

DIABETES ONE DAY AT A TIME

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Travelling with Diabetes

By Cathy Maurer, MS, RDN, LD

Do not let your diabetes prevent you from enjoying travel to see friends, family, and new places. Some of the fun of travel is to visit new places, eat new foods and get out of your old routine. Eating new foods, being more active, and living in a new time zone can all effect diabetes management. But if you plan, you should be able to stay healthy and have fun and travel safely.

Plan Ahead

- See your primary care provider for a check up
 - Make sure your shots are up to date.
 - Get prescriptions for all your medication in case you lose or run out of medicine.
 - Ask how your increased activity may affect your blood sugars.
 - Get a letter stating that you have diabetes and why you need your medical supplies. This may help you at airport security.
- If you are flying, visit www.tsa.gov for advice on travelling with diabetes.
 - You can print out a TSA Notification Card: Individuals with Disabilities and Medication Conditions to help you at check in.
- Find medical clinics and pharmacies close to where you are staying
- Wear a medic alert bracelet that states you have diabetes and any other medical conditions.
- If you wear a continuous glucose monitor (CGM) or insulin pump, remember to tell the airport security. These items could be damaged in the body-scanning device. Ask about a different security check.



Travelling with Diabetes *(continued)*

What to Pack

- ❑ Put your diabetes supplies in a carry-on bag. Carry medicines in original pharmacy bottles.
- ❑ Pack twice as much medication and supplies, such as insulin pen needles, lancets, and strips as you think you will need.
- ❑ Pack extra batteries for your glucose meter
- ❑ Pack your Medical Insurance cards
- ❑ Pack contacts information for primary care physician, diabetes team and emergency contacts.
- ❑ Pack healthy snacks, glucose gel or tablets, and water.
- ❑ Pack chill packs for insulin and medications. FRIO brand bag is one example.
- ❑ Pump users should pack extra infusion sets, cartridges and occlusive dressings, back up basal insulin, and syringes.

While you are traveling

1. If you are driving, pack a cooler with healthy foods and plenty of water to drink.
2. Do not store insulin or diabetes medications in direct sunlight or in a hot car. Keep them in a cooler. Don't put insulin directly on ice as it might freeze.
3. Do not store your glucose meter, insulin pump or other diabetes supplies such as test strips, in a hot car, by the pool, on the beach or in direct sunlight.
4. Get out of the car and walk or walk the aisles of the plane every 2 hours to prevent blood clots. People with diabetes are at higher risk for blood clots.
5. If you are more active than usual, check your blood sugar before and after activity and adjust food, activity and medication as needed. Don't overdo physical activity during the heat of the day.
6. Wear comfortable shoes and never go barefoot, even on the beach. Check your feet every day for blisters, cuts, redness swelling. Get medical care at the first sign of infection or inflammation.
7. Hot temperatures can change how your body uses insulin. Check your blood sugars more often. Be sure to take snacks, water, and a fast-acting glucose in case of low blood sugars.

Diabetes management can make travelling more challenging but not impossible. If you plan, you can have an enjoyable, more relaxing time away. You can take your diabetes care routine with you wherever you go.

References: www.tsa.gov
www.Diabeteseducation.novocare.com
www.cdc.gov
www.diabetes.org

Watermelon Lime Slushie



Cool off with this refreshing, no added sugar summertime drink!

INGREDIENTS

- 2 cups of watermelon
- ¼ cup lime juice (from about 2 limes)
- 2 cups of ice
- 2 Tbsp (plus more for garnish) fresh mint leaves

DIRECTIONS Puree the watermelon, ice, lime juice and mint in a blender until you get a slushie consistency. Pour into glasses and garnish with a sprig of mint (optional).

NUTRITION FACTS PER SERVING:

Serves 4 (about ¾ cup)

Calories 25, Carbohydrate 7g, Fiber 1 g, Protein 1 g, Saturated Fat 0 g, Cholesterol 0 mg, Sodium 0 mg

Source: www.diabetesfoodhub.org
Recipe credit: Christy Brissette, M.S., R.D.

CALENDAR OF EVENTS

Enjoy the following events

IN PERSON DIABETES SUPPORT GROUPS

These fun, informal sessions are for people coping with diabetes. Friends and family welcome. Call **614-546-4582** to learn more.

Mount Carmel St. Ann's

AUG 23, SEP 27, OCT 25 | 6:30 – 8:00 p.m.

Mount Carmel Grove City

AUG 29, SEP 26, OCT 24 | 6:30 – 8:00 p.m.

DIABETES 101

This free virtual class covers diabetes basics, like blood sugar monitoring, medications, nutrition, physical activity, and weight management. This class is held virtually September 7, 2023 from 5:30-6:30 p.m. Call **614-546-4582** to register.

SUGGESTED WEB SITES:

- » American Diabetes Association
- » CDC-Centers for Disease Control and Prevention
- » National Institutes of Health
- » Diabetes Advocates
- » USDA Center for Nutrition Policy and Promotion
- » diaTribe
- » Mount Carmel Healthy Living Center

Real Time use of the Continuous Glucose Monitoring (CGM) device data

By Fred Maggiore, a member of Mount Carmel St. Ann's diabetes support group



I wear a Dexcom G6 CGM. It is the single most important non-medicine part of my Diabetic Self-Management plan. I use the Dexcom G6 Android application on my smart phone. I do not have to even open the app to get the information I need. My blood sugar readings appear in the "Notifications" section of my smart phone home screen.

READINGS

Whether you use a smart phone, watch, tablet, or CGM receiver/reader, the application will show you the numerical value of your most recent blood sugar reading. For most CGMs, this will be up to five minutes old.

If the display area states a "Low" or "High" reading, STOP what you are doing.

- If you have symptoms of low blood sugar, treat right away (see next article).

Use your glucometer to check your fingerstick blood sugar to get a second opinion.



- If the reading was way off the graph line, contact the Customer Service number for the CGM manufacturer. The sensor may have failed (Very rare, but it happens).

TREND ARROWS

A CGM will also tell you in which direction and how fast your sugar level is headed (see chart).

Using Readings and Trend Arrows

Here is an example of how I use Readings and Trend Arrows to determine my actions.

First, the Reading displays my blood sugar level. Is it in the range I expected? Way above? Way below?

Next, look at the Trend Arrow. Where am I predicted to be in 30 minutes? Before CGMs, I strictly followed the "Carb Counting" mealtime insulin dosing. The amount of fast-acting insulin dose is a direct function of the number of carbs consumed.

Recently, I consider not only what I eat, but what else is going on in my daily schedule. How much physical activity did I or will I do today? Have I been more stressed than usual?

DiaTribe, an online resource, has an article on the **42 factors that affect blood glucose readings**¹. These factors are some of the things I consider before injecting my fast-acting insulin.

¹ <https://diatribe.org/42-factors-affect-blood-glucose-surprising-update>

ALERTS

Many CGMs will alert you when an event occurs. You can turn most alerts on or off and customize their ranges.

There are alerts related to:

- The CGM sensor itself (No Readings, Signal Loss)
- How fast blood sugar is changing
- Time in Range goal boundaries; Low or High

As I live alone, hypoglycemia is my greatest diabetes fear. I have my Low Alert set at a reading of 80 mg/dl to serve as a cushion so I can take corrective action before I reach my Low Threshold of 70 mg/dl.

You can change the sound of your alerts. I have a history of low readings at night. My alert sound is a Baby Crying. As a Grandparent, I cannot sleep through that sound. I awaken with enough time to take corrective action on my own.

There are two other major factors to consider when dealing with Alerts.

- **"Alert fatigue"** – if you get tired of getting alerts and decide to turn the alerts OFF, it defeats one of the best services of the CGM. Before turning anything off, consult with your health care team (HCT) about adjusting alerts.
- **Sharing** – alert information can be shared with others,

including family and your HCT. Silencing your device if you get "Alert Fatigue," does not silence theirs. For instance, I had a sensor that was sending false Low Alerts. While working with the manufacture's customer service on corrections, my son called from 1,200 miles away. His alert went off and he called to check in on me.

While many people only consider taking medicines, diet, and physical activity as part of the Diabetes Self-Management plan, technology like CGMs is playing an increasingly vital role in the management of diabetes.

Arrow direction	Means glucose is....
→	Steady & not changing more than 1 mg/dL each minute. 100mg/dL ▶ 30 minutes later ▶ 100mg/dL
↗	Rapidly rising >3 mg/dL each minute. 100mg/dL ▶ 30 minutes later ▶ 190mg/dL
↑	Quickly rising 2-3 mg/dL each minute. 100mg/dL ▶ 30 minutes later ▶ 160mg/dL
↘	Rising 1-2 mg/dL each minute. 100mg/dL ▶ 30 minutes later ▶ 130mg/dL
↓	Falling 1-2 mg/dL each minute. 100mg/dL ▶ 30 minutes later ▶ 70mg/dL
↙	Quickly falling 2-3 mg/dL each minute. 100mg/dL ▶ 30 minutes later ▶ 40mg/dL
↘	Rapidly falling >3 mg/dL each minute. 100mg/dL ▶ 30 minutes later ▶ 10mg/dL

Treating Blood Sugar Levels

By Suzanne M. Christman, MS, RD, LD, CDCES, BSN, RN

In the previous article, Fred mentioned that if the CGM device displays a LOW or HIGH reading you should STOP what you are doing and always verify the CGM reading with a finger stick glucose meter reading. This article will define hypoglycemia (low blood sugar) and hyperglycemia (high blood sugar), the symptoms, treatment, and prevention of both.



HYPOGLYCEMIA:

Blood sugar less than 70 mg/dl

The severity of low blood sugar can further be classified into 3 levels:

Level 1: Blood sugar between 54–70 mg/dl

Level 2: Blood sugar less than 54 gm/dl

Level 3: Inability to function due to physical or mental changes

SYMPTOMS of Hypoglycemia:

Mild Symptoms Shaky, weak, lightheaded, sweaty, dizzy, fast heart rate, blurred vision

Moderate Symptoms Impaired motor skills, confusion

Severe Symptoms Seizures, coma, trouble concentrating, tingling in fingers or lips, anxiety, headache

TREATMENT of Hypoglycemia:

Mild Low Blood Sugar

- Treat with fast acting glucose:
 - 3-4 glucose tablets
 - 4 ounces of juice
 - 4 ounces of regular soda or beverage with sugar
 - 8 ounces of skim milk

Avoid treating with foods containing protein or fat as these will not increase the blood sugar quick enough

- Monitor your symptoms and recheck your sugar level in 15 minutes
- If you do not see the level rising or continue to have symptoms treat again and call 911!
- If you are feeling better and the reading is above 80 mg/dl no more treatment is needed

Moderate Low Blood Sugar

- Treat with fast acting glucose:
 - 8 ounces of juice
 - 8 ounces of regular soda or a beverage with sugar
 - 1 tube of glucose gel

Avoid treating with foods containing protein or fat as these will not increase the blood sugar quick enough

- Monitor your symptoms and recheck your sugar level in 15 minutes
- If you do not see the level rising or continue to have symptoms treat again and call 911!
- If you are feeling better and the reading is above 80 mg/dl no more treatment is needed

Severe Low Blood Sugar

- **Severe hypoglycemia requires immediate medical attention**
- A family member or friend will need to **administer a glucagon injection or nasal glucagon and call 911**
 - If no response after 15 minutes, give a second dose of glucagon
 - Ingest sugar containing food or liquid once alert enough to safely eat and swallow

Glucagon

Glucagon is a hormone that raises blood sugar levels. Anyone using insulin should have a glucagon prescription from their doctor. Three products are available: **Gvoke HypoPen** and **Zegalogue** are prefilled pen devices that are easy to use. **Baqsimi** is a nasal spray that is absorbed through the nasal membranes. It does not need to be inhaled so it can be used on someone who is unconscious

PREVENTING Hypoglycemia:

- Always carry a source of fast acting glucose or carbohydrate with you. Refer to the sections above for examples
- Do not skip meals
- Eat meals and snacks at the same time each day
- Take medications as prescribed
- Plan for when you are physically active
- Record the time of day, how often and symptoms of the low blood sugar events to discuss with your health care provider

HYPERGLYCEMIA:

Blood sugar above 150 mg/dl

SYMPTOMS of Hyperglycemia:

Going to the bathroom often, feeling thirsty, being very tired, blurred vision, headaches, weakness, trouble concentrating, moodiness, irritability

TREATMENT of Hyperglycemia::

- Increase your water or sugar free beverage intake. Aim for at least 8 ounces every hour
- Take a walk if you are able
- Check your blood sugar every 2-4 hours
- Follow your meal plan as closely as you can
- Continue to take your normal diabetes medications
- Avoid any simple carbohydrates like juice, regular soda, other sugar sweetened beverages
- If the glucose level does not decrease, or your symptoms continue Call 911!

– **Severe hyperglycemia requires immediate medical attention** –

PREVENTING Hyperglycemia:

- Take medication as prescribed
- Eat meals and snacks at the same time each day
- Stay physically active
- Avoid stress
- Keep regular medical appointments
- Stay vaccinated to avoid getting sick

There are many reasons why blood sugar levels change. No one likes to have their levels lower or higher than their target range. Being prepared for such events can decrease the number of times they happen and disrupt your daily routines.



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For questions or more information on scheduling an individual appointment or a group class, please call **614-546-4582**.