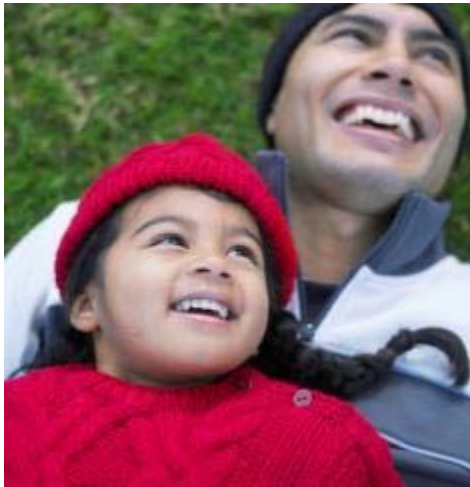


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IMPROVING LIVES. CURING TYPE 1 DIABETES. **T1D**



Managing T1D in the School Setting

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My Personal Journey with Diabetes

- 1977 - Graduated from Bradley University – BSN in Nursing
- 1987 - My daughter was diagnosed with T1D
- 1989 - My daughter starts kindergarten and I meet the school nurse
- 1993 - Completion of the comprehensive ten-year DCCT study
- 1995 – My daughter goes to Diabetes Camp
- 1996 – Humalog “fast acting” insulin goes on the market
- 2001 – My daughter gets her first insulin pump
- Today – February 2017 – 13 years working as a certified school nurse

As a parent – the positives of T1D

- Manageable disease
- The teachers/administrators know the child's name
- Helps a child develop a sense of discipline which is very beneficial later in life
- Encourages a child/family to develop a healthy diet
- Helps other children develop empathy and a deep sense of gratitude

Diabetes Management in the School

It takes a **TEAM!**

- Parent
- Student
- School Nurse
- Healthcare Provider
- Instructors & support staff

Diabetes Management in the School

It takes SUPPLIES!

Without supplies the school nurse/student is sunk!

- Testing kit, strips, alcohol wipes, lancets, lancet device
- Supplies for treating lows:
 - Juice boxes, glucose tabs, glucose gel – fast acting and palatable
- Ketone strips – **especially** if the student wears a pump
- Insulin
- Syringes
- Pump supplies – if student wears a pump – inserter, site, tubing, reservoir
- Glucagon

Diabetes Management in the School

It takes **COMMUNICATION!**

- Medical Alert bracelet – registered at local hospital
- Accurate contact information for parents/guardians
- Diabetes medical management plan (DMMP) from the healthcare provider
- Individualized Health Care Plan (IHP)– developed by the School Nurse
- 504 plan that goes out to staff
 - Parent is responsible for providing this to after school activity advisors
- Release of information for the nurse to speak with the health care provider
- Student contact

Diabetes Management in the School

The FIRST plan

The Diabetes Medical Management Plan (DMMP)

- The student's healthcare provider is responsible for this plan
 - Insulin type
 - Insulin delivery
 - Pump settings, insulin/CHO ratios, correction factors
 - Blood sugar/ketone testing parameters
 - Skill level of student related to monitoring/testing/treatment
 - Treatment protocol
 - Parameters for exercise
 - Glucagon administration orders
- Parents must notify School Nurse when the plan changes

Additional Plans

- Individualized health care plan (IHP)
 - I this plan in my office as a quick, concise reference
 - Developed by the School Nurse with input from the family
 - Includes testing times, testing locations, appropriate treatments for hypoglycemia, retesting
 - Includes the DMMP
- Emergency Care Plans – Can be specific or general
 - General at NHS as all staff are trained on hypoglycemia/hyperglycemia signs, symptoms and treatment yearly

The Ultimate Plan – 504

What is it and does my child need one?

- A 504 Plan is a legal (written) plan
 - “reasonable” accommodations the school must provide for a student with a disability.
 - A child does not need to require special education to be protected; children with T1D are protected under this law.
- Contact your building administrator to request a 504 plan
 - In our district – 504 plans are overseen by the school psychologist
 - In some districts – the school nurse or principal will oversee the plan development and distribution

Diabetes Care Plan

- A diabetes care plan shall serve as the basis of a student's Section 504 plan (29 U.S.C. Sec. 794) and shall be signed by a student's parent or guardian and submitted to the school for any student with diabetes who seeks assistance with diabetes care in the school setting.
- It is the responsibility of the student's parent or guardian to share the health care provider's instructions concerning the student's diabetes management during the school day.
- The diabetes care plan shall include the treating health care provider's instructions concerning the student's diabetes management during the school day, including a copy of the signed prescription and the methods of insulin administration.

504 Plan for Students with Diabetes

The brief explanation I use to define diabetes to non-medical staff:

Diabetes is a chronic condition in which the pancreas malfunctions and prevents the body from producing sufficient insulin. Insulin allows the food we eat to be transformed into the energy source used by every cell in the body; especially those in the brain. Blood sugars that are **high** or **low** can impact cognitive function. Parameters for **high** and **low** blood sugars are established by the healthcare provider; however general parameters are **low** <60, **high** >300.

Suggested 504 Accommodations

- 1. Blood sugar testing/monitoring, insulin administration, and snacking/treating **low** blood sugars, will be allowed during the day to maintain normal blood glucose levels. This can be performed throughout the building in classrooms as well as the nurses' office.
- 2. Unlimited bathroom usage, unlimited visits to the nurse and access to water.
- 3. Alternate setting for standardized testing using stop-the-clock testing accommodations.
- 4. Allow retakes/extended time for classroom assessments if management of **high/low** blood sugars interferes with the ability to complete the assessment.

Suggested 504 Accommodations

- 5. Time–and-a-half to make up any missed work due to missed class time/absences/illnesses related to diabetes and management of blood sugars.
- 6. Clarification and repetition of directions may be needed during times of **high/low** blood sugars.
- 7. PE participation as directed by physician. No physical activity when blood sugars are outside of the designated parameters.
- 8. Due to the possibility of impaired cognitive function, **NEVER** send a student that feels “**low**” to the nurse by themselves. Call the nurse or have another student accompany the student with diabetes to the nurses’ office.

Additional Notes for 504

These are NOT accommodations

- Additional notes:
 - 1. Students are expected to have treatment supplies with them at all times.
 - 2. The Diabetes Medical Management Plan completed by the healthcare provider annually should be submitted by the parent and reviewed by the school nurse prior to the first day of school to allow for testing, treating, insulin and glucagon administration during the school day.
 - 3. Testing and treatment supplies will be provided by parent.
 - 4. Student contract regarding bloodborne pathogens, safe disposal of sharps, and consideration for others while testing or treating will be reviewed annually with the school nurse.

Additional Notes for 504

These are NOT accommodations

- 5. Release of information will be requested annually by the nurse to enable the discussion of modifications to insulin dosing during the school day.
- 6. Teachers will be notified annually of signs and symptoms of high and low blood sugars.
- 7. Glucagon will not be taken on field trips unless parent/nurse accompanies the student on the field trip.
- 8. Parents may request to accompany student on all field trips. If requested, a nurse will accompany the student on field trips to oversee insulin management and glucagon administration

Sample Emergency Diabetes Management Plan

- In the case of a lockdown when the timing of the isolation and availability to nurse or parent is unknown, Student should do the following:
 - Lower his basal to 75% for the duration of the event.
 - He can lower his basal more if he trends low throughout an extended event.
 - Student will check his sensor every hour on the hour throughout the lockdown. He will look at his sensor for arrows up or down to monitor trends.
 - Student should look at his sensor at the inception of the lockdown and if “normal” then he should follow his same BG check (9:15am) and eating schedule (12pm)
 - Student will do an actual blood glucose (BG) check every 2 ½ hours throughout the lockdown
 - After Student does a BG check an adult should ask: “Do you need to do anything with your basal”?
 - Student will text parent BG/sensor information every hour if possible

Sample Student Contract

_____ I have reviewed my diabetes management care plan with the nurse.

_____ I have reviewed the importance of carrying treatment supplies.

_____ I have reviewed bloodborne pathogen concerns related to testing.

_____ I will not carry **exposed sharps** at any time.

_____ I will dispose of my sharps properly.

_____ I will keep my diabetic supplies in a secure location.

_____ I will not allow peers to touch/tamper with my diabetic supplies.

_____ I will test before driving during drivers education

Appropriate Treatment Supplies Available at ALL times!

- Fast acting
- Don't expire during the school year
- Easy to carry in a pocket/fanny pack/wrist pack: glucose tabs, gel, juice
 - If everyone can find a way to carry their cell phone – T1Ds can find a way to carry treatment supplies!
- Palatable but not desirable
 - I prefer not to use candy (especially not chocolate) or soda
- Protein source
 - I discourage any peanut products due to allergies

Diabetes Management in the School

- **Appears to be black and white but is nothing but gray**
 - Food intake
 - Carbohydrate intake, type of carb
 - High fat slows down digestion
 - Protein slows down digestion
 - Exercise
 - Insulin – delivered on a timely basis, site of delivery
 - Prior to eating is challenging
 - Emotions/illness

Managing Birthday Treats

- Many schools have eliminated any edible birthday treats due to concern with allergies
- If you're against allowing a cupcake/cookie – provide a favorite alternate treat for your child when there is a birthday celebration
- Consider a plan to modify the treat – scrape off icing/take off candy, set up this plan at the beginning of the year with your child's teacher
- Determine what snacks/treats require additional insulin coverage
- The student should be actively involved at every level of school
 - Level of involvement based on developmental level
 - Allow student choice/input whenever possible

What can a parent expect from the school nurse?

- Careful consideration of the health and well-being of your child.
- Acknowledge that parents are the experts on their child's diabetes but nurses follow orders of healthcare providers
- School nurses are generalists; managing anything from asthma and diabetes to scraped knees and cardiac arrest
- Varying level of experience with diabetes – but they are the healthcare advocate in the school setting responsible for overseeing and managing diabetes during the school day and all school sponsored activities.
- It is challenging to keep up with the “latest” in diabetes management; glycemic indexes, new pump technologies, continuous glucose monitoring systems – provide any training material for their perusal when possible.

Resources

- <http://www.iasb.com/law/diabmats.cfm>
- Care of Students with Diabetes Act
<http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3284&ChapterID=17>
- Helping the Student with Diabetes Succeed: A Guide for School Personnel (September 2016) (Guidance), www.niddk.nih.gov/health-information/health-communication-programs/ndep/health-care-professionals/school-guide/section3/Documents/NDEP-School-Guide-Full.pdf
- <http://www.diabetes.org/living-with-diabetes/parents-and-kids/diabetes-care-at-school/>
- <http://main.diabetes.org/dorg/PDFs/Advocacy/Discrimination/504-plan.pdf>