

information pack
for TEACHERS



A toolkit to inform on
diabetes in schools

Acknowledgements:

This material has been developed in collaboration with the members of the KiDS Advisory Committee:

Monika Arora, Anne Belton, David Cavan, David Chaney, Daniela Chinnici, Stephen A. Greene, Agnès Magnen, Angie Middlehurst, Denise Reis Franco, Nikhil Tandon, Sara Webber.

Publication coordinators: David Chaney, Daniela Chinnici (kids@idf.org)

Illustrations: Frédéric Thonar (alias Tonu) www.tonu.be

Layout: Olivier Jacqmain (Publications Manager of IDF)

Partners :



International
Diabetes
Federation



International Society for Pediatric
and Adolescent Diabetes

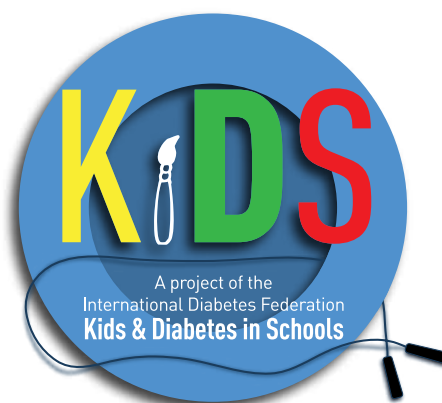


Endorsed by:



The Canadian Diabetes Association supports the International Diabetes Federation's KiDS pack to ensure the health and safety of children with diabetes and to help them be full and equal school participants without fear of exclusion, stigmatization or discrimination.

IDF gratefully acknowledges the support of Sanofi in this project.



Guidelines:

This pack should be used in tandem with an information session and is not intended to be distributed as a standalone item. A programme on diabetes education should be organised at schools around the pack.

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.

IDF, ISPAD and Sanofi Diabetes 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 pack.

We would appreciate your feedback on pack usage and photos from your information sessions.

No fees will be asked for using this pack.

TABLE OF CONTENTS

Introduction

Type 1 diabetes:

- ☐ What is diabetes?
A day in the life of Tom, living with type 1 diabetes
- ☐ What is type 1 diabetes?
- ☐ Myths about diabetes
- ☐ As a teacher what do I need to know?
- ☐ What do I need to know about low blood sugar?
Causes, symptoms and how to cope with it
- ☐ What to do if a child has low blood sugar
- ☐ What do I need to know about high blood sugar?
Causes, symptoms and how to cope with it.
- ☐ What to do if a child has high blood sugar
- ☐ What do I need to know about exercise and diabetes?
- ☐ What about extra curricular activities?

Type 2 diabetes:

- ☐ What is type 2 diabetes?
- ☐ As a teacher what do I need to know?
- ☐ Why do people need to prevent and take care of diabetes?
- ☐ Why is it important to choose a healthy lifestyle?
- ☐ How to stay healthy: eat well, move well!
- ☐ Stay healthy, follow your heart

Annexes:

- ☐ Diabetes management plan
- ☐ Guidelines for management of children with diabetes in school
- ☐ School activities with children to explain diabetes
- ☐ Resource websites

INTRODUCTION

The following KiDS information pack will guide you in making the school environment a better place for children with diabetes. The pack is an awareness and information tool created to inform teachers and children about diabetes. This pack should be seen purely as an information resource and *is not intended to replace the advice of the diabetes team.*

THE AIM OF THIS PACK IS TO:

Increase awareness of diabetes in school

Improve the lives of children with diabetes at school and fight discrimination

Help teachers address the topic of diabetes and need for a healthy lifestyle

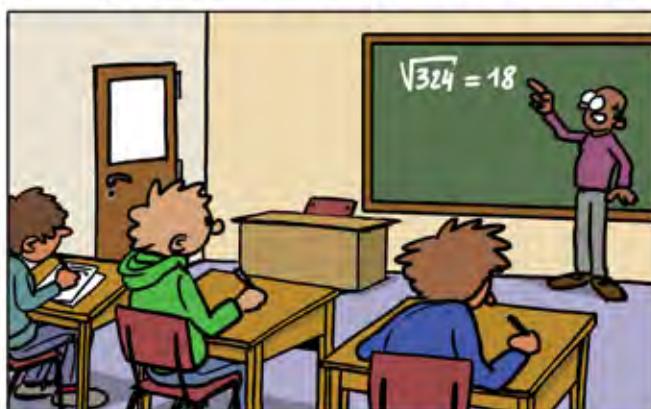
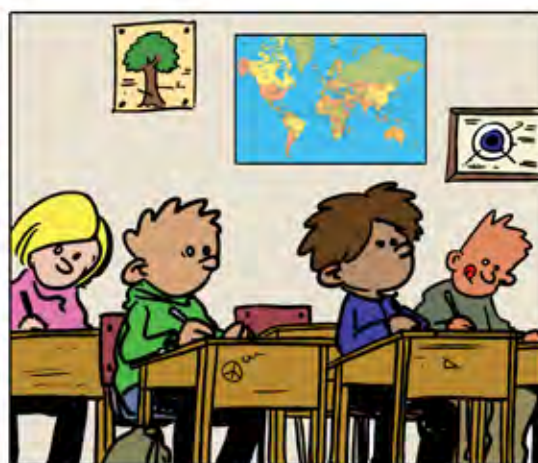
Why a blue circle?

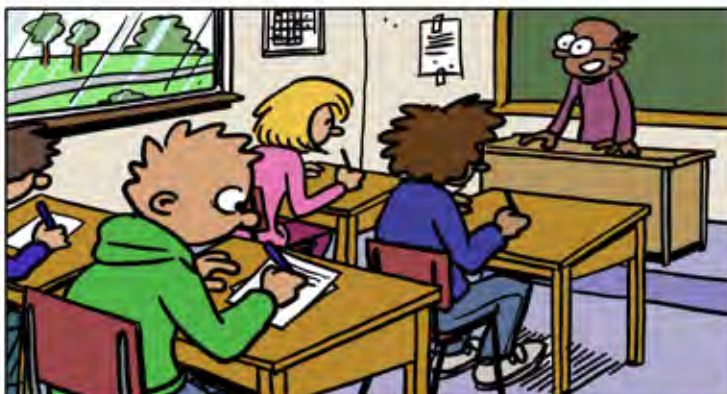
The icon was designed as a call to unite for diabetes and is a symbol of support for the UN Resolution on Diabetes. The colour blue represents the sky and it is the same colour as the flag of the United Nations

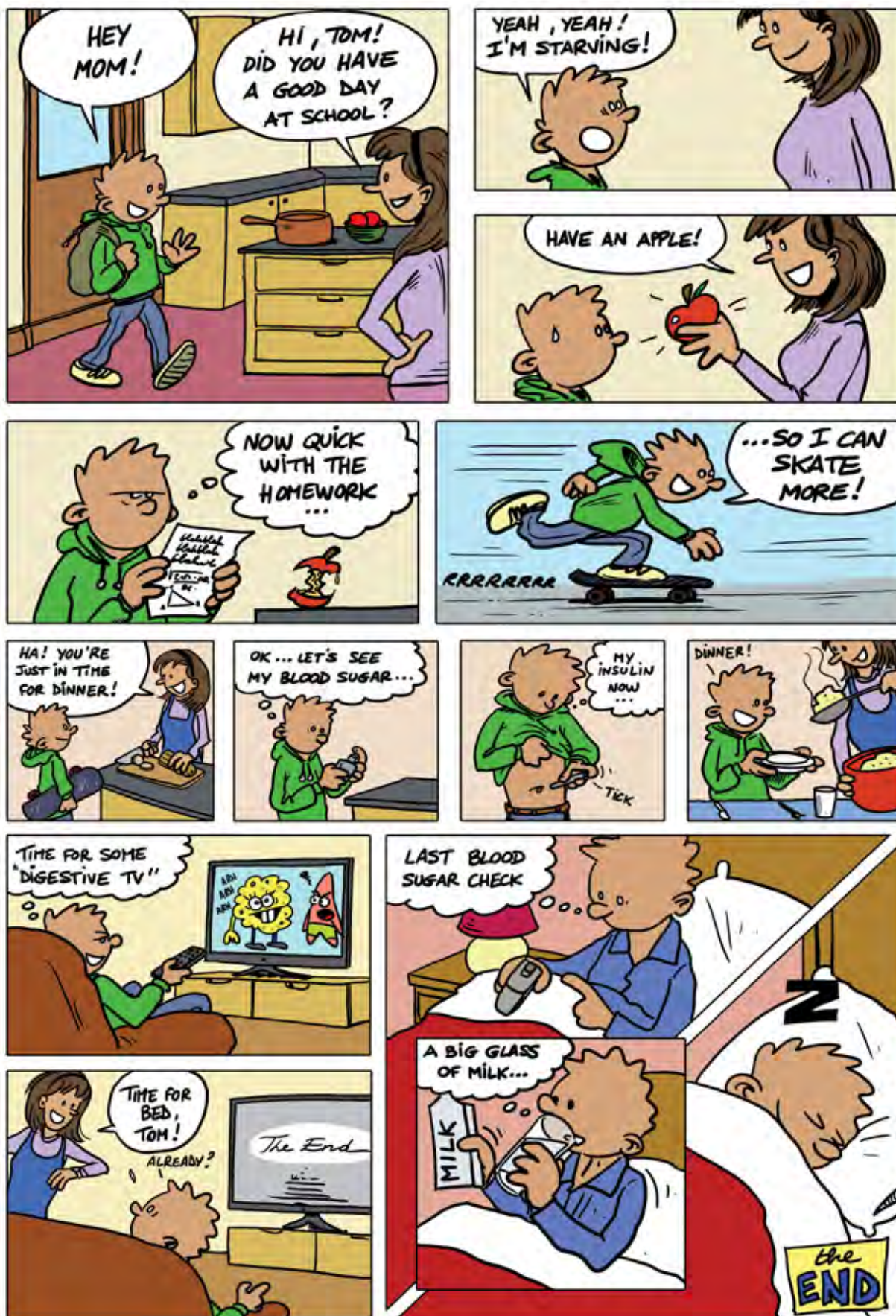
WHAT IS DIABETES?

A day in the life of Tom, living with type 1 diabetes









WHAT IS TYPE 1 DIABETES?

Type 1 diabetes is diagnosed when the pancreas stops making insulin completely. It is an autoimmune disease which means the body's own immune system attacks the pancreas destroying the cells that make insulin. This results in the body being unable to control the amount of sugar in the blood.

Diabetes can develop in a child of any age, including infants and toddlers. Type 1 diabetes often develops quickly and may be life-threatening if not diagnosed early.



MYTHS ABOUT DIABETES?

Quiz true or false

TRUE OR FALSE:

Eating too much sugar
causes diabetes

FALSE: When kids get type 1 diabetes, it's because their bodies can't make insulin anymore. It has nothing to do with eating too much sugar. When kids get type 2 diabetes there might be a connection because eating too much sugar (or foods with sugar, like candy or regular soda) can cause weight gain, and weight gain can lead to type 2 diabetes.

TRUE OR FALSE:

People with diabetes should
not exercise

FALSE: Exercise is important for all children— with or without diabetes. Exercise has many benefits. It keeps kids healthy and fit, and also helps them balance their blood sugar.

TRUE OR FALSE:

You can catch diabetes
from another person

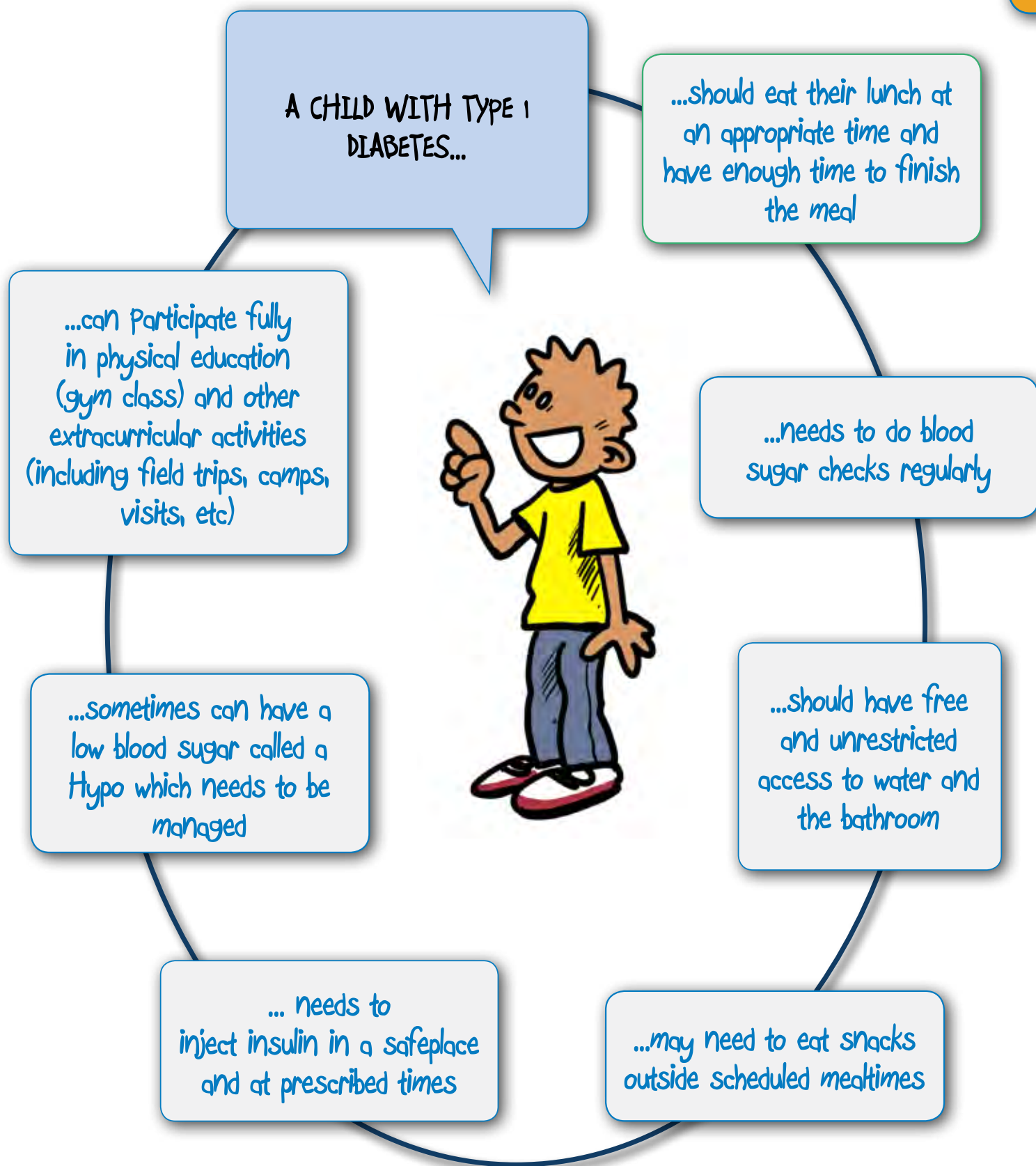
FALSE: Diabetes is not contagious, so you can't catch it from someone who has it.

TRUE OR FALSE:

Kids with diabetes can
never eat sweets

FALSE: Kids with diabetes can eat sweets — as part of a balanced, healthy diet. Like everyone else, a person with diabetes shouldn't eat too many sweets because they may cause damage to teeth and they don't have many vitamins and minerals.

AS A TEACHER WHAT DO I NEED TO KNOW?



WHAT DO I NEED TO KNOW ABOUT LOW BLOOD SUGAR?

Hypoglycaemia or low blood sugar

CAUSES

Low blood sugar
may be caused by:

Too much insulin on board

Too little carbohydrate

Unplanned exercise and activities

Missed or delayed meals/snacks

SYMPTOMS



WHAT TO DO IF A CHILD HAS LOW BLOOD SUGAR

How to cope with hypoglycaemia or low blood sugar

When a hypo does happen it is very important to act quickly:

Ask the child to check his/her blood sugar if he/she has a (gluco)meter

Ensure that the child consumes a fast acting carbohydrate
(see next page)

Listen to the child, don't ignore their needs or their friends' worries

FOLLOW WITH A SNACK OR MEAL IF DUE

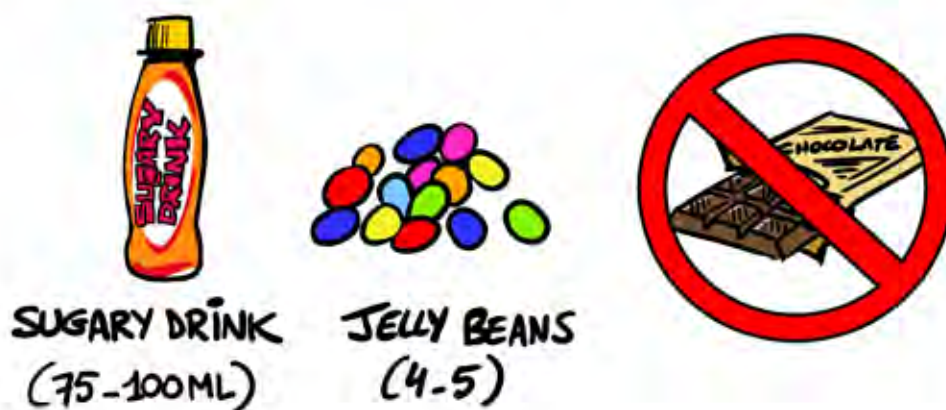
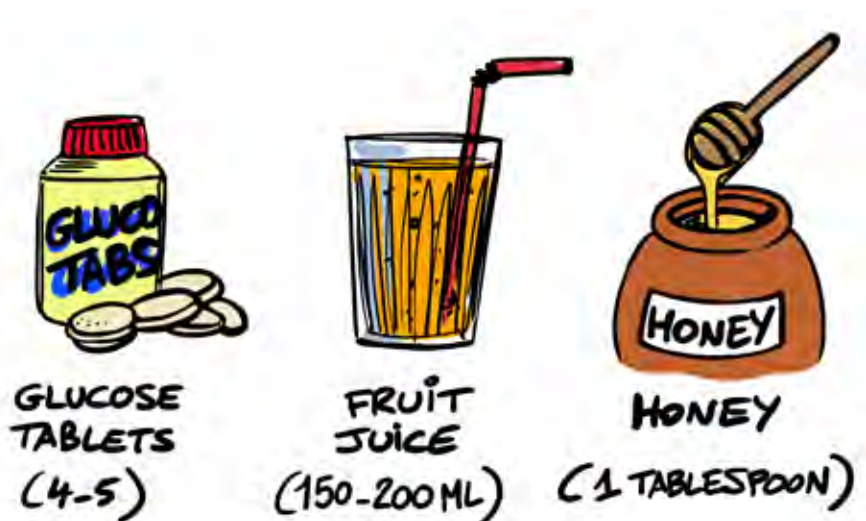
Be aware of the level of consciousness of the child. If the child is unconscious seek immediate medical attention and contact his/her family.

Ensure that child is supervised during hypoglycaemia and until recovery.

Check blood glucose again after 15 minutes.

WHAT TO DO IF A CHILD HAS LOW BLOOD SUGAR

How to cope with hypoglycaemia or low blood sugar?



**Get the child to recheck his/her blood sugar in 10 – 15 minutes.
if still low, repeat the treatment.**

**Send a note to parents to let them know their child had a low
blood sugar at school.**

WHAT DO I NEED TO KNOW ABOUT HIGH BLOOD SUGAR?

Hyperglycaemia or high blood sugar

CAUSES

High blood sugar
may be caused by:

Too little insulin on board.
Eating too much carbohydrate.

Stress from an illness.
(such as a cold or flu)

Other stress/anxiety.
(such as family conflicts or exams)

SYMPTOMS



WHAT TO DO IF A CHILD HAS A HIGH BLOOD SUGAR

How to cope with high blood sugar

What to do in case of high blood sugar

A CHILD WITH A HIGH BLOOD SUGAR LEVEL SHOULD BE ADVISED TO:

Drink plenty of water to keep hydrated

Check his/her blood sugar and repeat the blood sugar test level in about 2 hours

If his/her blood sugar level is very high (15 mmol/l or 270 mg/l) contact the school nurse or child parents so they can seek further advice

ATTENTION

When high blood sugar occurs over a number of days, it is important to report to parents and school nurse.

WHAT DO YOU NEED TO KNOW ABOUT EXERCISE AND DIABETES?

The duration and intensity of exercise will have an influence on blood glucose levels. To avoid low blood sugar episodes, a child with diabetes may need to eat an **additional snack before, during and after exercising.**

If a child has symptoms of low blood sugar or will be participating in more than 40-45 minutes of physical activity,

blood glucose levels should be checked before exercising.

Exercise is a key component of diabetes management.

With few special considerations, a child with diabetes can fully participate in all athletic opportunities available in schools.

All of the students with diabetes need to have their **"Hypo Pack"** (see guidelines in annex).



WHAT ABOUT EXTRA CURRICULAR ACTIVITIES?

I CAN participate in all after-school activities. My teacher should notify my parents as soon as possible and invite them to the planning stage of the activity especially if this involves an overnight.



I'll bring with me:

- ☐ a diabetes pack with a meter, insulin and a sugar source.
- ☐ a fast-acting carbohydrate snack or drink in case of hypoglycaemia.
- ☐ extra snacks in case lunch is delayed or we get more exercise than usual.
- ☐ a bottle of water.

An overnight activity means I need to be able to inject my insulin or this needs to be arranged with my parents.

WHAT IS TYPE 2 DIABETES?

Type 2 diabetes is being diagnosed in children in a growing number of countries. In the United States, up to 1 in 3 new cases of type 2 diabetes, is diagnosed in youth younger than 18.

Type 2 diabetes is diagnosed when the body does not produce enough insulin to function properly, or the body's cells don't react to insulin. This is known as insulin resistance. If this happens, the body is unable to control the amount of glucose in the blood.

SYMPTOMS:

Unlike type 1 diabetes, in people with type 2 diabetes the symptoms are often mild or absent, making this type of diabetes hard to detect.



In general the most common signs are



WEIGHT LOSS



VERY THIRSTY

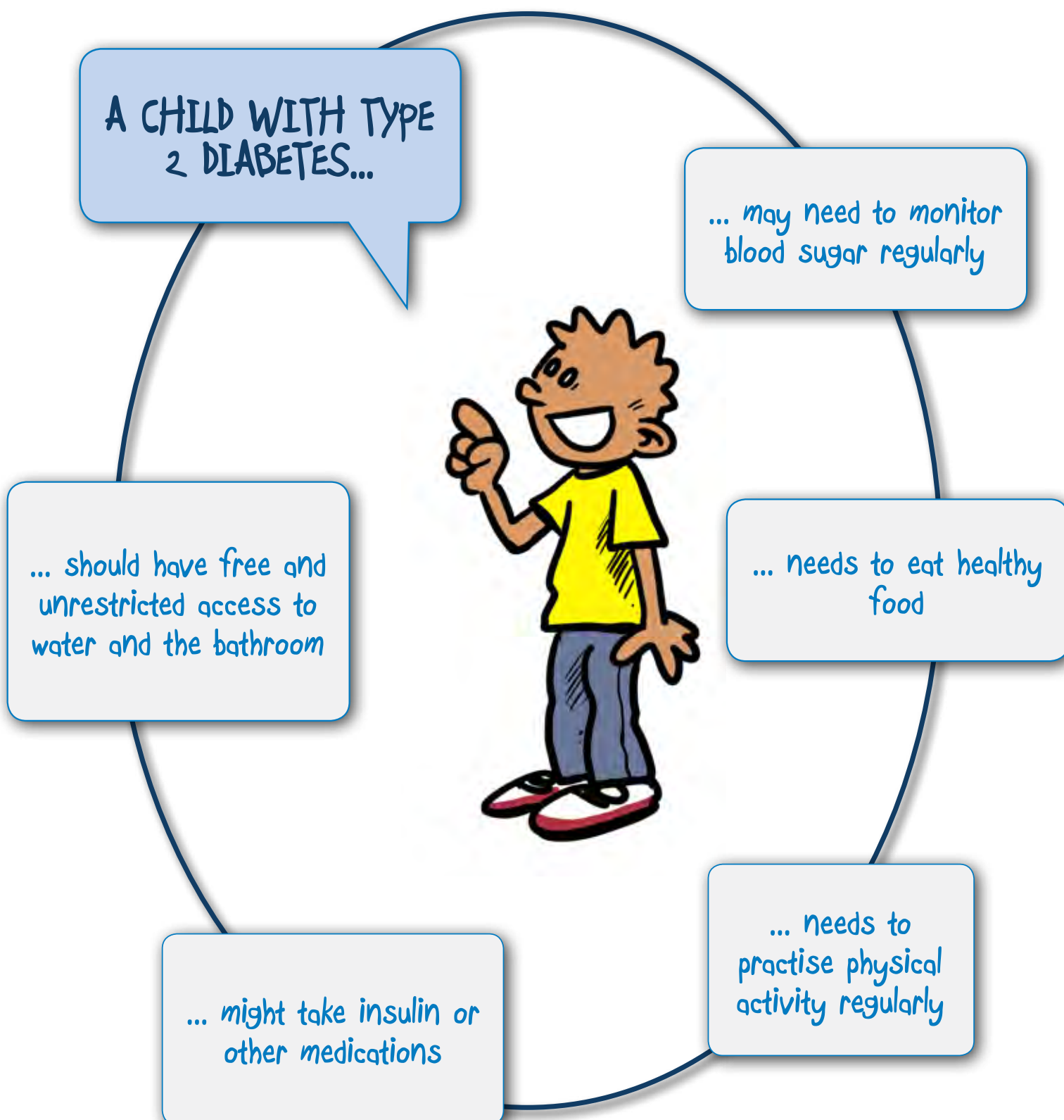


NEED TO URINATE OFTEN



WEAKNESS FATIGUE

AS A TEACHER WHAT DO I NEED TO KNOW?



WHY DO PEOPLE NEED TO PREVENT & TAKE CARE OF DIABETES

BECAUSE IT CAN LEAD TO :

I CAN'T SEE...

damage to the retina

foot problems



kidney disease

WHY IS IT IMPORTANT TO CHOOSE A HEALTHY LIFESTYLE?

TO PREVENT:



OVERWEIGHT



TIREDFNESS



FEELING SICK

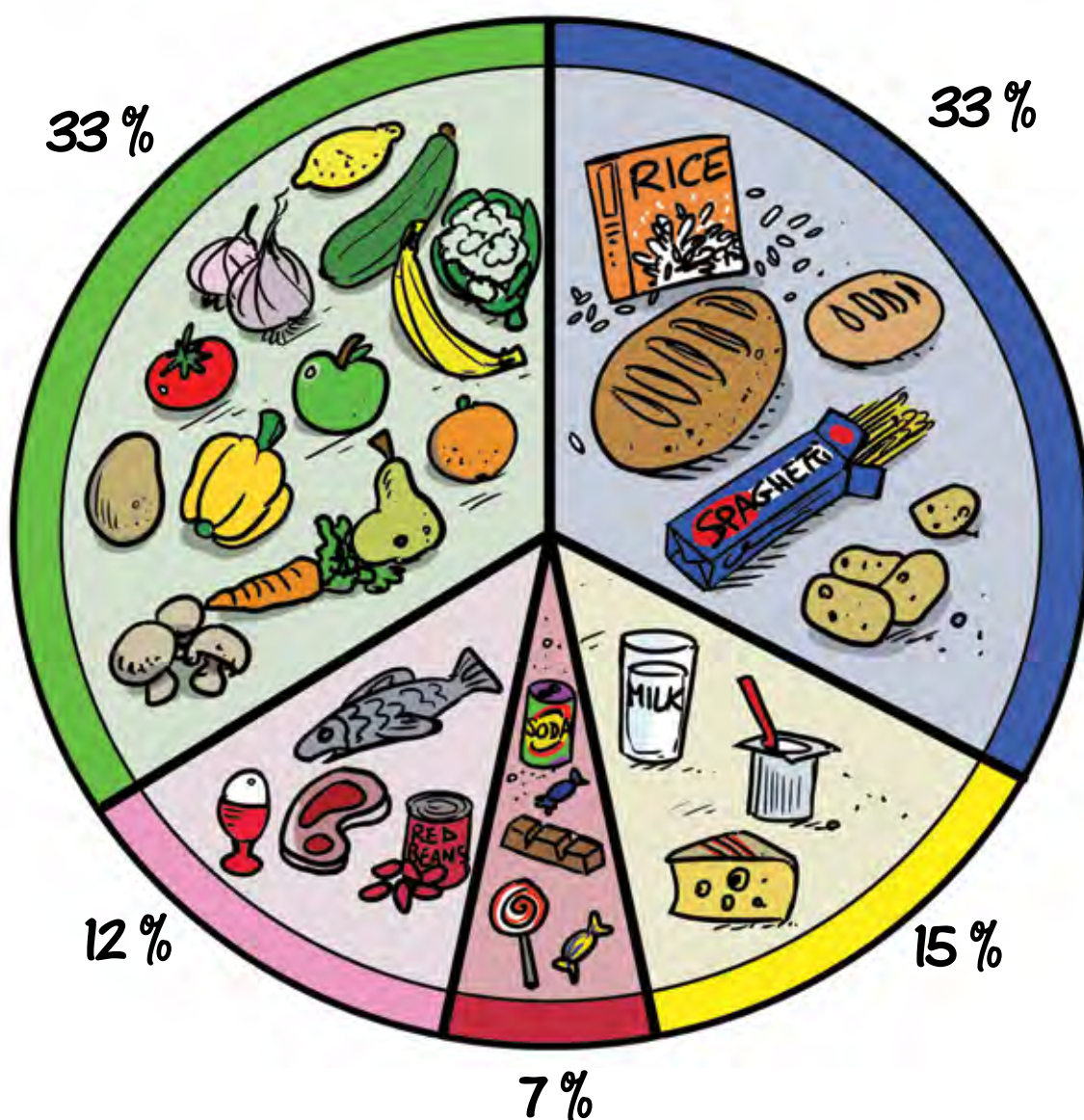


UNHEALTHY HEART

HOW TO STAY HEALTHY? EAT WELL

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

THE EATWELL PLATE



Try to remember these proportions in your daily meals.

HOW TO STAY HEALTHY?

MOVE WELL

A healthy diet is built on a base of regular physical activity, which keeps calories in balance and weight in check.

TIPS TO GET ACTIVE:

- ☐ Try sports and choose one you like
- ☐ Set regular times for activities; make it a part of your daily schedule
- ☐ Reduce use of screen time (TV, computers etc..) and play with friends
- ☐ Walk to school
- ☐ Take the stairs instead of an elevator
- ☐ Learn to use the skateboard, the bike or run instead of getting a ride
- ☐ Walk the dog with your parents



☐ Turn off your TV, smart phone or computer and spend some time playing with your friends

☐ Stay active: do a minimum of 30 minutes of exercise per day!

☐ Exercise with a friend

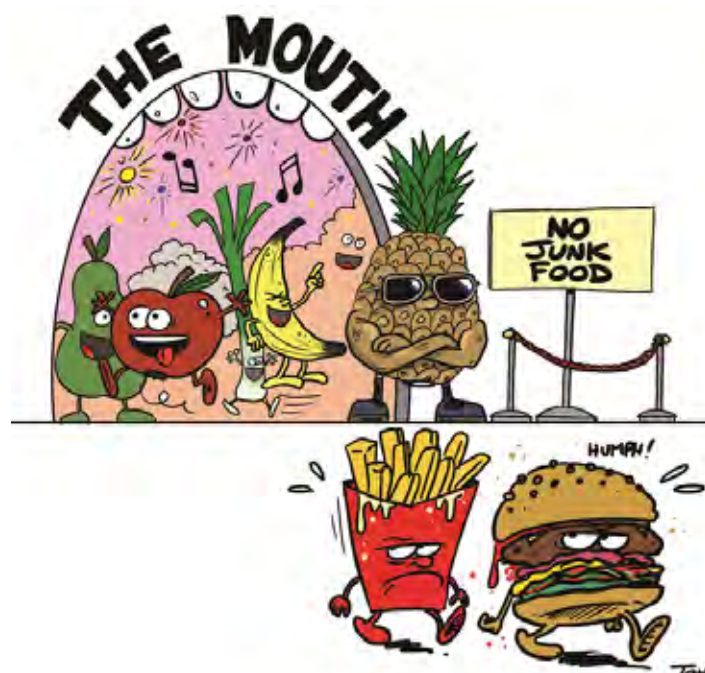
STAY HEALTHY: FOLLOW YOUR HEART

BECOME AN HEALTH ANGEL!



PHYSICAL ACTIVITY KEEPS
YOUR HEART HEALTHY

REDUCING INTAKE OF
JUNK FOOD CAN HELP
REDUCE YOUR RISK OF
TYPE 2 DIABETES



ANNEX 1

DIABETES MANAGEMENT PLAN

to be completed by parent or legal guardian

Child's name

Date of Birth

Mother's Name

Father's Name

Child's age
at time of
diagnosis

Contact phone numbers:

(list by order in which calls should be made, and note if it is a parent, friend, or caregiver and whether the number is home and or work. Also note if each person has legal authority to respond in an emergency situation.)

	Number	Name	Relationship	Location	Authority
1.
2.
3.

Primary Care Physician:

Name Phone

Other Health providers:

Name Phone

Name Phone

MONITORING:

Usual blood glucose monitoring times:

☐

Morning

☐

Mid-day

☐

Afternoon

☐

Night

☐

Other:

☐

Other:

Does your child have a preferred location for monitoring (classroom, school office, etc.)?

.....

Goal range for blood glucose: Between and

LOW/S:

If below, please do the following:

.....

.....

Call parent if below: (Tel:)

Usual signs/symptoms of low blood glucose are:

.....

.....

.....

.....

.....

.....

HIGHS:

If above _____, please do the following:

Blood glucose level at which to measure ketones: _____

Call parent if blood sugar is above: _____ (Tel: _____)

Usual signs/symptoms of high blood glucose are:

Insulin:

Will daily insulin be needed in school?

☐ YES ☐ NO

If insulin is needed at any other time, please specify time, amount and circumstances for administering insulin:

FOOD:

Will your child participate in school breakfast and/or school lunch?

☐ YES ☐ NO

If yes, will modifications to the regular menu be needed?

☐ YES ☐ NO

EXERCISE:

What are your child's favourite physical activities?

Will your child participate in school sports? ☐ YES ☐ NO

SELF-CARE:

Please put an **X** in the box that best describes your child's role:

	Does it alone	Does it with su- pervision	Parents help	Parents do it
Pricks finger				
Puts strip in monitor				
Reads monitor				
Records result				
Adjusts food based on result				
Adjusts insulin based on result				
Knows which foods to limit				
Can select kind and amount of food				
Helps plan meals				
Selects insulin injection site				
Prepares for injection, selects site				
Measures insulin				
Injects insulin				
Measures ketones				

PARTIES AND SPECIAL FOOD OR MEALS:

Do you wish to be contacted before each event?

☐ YES ☐ NO

Additional instructions for the school:

EMERGENCIES:

What do you feel should be treated as an emergency?

What do you want the school to do in an emergency?

Other requests:

(Adapted on Recommendations for Management of Diabetes
for Children in School – Vermont Department of Health)

ANNEX 2

GUIDELINES FOR MANAGEMENT OF CHILDREN WITH DIABETES IN SCHOOL

The following guidelines should be taken into consideration when dealing with diabetes in school. The daily routine of a child with diabetes includes: daily blood glucose monitoring and schedule of food, insulin and activities. Therefore, while at school, each child with diabetes must be allowed to:

- ☐ Do blood sugar checks.
- ☐ Treat hypoglycemia with emergency sugar.
- ☐ Inject insulin when necessary.
- ☐ Eat snacks when necessary.
- ☐ Eat lunch at an appropriate time and have enough time to finish the meal.
- ☐ Have free and unrestricted access to water and the bathroom.
- ☐ Participate fully in physical education (gym class) and other extracurricular activities, including field trips.

In addition:

- ☐ The extent of the student's ability to participate in diabetes care should be agreed upon by the school personnel, the parent/guardian, and the health care team, as necessary.
- ☐ The ages at which children are able to perform self-care tasks are very individual and variable, and a child's capabilities and willingness to provide self-care should be respected.

- ☐ Successful management of diabetes in school requires team work between child, parents/guardians, health care team and the school.

Tips to establish an effective management program for diabetes at school:

- ☐ Plan for communicating with parents and the student's medical providers, agree emergency procedures and list phone numbers required.
- ☐ School policies and procedures for administering medications, and handling equipment such as meters and pumps should be developed.
- ☐ Specific actions for school personnel to perform in the management program should be agreed.
- ☐ A specific plan of action for handling high and low blood sugar episodes, including the appropriate treatment foods and medications to have available should be agreed.
- ☐ A list of any medications the student receives, noting which ones need to be taken during school hours should be documented.

WHO DOES WHAT ?

PARENT/ GUARDIAN

- ☐ Supply, equipment and medication necessary for the provision of health support services to students.
- ☐ Supply emergency contact numbers to address any expected situation that may arise.
- ☐ Supply Information about the student's meal/snack schedule.
- ☐ Keep the school informed of any changes in plan of care.

SCHOOL STAFF

- ☐ Arrange a meeting with parents / guardian at the beginning of the year to complete the diabetes management plan.
- ☐ Liaise with parents to find out the routine of the child.
- ☐ Make sure they have contact numbers for parents / guardians.
- ☐ Agree when parents / guardians need to be contacted.
- ☐ Support the child with diabetes at school.
- ☐ Allow the child to undertake blood glucose monitoring at agreed times.
- ☐ Provide a safe place for a child to inject insulin.
- ☐ Familiarise themselves with the signs and symptoms of low and high blood sugar.
- ☐ Know how to cope with a child who has a low and high blood sugar.
- ☐ Ensure a child with low blood sugar is supervised and not left alone.
- ☐ Provide unlimited access to water and bathroom.

STUDENT

- ☐ To tell the teacher when they are going low if possible.
- ☐ To tell the when they do not feel well.
- ☐ To do their blood sugar and insulin injection if able in accordance with the management plan.
- ☐ Bring their diabetes equipment to school.
- ☐ Carry with them fast acting carbohydrate in case of a low blood sugar.

SCHOOL ACTIVITIES WITH CHILDREN TO EXPLAIN DIABETES

GAMES

- ☐ Games with images (for instance: recompose the table “A day in the life of Tom living with type 1 diabetes” using images like a puzzle)
- ☐ Interactive online games: http://t1dstars.com/web/fun_and_games
- ☐ Short video : <http://www.diabeteskidsandteens.com.au/whatisdiabetes.html> followed by a power point with a quiz
- ☐ Comics (<http://www.comiccompany.co.uk/?category=34&collection=252&code=764>)

RESOURCE WEBSITES

- ☐ <http://ndep.nih.gov/publications/PublicationDetail.aspx?PubId=97#main>
- ☐ [http://t1dstars.com/web/;](http://t1dstars.com/web/)
- ☐ <http://www.diabeteskidsandteens.com.au/staycoolatschool.html>
- ☐ [http://main.diabetes.org/dorg/advocate/Back to School August 2013/lib/playback.html](http://main.diabetes.org/dorg/advocate/Back_to_School_August_2013/lib/playback.html)
- ☐ <https://www.diabetescamps.org/ugc/page-body/doc/JDRF%20School%20Advisory%20Toolkit.pdf>

DIABETES MANAGEMENT PLAN IN SCHOOL CONSULTED FOR THE KIDS PACK:

- ☐ http://www.childrenwithdiabetes.com/d_0q_500.htm
- ☐ <http://healthvermont.gov/prevent/diabetes/SchoolDiabetesManual.pdf>
- ☐ <http://www.gnb.ca/0000/pol/e/704AH.pdf>