Sick day Management, healthy Minds, and Healthy Eating



What will you/your child learn?

- ✓ Coping with Diabetes
- ✓ What to do when your child is sick
- ✓ How illness may affect your child's blood sugar control
- ✓ What ketones are and when to test
- ✓ How to manage your child's fluid needs
- When and how to communicate with the diabetes team and/or primary care provider
- ✓ Healthy Eating

But First.....

Intro to Erin Pfeffer, LCSW Licensed Clinical Social Worker Division of Endocrinology (904) 697-3031



Grief Happens

- Big feelings are normal
- ALL feelings are OK
- Parents may need to set limits on behaviors, especially SAFETY
- Increased risk for Depression, Anxiety, and Eating Disorders
- Counseling is available and encouraged





Tips for Coping

- Recognize Stigma
 - Diabetes is NOT your fault.
 - Giving your body insulin is NOT a sign of failure.
- Connect with the Diabetes community
 - Diabetes camps, JDRF, American Diabetes Association
 - You are not alone!
- Remember that diabetes is a part of you, not all of you.
 - Diabetes can be a strength

More Tips for Coping

- Find new ways to ENJOY lifestyle changes
 - Gardening, cooking new recipes, cooking with family/friends
 - Sports, nature walks, dancing to your favorite music
- Keep planning for your future
 - People with diabetes can live long, healthy, happy lives
- Don't be afraid to ask for help



When your child is sick...

Knowing your child is sick

- Signs and symptoms of illness are fever, vomiting, diarrhea, severe headache, earache, sore throat, coughing, sneezing or injury
- Observe your child's behavior. Is your child as active as usual? How interested is your child in play or usual activities? Are your child's sleep habits being interrupted by symptoms of underlying illness?

Supplies to have on hand

- Urine keto-stix test strips
- Glucagon emergency kit (Set expiration date reminders in your cell phone)
- Extra blood sugar test strips
- Fluids with and without sugar



How blood sugars are affected during illness

- Blood sugars may be high or low and may respond differently with each illness
- Do not rely solely on sensor readings
- During illness stress hormones may make the blood sugar rise
- If blood sugar is elevated: Check blood sugar every 2-3 hours, give correction boluses and check for ketones. *Remember do not give correction boluses any closer than every 2 hours.*
- If blood sugar is below 70: follow the 'Rule of 15' and check for ketones. If child is not able to tolerate fluids, give 1 unit of glucagon for every year of age (example: child is 8 years old, give 8 units of glucagon).
- Your child <u>needs insulin every day</u> to use sugar in blood even when unable to eat

Understanding ketones



- Ketones are present when we need MORE insulin
- Ketones may cause vomiting and /or abdominal pain
- Ketones may be managed at home with frequent telephone contact with the diabetes team
- Diabetic Ketoacidosis (DKA) can occur in a few hours or over several days and always requires hospitalization
- Insulin stops ketone production and increasing fluids help clear them from the body
- An increase in insulin is needed if ketones are present.

When to check for ketones

- 2 blood sugars in a row over 240 mg/dL
- At first sign of illness



How much fluid does my child need?

- Your child may prefer to drink rather than eat while sick
- Your child will need at least 4 ounces of liquid every hour while awake
- More fluids are needed if your child has a fever, diarrhea, ketones, or is vomiting
- Fluids may be tolerated best if offered in small and frequent sips or through a straw
- After vomiting, offer sips of fluids, ice chips, or Popsicle[®] pieces
- Your child's mouth should be shiny and moist. A dry tongue or cracked lips are signs of dehydration as well as dark circles around eyes or eyes that appear sunken

Fluids

If blood sugar is **less than 150**, give <u>Fluids containing sugar</u> Clear, flat soda such as 7-up, ginger-ale, sprite Popsicle Regular Jell-O[®] Juice Kool-Aid[®] Gatorade[®]

If blood sugar is **more than 150**, give

Sugar-Free Fluids Water or ice chips Flat diet soda Sugar free Popsicle Chicken broth Sugar-free Jell-O[®] Crystal Light® products PowerAde Zero Pedialyte-sugar free



If your child is sick: Insulin, Carbs, and Fluids!

Blood sugar	Treatment	Insulin Doses
<70 mg/dl	Treat hypoglycemia with 15 gm fast acting carbohydrates	
70-150 mg/dl	Push carbohydrate containing fluids	Hold carbohydrate coverage. Give correction if above target.
>150	Push carbohydrate free fluids	Cover carbohydrates and correct blood sugar every 2- 3 hours

If your child is sick: Ketones= More Insulin!

Ketones	Fluids	Correction doses
Ketones negative	Encourage fluids	Give correction dose every 2-3 hours for high blood sugars
Ketones= trace-small	Encourage fluids (4-6 oz/hour)	Give correction dose every 2-3 hours for high blood sugars
Ketones= moderate	Encourage fluids (at least 4-6 oz/hour), more if tolerated	Add 10% extra to correction doses. Give correction doses every 2-3 hours for high blood sugars.
Ketones= large	Encourage fluids (at least 4-6 oz/hour), more if tolerated	Add 20% extra to correction doses. Give correction doses every 2 hours for high blood sugars.

Over the Counter Medications:

- Illness can often raise blood sugar.
- Most over the counter medications have little or no effect on blood sugar. Use as directed on the package. Cough syrups, decongestants and lozenges may contain sugar and potentially increase glucose level. High glucose levels during illness are much more impacted by the illness itself rather than these medications.
- Asthma medications and oral steroids may also increase glucose level. Give correction doses as prescribed and call the diabetes team if blood sugars remain high.

Other recommendations:

- The American Diabetes Association along with your physician recommends:
- Influenza or 'flu' vaccine
- Pneumococcal vaccine- PCV13 for children< 2 years old
- PPSV23 for children 2 years and older



When to call with the diabetes team:

- Call if your child vomits twice
- Call if ketones (moderate, large) are present
- Call if your child refuses to drink fluid and is sick and/or has ketones
- Call to discuss your child's insulin needs
- Call if concerned about dehydration (dry tongue or cracked lips)

• Call if unable to bring up a low blood sugar despite treatment with sugar Call the diabetes center if there are other signs of diabetes ketoacidosis (DKA) besides nausea/vomiting. *If you see any changes in breathing such as very deep and/or rapid breathing, call 911 immediately*



When to go to the Hospital or call 911:

- Repeated vomiting
- Dehydration: dry tongue or cracked lips, dark circles around eyes or eyes appear sunken, decreased urination
- Large or increasing ketones that are not reversing despite attempts
- Signs of DKA (Diabetes ketoacidosis): severe abdominal pain, fruitysmelling breath or deep and/or rapid breathing or difficulty breathing

When to call your pediatrician:

- Fever or infection
- When your child has a condition not related to their diabetes

What would you do?

1) It is 3AM. Your child wakes up vomiting. What is the 1st thing you should do?

- A. Call diabetes team
- B. Check blood sugar and ketones in urine
- C. Check the temperature
- D. Call the primary care physician



- 1) Your child's blood sugar is 90 and ketones are moderate. What should you do?
 - A. Nothing because the blood sugar is in target range
 - B. Encourage sugar free fluids
 - C. Give sugar containing fluids and insulin as soon as the glucose level rises high enough





 Your child has vomited a third time. You talked with the diabetes team 2 hours ago. The current blood glucose is 100 and ketones have increased to large. What do you do?



Eating Healthy



What does it mean to eat healthy?

Eat 3 meals everyday
Eat healthy snacks
Eat more fruits & vegetables
Eat less fast foods
Eat less fried foods

Why should you make good food choices?

It keeps you healthy and strong and gives you lots of energy!

Healthy Snacks

- * Raw vegetables with low-fat dip
- Smoothie made with low-fat milk or low-fat yogurt and fresh fruit or veggies
- * Trail mix made with pretzels, dried fruit and cheerios
- * Keep healthy stuff convenient and available

Not-so-healthy snacks - a rare

treat











Healthy Drinks - All you want and more!









Not-so-healthy drinks- Don't bring them in the house









Stay Active

Fun ways to stay active: Basketball Jump rope Play tag Soccer Walk your dog Bike riding Swimming Dance Skate boarding Baseball





Remember: small steps add up!

□500 extra calories per day leads to 1 pound weight gain every week-That's 52 pounds each year!

Why stay active??

- It helps you maintain a healthy weight
- Decreases your risk of diseases later in life
- 30 minutes of exercise helps control our glucose level for 24 hours!
- It helps you feel better!

Some ways to get started:

• Get off the bus before your stop and walk the rest of the way home.

• As a family, park your car far from the door to get in a few extra steps.

• Use the stairs instead of waiting for the elevator.

• After dinner, take walks or bike rides as a family instead of watching TV.

- Help your parents with yard work, house-work, and carrying in the groceries. (seriously)
- Check out prices at local gyms or YMCA's in your area. Planet Fitness has FREE ACCESS for kids in the summers.
- Get involved in organized sports at school or in your area.

What if I don't take care of my diabetes?

- Neuropathy
- Skin complications
- Eye complications
- Foot complications
- Kidney disease (nephropathy)
- Cardiovascular disease (CVD)
- High blood pressure
- Stroke

Empowering you to take control

- You got this!
- We are here to back you up if you get stuck.

