- Lack of sleep can affect your appetite and food choices. This can increase weight and make insulin work less well so blood glucose levels can be higher.

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HOW TO PREPARE HEALTHY MEALS?

It is important that the right foods is chosen at all meals, both at home and in school.

Include

- ❑ Lean meats, fish and eggs
- ❑ Food high in fibres (whole grains, legumes)
- ❑ Wide variety of colourful fruits and vegetables
- ❑ Low fat dairy products (yoghurts, cheese, milk)
- ❑ Variety in child's meals to avoid monotony
- ❑ Healthy drinks to stay hydrated

Avoid

- ❑ Food made from refined cereals and flours (white bread and breakfast cereals)
- ❑ Food high in added sugars (cakes, pastries, juices, ice creams)
- ❑ Drinks containing sugar (unless to treat hypoglyceamia)
- ❑ Food with added salt (chips, salted biscuits, snacks, sauces)

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TIP: Include your child in making healthy food choices!

Carbohydrates, fats and proteins improve memory, attention span, creativity and problem solving abilities

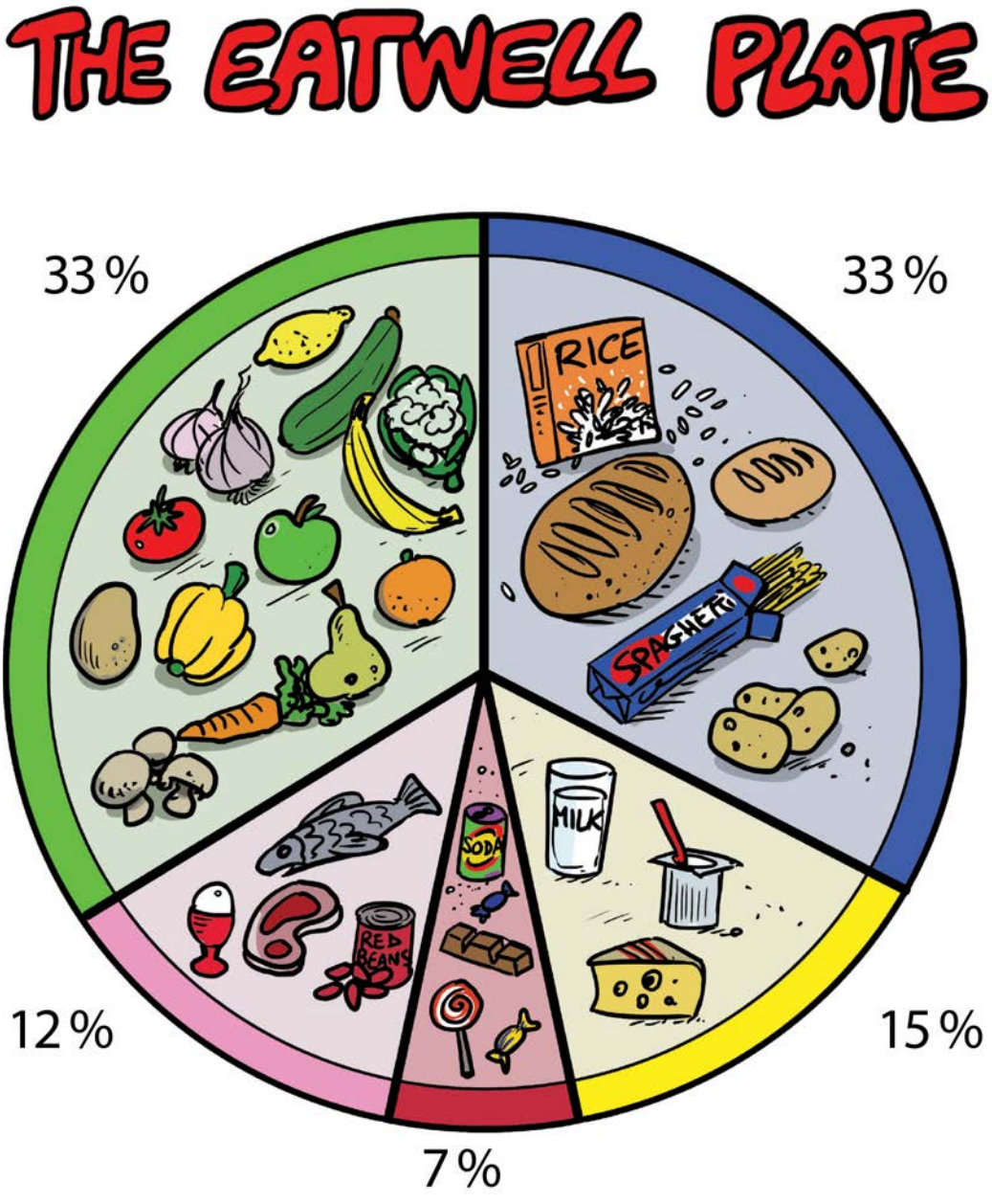
HOW TO DRINK HEALTHY?

The guide below advises children to drink the following beverages in the indicated proportions to guarantee good hydration.

HOW TO STAY HEALTHY?
EAT WELL PLATE

There is a lot of evidence that lifestyle changes can help prevent the development of type 2 diabetes.

The foods we eat can be divided into five food groups as shown below in the eat well plate. You will have a well-balanced diet if you eat a variety of foods from across the groups.



Try to remember these proportions in your diet.

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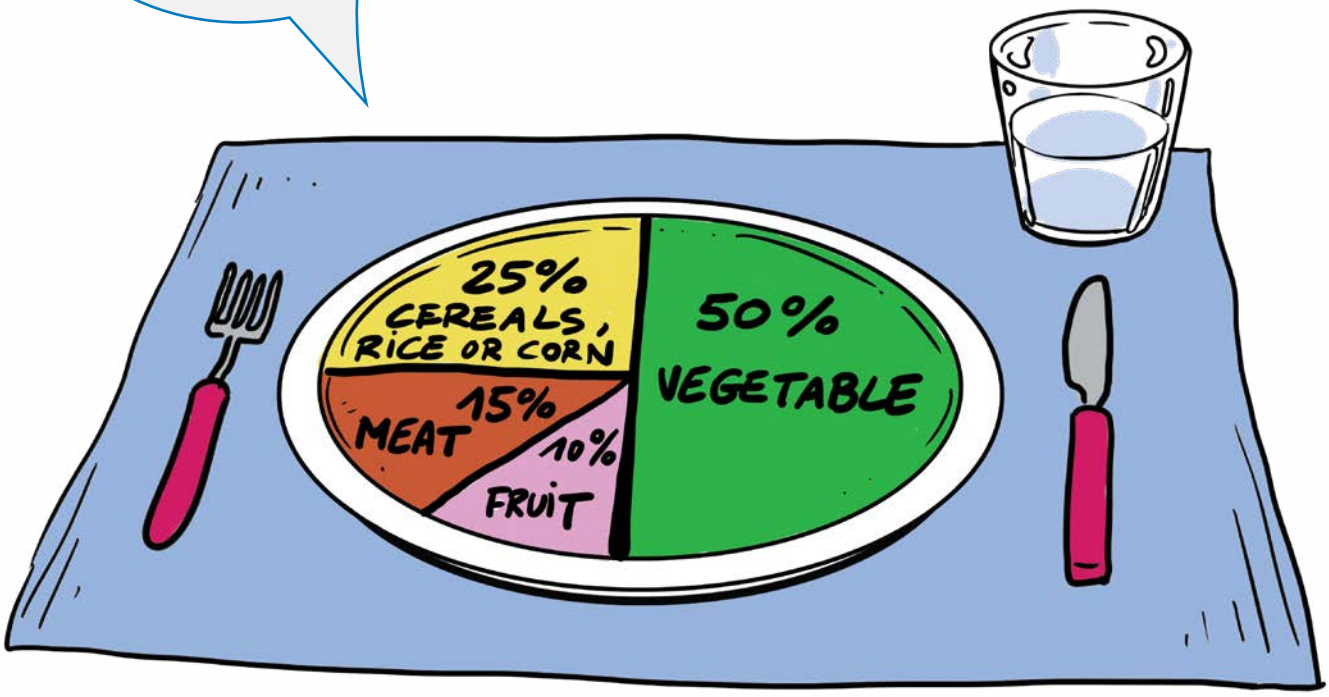
PLATE METHOD

For your main meal, the plate method provides a useful visual guide to judge portion size.

TIP:

Balance insulin and carbohydrates to keep the blood glucose closer to the target levels of children with diabetes



TIPS:

1. Adapt the plate according to local foods
2. Use unsaturated fats such as olive oil or sunflower oil to cook your food

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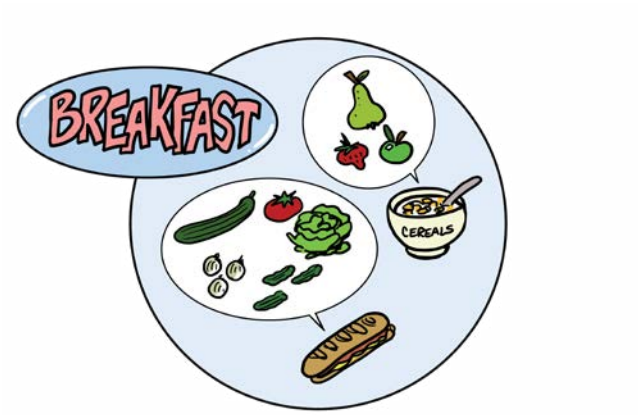
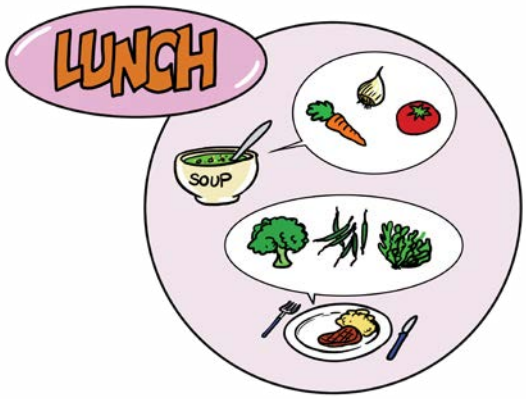
HOW TO INCORPORATE MORE FRUITS AND VEGETABLES INTO THE DIET

It is recommended to eat at least 2 1/2 cups of fruits and vegetables each day!



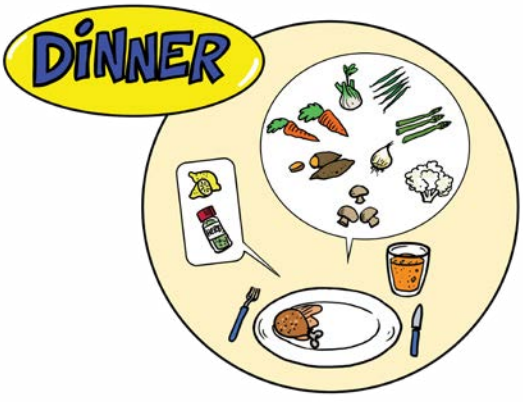
Add fruit on top of your cereal or in your yoghurt

Add vegetables in your sandwich

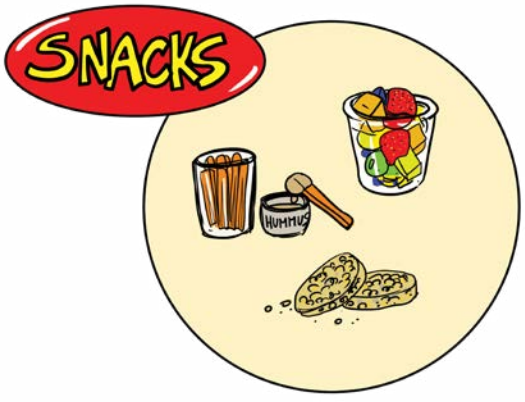


Add vegetables in soup or sandwiches

Add a small side of salad with low fat dressing to your main dish



Fill at least half your plate with vegetables and fruit



Bring a handful of fresh fruits, dates and/or nuts in small pots or cups

HEALTHY MEAL PLANNING AT HOME

How parents should prepare food storage containers?

TIP:
Make your child's lunch fun and attractive by using colourful and varied food

In warm environments, prevent the growth of harmful bacteria by storing packed lunches in a refrigerator until lunchtime.

Alternatively pack in cool bags with ice packs or frozen water bottles.

PARENTS

TIPS FOR PARENTS ABOUT FOOD AND DIABETES

1. Every child, with or without diabetes, needs an adequate amount of calories and nutrients to grow healthy. To ensure a balanced diet, use your national **food guides** (pyramids, wheels, plate model,...) to help you find strategies to encourage **healthy eating habits – It's a key part of providing a healthy foundation for future generations!**

2. Remember that **carbohydrates** in foods are transformed into **glucose** after digestion and affect the blood glucose levels **(glycaemia)** – Children with diabetes need this nutrient for proper energy and growth. To maintain good glycaemia control, it is most important to match the insulin with the amount of carbohydrates eaten.

3. Provide school with your child's individual meal plan

HOW TO READ FOOD LABELS

Reading food labels will help you to understand nutritional values to make healthy food choices!

Nutrition facts	
Serving size	1 cookie (24g)
Amount per serving	
Calories	
	%Daily Values*
Total Fat 2.5g	4%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 85mg	6%
Total Carbohydrates 19g	6%
Dietary Fiber 1g	4%
Sugars 11g	
Protein 1g	
Ingredients: Rice Flour, Organic Granulated Cane Juice, Dark Chocolate Chunks (granulate, cane juice, chocolate liquor, cocoa butter, dextrose, soy lecithin, vanilla) Natural Vanila Flavor, Salt, Baking Soda, Xanthan.	

Pay attention:
The quantity you eat may be bigger than the quantity used here to calculate the nutrition facts.

The number of calories contained in a single serving.
Not in the whole package!

Try to limit the amount of these components in your diet.

Avoid products with more than 8g of sugar per portion.

The list of ingredients provide important information about what you are eating.*

* On a food label, the ingredients are listed in order of quantity, with the ingredients used in the greatest amount first, followed in descending order by those in smaller amounts. Therefore limit products that have as first ingredients all forms of sugars: sucrose, corn-syrup, high-fructose corn syrup, invert sugar, maltose, dextrose, cane sugar, beet sugar.

PARENTS

Kids and Diabetes in Schools

Advocacy Toolkit

Table of contents

Acknowledgements

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Introduction

About this toolkit

The KiDS Advocacy Toolkit compiles **information and tips to help advocates** encourage local or national decision-makers to bring diabetes education into schools.

This toolkit is aimed at anyone interested in diabetes, education, health and/or the school environment, such as: children and adults living with diabetes; parents, carers and guardians of children with diabetes; local and national diabetes associations; civil society organisations working in education, health and/or human rights; healthcare professionals; school students; school staff; and relevant school bodies (school councils, parents' associations, teachers' associations, teachers' unions).

What is advocacy?

Advocacy is systematic and planned work aimed at influencing decisions within political, economic and/or social institutions to generate positive change. While advocacy can be an individual activity, positive change is brought about mainly through partnerships and collaboration.

For example: an advocacy campaign aimed at banning the sale of unhealthy foods on school premises or at persuading the local authority responsible for education to provide diabetes education sessions for school staff.

Advocacy in the framework of the KiDS project would be any activity or set of activities aiming to encourage local or national decision-makers to undertake actions or adopt policies to bring diabetes education to schools.

About the International Diabetes Federation

The International Diabetes Federation (IDF) is an **umbrella organization** of over 240 national diabetes associations in 168 countries and territories. It represents the interests of the growing number of people living with diabetes and those at risk. IDF has been leading the global diabetes community since 1950. Its mission is to promote diabetes care, prevention and a cure worldwide.

IDF is engaged in action to tackle diabetes from the local to the global level – from programmes at community level (such as Kids and Diabetes in Schools), to worldwide awareness and advocacy initiatives. IDF's activities aim to influence policy, increase public awareness and encourage health improvement, promote the exchange of high-quality information about diabetes, and provide education for people with diabetes and their healthcare providers.

Find out more about IDF at **www.idf.org**

Diabetes - a global challenge

What is diabetes?

Diabetes is a **non-communicable and chronic disease that occurs when the body cannot produce or use effectively the insulin required** to let glucose pass from the blood stream into the body's cells to provide energy. Over time, high blood glucose can lead to damage in tissues and organs, which can result in the development of complications such as cardiovascular disease, diabetic retinopathy, diabetic kidney disease and nerve/vascular damage.

There are three main types of diabetes:

- **Type 1 diabetes** occurs when the body produces very little or no insulin. Its onset happens most frequently in children and adolescents, but can happen at any age. People living with type 1 diabetes need daily insulin injections to keep their blood glucose levels under control.
- **Type 2 diabetes** occurs when the body cannot use the insulin it produces effectively. Type 2 accounts for around 90% of all diabetes cases. Its onset typically happens in adulthood. People with type 2 diabetes can initially manage their blood glucose with a healthy diet and increased physical activity, but over time most of them will require oral drugs and/or insulin injections.
- **Gestational diabetes** occurs when a woman experiences high levels of blood glucose during her pregnancy. It usually disappears after pregnancy. Women affected by gestational diabetes and children born to women with gestational diabetes are at higher risk of developing type 2 diabetes later in life.

Learn more about diabetes and test your knowledge at **www.idf.org/aboutdiabetes**

The global impact of diabetes

Diabetes is one of the fastest growing health challenges of the 21st century, with the number of adults living with diabetes having more than tripled over the past 20 years.

According to IDF figures, in 2019:

463 million adults (20-79 years) lived with diabetes

Approximately half (232 million) were undiagnosed

4 in 5 (79%) lived in low and middle-income countries

Diabetes caused 4.2 million deaths

760 billion dollars were spent on diabetes – 10% of the total adult healthcare expenditure

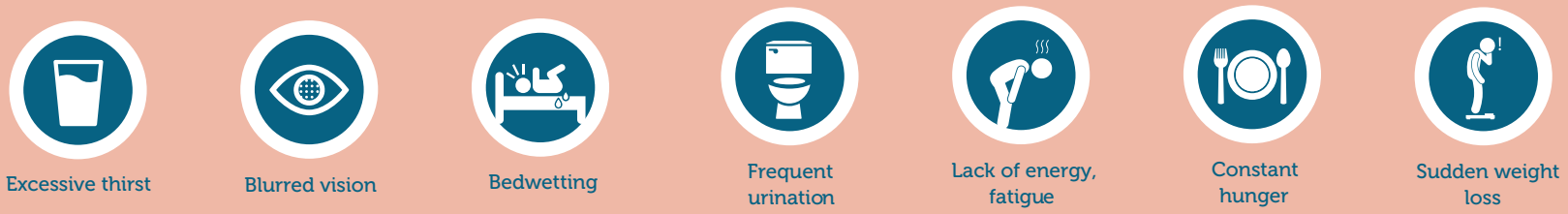
Beyond the 463 million people living with diabetes, a further 374 million are at increased risk of developing type 2 diabetes. If action is not taken to address this rising trend, IDF estimates that **700 million adults will live with diabetes by 2045.**

Diabetes in the young

- In 2019, **more than 1.1 million children and adolescents** lived with type 1 diabetes.
- Every year, close to 130,000 children and young adults under the age of 20 are diagnosed with type 1 diabetes. Of this number, more than 98,000 are under the age of 15.
- The number of new type 1 diabetes cases among children and adolescents is increasing in many countries at an annual rate of around 3%.
- In countries with limited access to insulin and inadequate health service provision, children and adolescents with type 1 diabetes face serious complications and risk a premature death.
- **Many children and adolescents with type 1 diabetes are often not diagnosed or misdiagnosed with something else**, such as stomach flu, urinary tract infection, strep throat or a viral infection.
- In populations of European origin, nearly all diabetes cases among children and adolescents are of type 1. In other populations (e.g., Japan) type 2 diabetes is more common in this age group.
- There is evidence that **type 2 diabetes is increasing** among children and adolescents, but reliable data is scarce.
- With increasing levels of obesity and physical inactivity among children and adolescents in many countries, type 2 diabetes among this age group has the potential to become a global public health issue.

Find the latest diabetes figures at
www.diabetesatlas.org

The typical symptoms of type 1 diabetes



COVID-19, diabetes and school

The outbreak of COVID-19 in 2020 has disproportionally affected people living with diabetes, who are at higher risk of negative health outcomes if infected by the virus. The pandemic has also had a **significant impact on education,** with many schools needing to close to support measures to contain the spread of the virus.

Despite the lack of data on the long-term impact of the pandemic in children and youth, existing research indicates some trends:

- COVID-19 has undermined years of progress in education around the world and decreased access to quality education, especially among students from poor settings/households.[1] UNICEF estimates that **1 billion children are at risk of falling behind due to school closures**.
- COVID-19 is exacerbating disparities in nutrition, health and stimulation, and services to support young children are too often overlooked in the response to the pandemic.[2]
- COVID-19 may have worsened the already **insufficient levels of physical activity** among children and adolescents, due to the prolonged school closures and home confinement.[3]
- **Recreational screen time**, as well as the **consumption of sugar-sweetened beverages**, seems to have increased during the pandemic.[4,5,6]
- COVID-19 seems to have increased food insecurity rates for children, which are linked to risk of obesity and weight gain.[7]

Children living with diabetes go through lots of hardships at school. In order to participate at school and be treated in the same way as others, children living with diabetes need school staff and fellow students to know more about diabetes and how to best support them.

Sarah Biyinzika,
IDF Young Leader living with type 1 diabetes (Uganda)