

# MANAGING TYPE 1 DIABETES AT SCHOOL

Whether your child is newly diagnosed with Type 1 diabetes or you have been managing it for awhile it's difficult. Entrusting your child's vast medical needs and all around well being to strangers is not easy. Explaining and communicating to school personnel can be challenging...*but you can do this!*

It is our job as parents to create a situation at school where our children feel safe, well cared for, treated as an equal and understood. With preparation and taking the initiative to educate your child's teachers, staff and caregivers at school, you can succeed in helping to provide a safe environment for your child. School personnel may not have realized the extra efforts required by them to ensure a safe, caring and positive learning environment for our children with Type 1 diabetes, but most will be open to help. Teachers and school personnel have made a commitment to educating and helping all children. School staff are not only responsible for the medical needs of T1 children, but are also dealing with the social, emotional, physical and intellectual needs of a number of other students on a daily basis.

## KEYS TO SUCCESS:

- Education for everyone is important—your child and school personnel. There are a lot of self care needs a child/young person with T1 has to undertake. Your child's health care team is also a good resource for the parents and school when questions or concerns arise.
- Advance planning. Prior planning will enable your child to deal with problems more confidently. Even if you/your family is well organized, there will be some days when the plans do not work well.
- Good communication between parents and school staff are critical for a child's well-being and a parent's peace of mind.

## STEP BY STEP, PARENTS RESPONSIBILITY:

1. Teach your child as much about diabetes as possible. (Age appropriate) Try to plan for specific school situations with your child prior to their return to school. *Also, it is important to make sure they know when and who to ask for help.*
2. Provide the school with all the diabetes supplies your child will need through the day:

Blood glucose meter

Test strips

Insulin

Syringes or Pen

Lancets

Alcohol Wipes

Insulin pump supplies

Ketostix

Plenty of items to treat lows—*glucose tabs, skittles, juice, etc.* Along with peanut butter, beef or cheese sticks, whatever their favorite protein snack is to follow up the low.

## Glucagon

3. Provide the school with a list of emergency phone numbers, including the parent's home, cell and office number, alternate persons, physician and hospital numbers, and your child's diabetes healthcare plan from your medical team.
4. Educate those who will be working with your child by setting up a school conference and distributing clearly written information.

## SCHOOL CONFERENCE

### **Should be initiated by the parents at the following times:**

- Prior to your child's return to school after a new diagnosis of Type 1 diabetes.
- At the beginning of each new school year (if possible the week prior to the start of classes.)
- If a child changes schools. Whether it be a transfer, or moving up in grade to middle school or high school.
- Throughout the school year if the child is having problems with blood sugar control or to answer any questions the teacher and staff may have.

### **Participants in the conference may include:**

- Parents
- Child
- School nurse
- Teacher (s)
- Principal
- Counselor
- Lunchroom personnel
- Bus driver
- Gym teacher

**SEE SAMPLE LETTER THAT CAN BE CUSTOMIZED AND HANDOUTS ABOUT TYPE 1 DIABETES AT THE END OF THIS DOCUMENT. THESE CAN BE TAKEN INTO YOUR SCHOOL CONFERENCE TO GET YOU STARTED.**

## CARE PLAN

Provide nurse/teachers with a written care plan, and discuss it with them. Include specific times when blood sugar should be tested, symptoms of high and low blood sugar, the need for snacks and insulin, and detailed emergency procedures. Include in that care plan an action plan if your child feels low in class. Never let a child walk to the nurses office alone, etc. Everyone should understand that the plan is to prevent an emergency situation from occurring.

## COMMUNICATION PLAN

Decide together whether it be daily, weekly or as needed. Typically, the communication plan is with the parent and school nurse/aide. It varies. Determine

what you as a parent want to know...daily blood sugar numbers and/or general information and how that information will be communicated—email, telephone, a note coming home each day, etc.

## IMPORTANT NOTES

**Be involved.** Stay involved. Keep in touch. Check on inventory of supplies periodically. Adjust the care plan as needed.

**Consider** stocking your child's classroom (s) with a juice box, can of coke, skittles or whatever works best to treat your child's lows. Label "in case of emergency" with their name.

**Great books.** There are many great tools today to help explain T1. Depending upon your child's age, getting a book to read and explain (by you or your child's teacher) what T1 is to your child's classroom can be of great benefit.

**Rehearse** with your child different scenarios that might occur, such as what to say if a teacher doesn't understand the seriousness of Type 1 and forgets to allow a glucose test during class time.

**Alert** teachers to the fact that abnormal sugar levels can affect academic performance.

**504 Plan.** When the time is right work with the school to provide a 504 plan. A 504 is a plan to help students manage Type 1 diabetes. This agreement is between the school and parent puts into place guidelines and accommodations.

**School can be difficult for any child, but adding diabetes to the picture can make it even harder. Managing diabetes will require a partnership with you, your child, the school staff and medical team. Setting a cooperative tone for how you are going to handle this diagnosis will serve your child and your family well.**



**Your Name Here  
Address  
City, State, Zip  
Telephone**

August, *Year*

An Important Message to (*your child's school name here*) Staff,

My \_\_\_\_ year old daughter/son, \_\_\_\_\_ is a student at (*your child's school name here*) entering the \_\_\_\_ grade. I, like most moms, want the best for my daughter/son, including the best possible school experience.

Because my child has Type 1 diabetes, a bit more preparation for a positive experience may be necessary.

First, please know how much I appreciate the extra efforts *you* must make to ensure a safe, caring and positive learning environment is provided for (*your child's name here*). I know the demands of Type 1 diabetes are not easy and oftentimes overwhelming. I understand that you as a teacher, nurse, administrator, coach, bus driver, or other school personnel are not only responsible for the medical needs of my child, but for many other children, as well. I'm certain that dealing with the social, emotional, physical and intellectual needs of all of your students on a daily basis can be challenging.

The best health possible and all around well being is what I wish for my (*your child's name here*). It's not easy being a child with Type 1 diabetes. Through no fault of her/his own, or anything we have done, (*child's name*) has been placed in a world of medical procedure, protocol and treatment which is critical to her/his survival. Physically she/he must endure shots, finger pokes, highs, lows, constant interruptions, headaches, numerous doctor appointments and many daily responsibilities a child should not have to concern themselves with. On a psychological and emotional level, she/he must endure 'being different.' Along with that territory, embarrassment, humiliation, fear, confusion, shame, ostracism, and depression can arise. Type 1 diabetes is a serious disease. It is often misunderstood because of the disease with a similar name—Type 2 diabetes.

Amazingly, (*your child's name*) begins each day with a smile, and faces her/his burden with courage. I believe her/his courage is an important quality that will allow her/him to make sound decisions so she/he can have the best health her/his little body will allow.

Our young people have fabulous potential, but sometimes being young with Type 1 diabetes feels like you haven't had a fair shake. The outcome for many with this disease is not good—in fact the statistics are staggering. But I *refuse* to allow this disease to get the best of her/him. We focus on the triumphs, pride, encouragement, awareness, responsibility and strength that she/he is learning to possess at an early age.

***To that end, I will do anything in my power to help you, help my precious little girl/boy.*** Please let me know if you have any questions, need information, supplies, help, or anything at all.

Thank you for your commitment to educating and helping my little girl/boy, and all of our children. *It means more to me than you will ever realize!*

Gratefully,  
Your name here

I can be reached: LIST ALL OF YOUR CONTACT INFORMATION HERE

Your distribution list:

Nurse:	Principal:	<i>Other classes:</i>	Music:
Teacher:	Vice Principal:	Art:	Library:
Counselor:	Office:	Computer:	Other grade teachers, awareness
Bus driver:		P.E.:	recess
District:			

# UNDERSTANDING TYPE 1 DIABETES

The Simple Explanation



Working  
Together,  
Keeping  
our  
Children  
Safe!



PO Box 7034  
Lee's Summit, MO 64064  
816.478.0253  
www.KIDSWITHCOURAGE.org

*Mission:* Providing opportunities that encourage, educate and create positive outcomes in the lives of children, young people and families whose life long journey includes battling Type 1 diabetes.

## WHAT IS TYPE 1 DIABETES?

Simply stated, Type 1 diabetes develops in children and young people when their own body's immune system mistakenly attacks and destroys pancreatic beta cells. These beta cells produce the life sustaining insulin required by the body to fulfill its most essential function of converting food into energy to fuel the body's organs. (Type 2 diabetes, on the other hand occurs when the body doesn't respond to the insulin that's being made.)

Being diagnosed with Type 1 diabetes places children and young people in a world of medical procedure and protocol requiring rigorous every day care and treatment to stay alive. Without intensive insulin therapy and carefully monitored medical attention, organs begin to fail, eventually causing blindness, kidney failure, heart disease and death.

The exact cause of Type 1 diabetes is unknown. There is no cure. You cannot catch Type 1 diabetes from someone who has it. 15,000 children and young people in the United States are diagnosed each year. About 1 in 450 children/young people have Type 1 diabetes.

## WARNING SIGNS

Physical symptoms of Type 1 diabetes may initially appear harmless but they are seriously life-threatening. Some symptoms are often mistaken for other conditions. Watch children for these symptoms:

- **EXTREME THIRST & FREQUENT URINATION:** When excess sugar builds up in your bloodstream, fluid is pulled from your bodily tissues leaving you thirsty. As a result children will drink and urinate more than usual.
- **BED WETTING:** By a child who does not usually have this problem.
- **INCREASED APPETITE:** Without insulin to move sugar into cells, a child's muscles and organs become under nourished and depleted of energy. Intense hunger may persist even after they have eaten. Energy from food never reaches their energy-starved tissues and organs. Basically, even though children are eating, they are literally starving to death.
- **WEIGHT LOSS:** Despite increased eating to relieve hunger, a child will likely lose weight—*sometimes rapidly*.
- **BLURRED VISION:** When blood sugar levels remain high fluid may be pulled from the lenses of your eyes. This may affect a child's ability to focus clearly.
- **FRUITY, SWEET OR WINE LIKE ODOR ON BREATH**
- **FATIGUE, DROWSINESS, LETHARGY:** When cells are deprived of sugar, they may feel tired and irritable.
- **HEAVY, LABORED BREATHING**
- **UNUSUALLY EMOTIONAL OR IRRITABLE:** For no known reason. As sugar becomes unavailable in the bloodstream, including the brain, cognitive function and mood are affected.

## HOW IS TYPE 1 DIABETES TREATED?

Treatment for type 1 diabetes is a lifelong commitment. To stay alive, children and young people with Type 1 diabetes require intensive insulin replacement therapy by taking multiple daily injections or infusion of insulin through a pump. Balancing food intake with insulin, activity, growth and emotions is required and complex. To remain healthy, people with Type 1 diabetes must monitor blood sugar numerous times daily, maintain a healthy diet, and exercise regularly. The goal is to keep blood sugar levels as close to normal as possible to attempt to prevent or delay diabetes related complications. Over time, uncontrolled blood sugar levels can lead to cardiovascular complications, such as heart disease, kidney failure, organ failure, blindness and even death. For a person with Type 1 diabetes, keeping blood sugar levels in a normal range is challenging.

## 100 PERCENT OF THE TIME, A CHILD WILL DIE IF SHE/HE HAS UNDIAGNOSED AND UNTREATED TYPE 1 DIABETES

The seriousness of Type 1 diabetes is widely misunderstood by our society. Why? A combination of factors. Is it that the disease with a similar name, Type 2 diabetes is so prevalent that people incorrectly associate the name diabetes as one generic disease? Scientifically, they are two separate and distinctly different diseases. The general population may not understand the disease unless they are affected by it.

# Type 1 Diabetes:

## EMERGENCY CARE for children with Low Blood Sugar (Hypoglycemia)

Working  
Together,  
Keeping  
our  
Children  
Safe!

### WHAT IS LOW BLOOD SUGAR (HYPOGLYCEMIA)?

Hypoglycemia is one of the most common conditions for people with Type 1 diabetes. This condition should be considered an emergency. Blood sugar levels can drop rapidly. Levels below 65 cause brain and/or nervous system damage; levels below 45 can cause seizure, coma, or even death. Any low blood sugar must be treated quickly.

A blood glucose meter reading below the target range specified by a child's physician indicates low blood sugar. Most children's ideal blood sugar glucose range is between 80-140, but sometimes varies. The physician and parents for a child should determine what course to follow. *(This information should be considered a general guideline and should not take the place of professional medical care, specific to one child).* Children and young people with Type 1 diabetes have noticeable symptoms of low blood sugar at various readings.

### CAUSES:

**Low blood sugar occurs when the body has too little food or too much insulin.**

- Too much insulin injected
- Medication interaction
- Exercise
- Illness or injury
- Eating less than usual or later than usual
- Accidentally injecting extra insulin, after forgetting about previous dose.
- Insulin was injected at a site where the absorption rate is faster than usual.

### WARNING SIGNS/SYMPTOMS:

**A child/young person with Type 1 diabetes may exhibit one or more of these:**

- Shakiness
- Nervousness
- Personality change/irrational behavior
- Sweating
- Blurry vision
- Poor coordination
- Hunger
- Nausea
- Drowsiness/Sluggishness
- Dizziness
- Headache
- Severe symptoms—as listed plus convulsions/unconsciousness

My child's early warning signs of low blood sugar is sweating around neck, hunger, and what kids sometimes call shaky legs. And, sometimes a child does not feel or recognize the symptoms of going low.

### WHAT TO DO:

**If the child/young person is alert and can swallow without choking or coughing:**

1. Give her or him 4 oz of sugar added liquid such as fruit juice, regular soda or kool-aid; or a quick sugar food
2. Check the blood sugar level with the blood glucose meter
3. Wait 10 to 15 minutes
4. Offer more quick-sugar food if she/he is not feeling better and is still having symptoms
5. Check blood sugar level again
6. Offer a snack, such as cheese and crackers or half of a sandwich
7. If blood sugar levels are not coming up, or if the child becomes sleepy or lethargic, administer glucagon, and call 911 immediately.
8. Stay with the child until emergency services arrive

**If the blood sugar levels are low and he/she is showing signs of low blood sugar and is unable to swallow, unconscious, and/or convulsing:**

1. Remain calm
2. Call 911 immediately
3. Do not try to give them food or liquid because they could be inhaled
4. Give the person a shot of glucagon if one is available. Follow the directions given with the glucagon medication.
5. If glucagon is not available, you can rub or squeeze 1 or 2 Tbsp of cake icing, honey, syrup or glucose gel under the tongue or in the space between the gum and cheek
6. Turn child on his or her side in case vomiting occurs
7. Continue to check blood sugar levels every 15 minutes
8. Stay with the child until emergency services arrive

**IMPORTANT:** If a low blood sugar is suspected, a child/young person should *never* be left alone. A child with a suspected low blood sugar should be considered a life-threatening emergency. If the nurse does not come to the child, someone should **always** accompany the child to the nurse. A low blood sugar may leave the child incapable of getting to the office on her/his own.



PO Box 7034  
Lee's Summit, MO 64064  
816.478.0253  
www.KIDSWITHCOURAGE.org

# Type 1 Diabetes

## EMERGENCY CARE for children with High Blood Sugar (Hyperglycemia)

Working  
Together,  
Keeping  
our  
Children  
Safe!

### WHAT IS HIGH BLOOD SUGAR (HYPERGLYCEMIA)?

Hyperglycemia occurs when the person with Type 1's blood sugar level gets too high from the bodying getting too little insulin or too much food. As the body tries to compensate, it produces ketones, harmful acids that poison the body and its organs. Untreated, hyperglycemia may develop into ketoacidosis, a very serious condition that requires hospitalization.

Hyperglycemia occurs when the person with Type 1's blood sugar level gets too high. When the body gets too little insulin or too much food. The body produces ketones, harmful acids that poison the body and its organs. Untreated, hyperglycemia may develop into ketoacidosis, a very serious condition that requires hospitalization.

High blood sugar levels over long periods of time can lead to serious complications. The complications for diabetes primarily involve small blood vessels (microvascular) or large blood vessels (macro-vascular). Microvascular disease includes eye disease, kidney disease, and nerve disease. Macrovascular disease includes heart disease and stroke. Disease leading to amputation usually involves both loss of sensation (nerve disease) and large vessel disease.

Very high blood sugar levels can lead to diabetic ketoacidosis (DKA), or a 'diabetic coma.' DKA occurs when the body begins to burn fat and body tissue for energy because the cells can't get the energy they need. This causes the release of ketones in the body, which are dangerous when released at high levels. Ketones become like poison to the body and are passed in the urine as they build up in the blood.

### CAUSES OF HIGH BLOOD SUGAR:

#### Some potential reasons that a person with Type 1 diabetes might have high blood sugar:

- Not enough insulin injected
- Injecting insulin at site on body where absorption rate is slower
- Eating earlier than usual
- Eating more than expected
- Incorrect calculation of carbohydrates/insulin ratio
- Stress
- Other hormones
- Missing or skipping an insulin dose
- A clog in insulin pump tubing
- Less exercise than normal
- Illness or injury
- Medications

### SYMPTOMS OF SUSPECTED HIGH BLOOD SUGAR:

#### A person with Type 1 diabetes may exhibit one or more of these:

- Frequent urination
- Frequent thirst (dehydration)
- Nausea
- Stomachache
- Heavy breathing
- Inability to concentrate
- Headache
- Blurry vision
- Increased hunger
- Vomiting
- Lethargy, drowsiness, exhaustion
- Fruity or sweet breath smell
- Weight loss

### WHAT TO DO:

The following guidelines are general treatments for high blood sugar. Specific actions should be determined by the health care provider and parents or caregiver responsible for the specific child or young person.

#### If the blood sugar is more than 240, check urine ketones.

##### If ketones are Negative, Trace or Small:

1. Have the child/young person drink 8-16 oz of water
2. Child/young person should keep drinking water until urine is clear of ketones.

##### If ketones are Moderate or Large:

1. Contact parents
2. Extra insulin may be given



PO Box 7034  
Lee's Summit, MO 64064  
816.478.0253  
www.KIDSWITHCOURAGE.org