

*“My Doctor Says
I Need a Diabetes Travel Plan...”*

How Will This Help?



Helping all people
live healthy lives

BD Getting Started™

Travel, Vacations and Diabetes

Your Guide to Traveling With Diabetes

Taking a trip can be stressful due to the changes you will make in your daily routine. These may include different food choices, and more or less exercise than usual. These changes can affect your blood glucose. Keeping your blood glucose within your target ranges when you travel, makes it more likely that you will feel better. Planning to keep your diabetes within your blood glucose goals while you are away is as important as planning your trip! Following are some helpful hints to follow before and during your next vacation or business trip to help you manage your diabetes.

1. Stick to Your Meal Plan Away From Home

Before You Leave

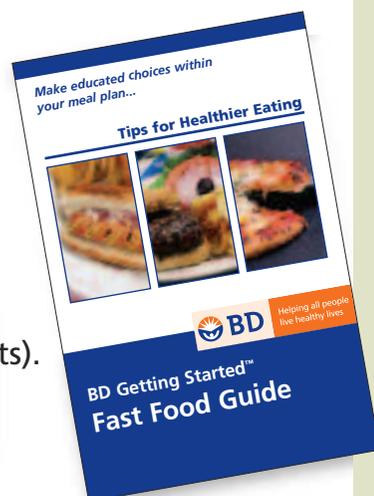
- Learn how to count carbohydrates to help you be more flexible with meals.
- Meet with a Registered Dietitian (RD) to learn more about meal planning before your trip.

By Car

- Pack a cooler with foods that fit into your meal plan.
- Stop in places with many choices for eating (including fast food restaurants).
- Check the BD Fast Food Guide for making better food choices.

By Plane or Train

- Check to see if a meal will be served when you buy your ticket.



- Remember that meals may not be served at times that fit into your usual schedule of meals. (Depending on the airline, a meal may not be served and a snack may not be offered if a flight is less than four hours.)

- Order any special meal requests in advance.
- Keep snacks that will not spoil in your carry-on bag (to help avoid poor food choices and long waiting lines at airport restaurants).



Before You Order Food or Begin Your Meal

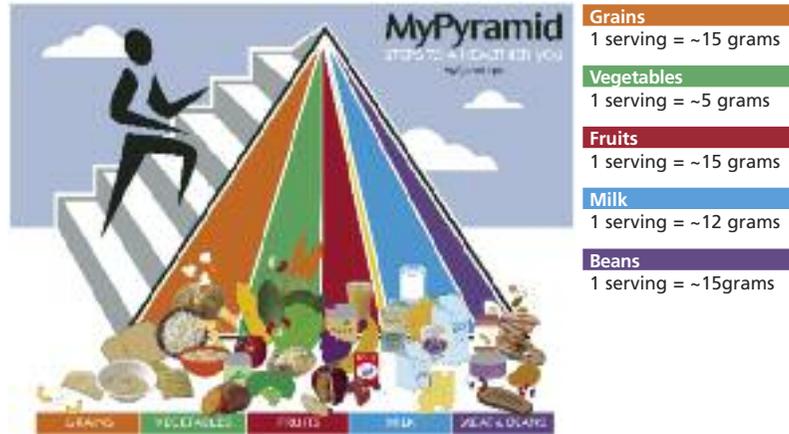
- Think ahead to avoid overeating – especially on cruise ships or with “all-you-can-eat” buffets.
 - Keep track of carbohydrate-containing foods – essential for blood glucose control. (See Carbohydrate Food Sources, page 4)
 - Use a smaller plate to help keep portion sizes under control. Rely on simple measurements to decide on food portions (See “Measuring By Hand” Examples, page 4).
 - Ask how foods are prepared so you can make better choices.
- ### Drinks That Contain Alcohol
- Do not drink alcohol on an empty stomach – this can lead to low blood glucose.
 - Avoid sugar-based drinks/mixers like fruit and fruit juice drinks with large amounts of carbohydrates – they may affect blood glucose control.
 - Do not drink and drive!
 - Never get behind the wheel unless you know your blood glucose is within a safe range.
 - Check your blood glucose at regular intervals if you are driving a long distance.



Carbohydrate Food Sources

The Food Guide Pyramid¹ shows that you should eat the most servings from the grains, vegetables, milk, beans and fruits—the largest sections of the food pyramid. The carbohydrate grams for each food group is shown below.

Diabetes Food Pyramid: Food Groups Containing Carbohydrate



Estimating Portion Size:

This method is a simple way to judge portion sizes, when tools to measure portion sizes are not on hand.²

Measuring By Hand

Your fist is about the size of an 8-ounce measuring cup and up to one serving of fruit



A serving of vegetable is approximately the size of your cupped hands



3 ounces of meat are about the size of the palm of your hand and the thickness of your little finger

Adapted from Diabetes Spectrum, *Patient Information*, Vol. 12, Number 3, 1999 American Diabetes Association.

2. Plan to Exercise When You Travel



Changes in activity can upset blood glucose control. Whether you travel by plane, train or car, you may be sitting for long periods of time and blood may pool in your feet or legs. This may cause swelling and not allow the blood to circulate as well as it should.

By Car

- Stop, get out and walk around every two to four hours to improve your circulation.
- Take a short walk after bathroom breaks.

By Plane or Train

- Try to get up more often (such as hourly).
- Walk up and down the aisle.

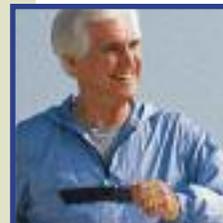
On a Cruise Ship

- Swim in the pool or walk in designated areas.
- Check for exercise sessions, dance activities, etc.

During Activity, Which is More Intense Than Usual

If your trip involves lots of walking or activities such as skiing, hiking, tennis or other sports be sure to carry the following items with you:

- Blood glucose monitor and testing supplies.
- Snacks.
- Treatment for low blood glucose.



¹ The Food Guide Pyramid, U.S. Department of Agriculture, www.usda.gov/fcs/cnpp.htm

² American Diabetes Association, *Diabetes Spectrum, Patient Information*, Vol. 12, Number 3, 1999.

3. Take Special Care of Your Diabetes Medications and Supplies

What to Bring – How to Pack

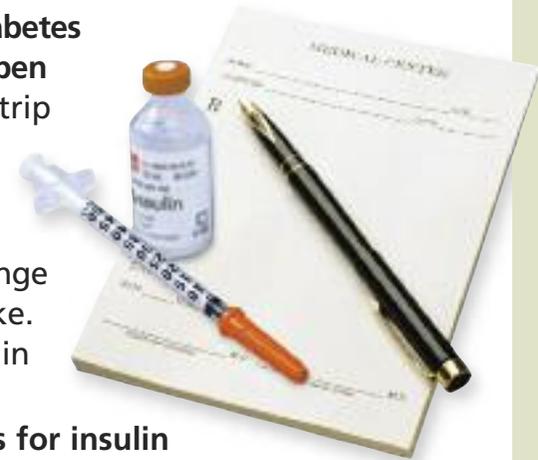
- Bring at least double your usual amount of medication needed for the amount of time you will be away (to avoid running out or misplacing).
- Carry insulin and diabetes supplies with you in your carry-on bag (Storage on planes or trains can be above or below ideal temperature. Checked luggage can be lost or delayed).
- Take a list of all your medications – include generic name, trade name and manufacturer (company web site may be useful resource during travel, especially outside the country).
- Plan for syringe/lancet disposal – some airport rest rooms now have sharps containers (needle disposal units). Carrying a small individual sharps container may be useful when traveling.



Prescriptions

- Prescriptions are required for oral diabetes medications and insulin analogs such as lispro (Humalog®), aspart (Novolog®), glulisine (Apidra®), detemir (Levemir®), glargine (Lantus®), lispro/NPL (Humalog® Mix 75/25™) and insulin aspart protamine suspension/ insulin aspart (Novolog® Mix 70/30).
- Prescriptions may not be required in your home state, but may be needed in other areas of the U.S.A. and abroad for other human (non-analog) insulins (Regular, NPH, etc. or premixed insulin, such as 70/30 or 50/50).

- It is a good idea to have an extra prescription for all your diabetes medications, syringes and pen needles in the event your trip is extended.
- Insulin may differ in concentration in other countries, which could change the amount you would take. Always carry enough insulin for your entire trip.
- The need for prescriptions for insulin syringes and pen needles may vary from state to state. Carry an ample supply and keep detailed information about the type that you use.
- Know the availability and different names of your diabetes drugs (both oral agents and insulins) at your travel destinations – check with the drug manufacturer.
- If your prescriptions are filled at a nationwide drugstore chain, they can be accessed by any of the stores in that chain.



What to Do About Storage

- Store medications away from heat, light and extreme temperatures. If temperature will vary during travel, you may need a storage container designed to keep medications at the appropriate temperature.
- Once opened, a 10-ml vial (bottle) must be used within 28 days (whether or not it is stored in the refrigerator).
- Once opened, pre-filled pens and cartridges should not be refrigerated. Once you open a pre-filled pen and begin keeping it out of the refrigerator, the length of time you can use it varies with the insulin formula.



Length of Time More Common Formulas are Usable After Opening³

INSULIN	# OF DAYS
Apidra®	28
Apidra® 3 ml	28
Lantus®	28
Humalog® 1.5	28
Humalog® 3 ml	28
Humalog® Mix 75/25™	10
Humulin® 70/30	10
Humulin® N	14
Levemir®	42
Levemir® 3 ml	42
Novolog® 3 ml	28
Novolin® R 3 ml	28
Novolin® R 1.5 ml	30
Novolin® N 3ml	14
Novolin® N 1.5 ml	7
Novolin® 70/30 3 ml	10
Novolin® 70/30 1.5 ml	7
Novolog® Mix 70/30	14

If You are Traveling With an Insulin Pump

- Take extra insulin and infusion sets and batteries. It is a good idea to carry a schedule of your injection doses and syringes in case of pump malfunction.
- Your insulin needs may change depending on your activity level, eating patterns, local weather and altitude. You may need to change out infusion sets more often or take insulin with a syringe.

4. Bring Your Blood Glucose Monitoring Supplies

- Check your blood glucose every few hours during your trip, especially on travel days for changes in blood glucose.
 - The results will tell you when you need to adjust your medication.

³ www.sanofi-aventis.us

³ www.lillydiabetes.com/

³ www.novonordisk-us.com

- Check blood glucose levels more often until you settle into a routine.
- Using a monitor that has memory may be easier to use when traveling. Be sure to change the time and date if necessary. Using the memory or your logbook will help you see a clear picture of blood glucose trends and problem areas.

- Pack at least double the monitoring supplies that you would usually use.

Bedtime		Night		Comments
time blood glucose	insulin	time blood glucose		
180	15x			ate lunch out
120	15x			
90				ran 30 min, ate larger snack

5. Be Prepared to Treat Low Blood Glucose When Traveling

Checking your blood glucose often helps to show how changes in your routine during travel affect the level of your blood glucose. Increased physical activity can generally be managed with more snacks or less diabetes medication. If you have a low blood glucose (a blood glucose of 70mg/dl or less), be prepared to treat it with food or drink that contains 15 grams of a quick-acting carbohydrate and no protein or fat. (See page 4)

Treatment Items for Low Blood Glucose to Carry With You at All Times

Nonperishable items (15 grams of carbohydrate) may be the most reliable:

- Glucose tablets.
- Single-dose tubes of glucose gel.

Other Items Include:

- Four ounces of fruit juice.
- Three to five pieces of hard candy (chew up).
- Five sugar cubes.
- Four ounces of regular (not sugar-free) soda.
- One tablespoon of honey or jelly.



If You Have Type 1 Diabetes and Take Insulin

Pack a Glucagon Emergency Kit in case of low blood glucose (**Before you leave on your trip make sure that it has not expired**). Glucagon is a hormone that raises your blood glucose by causing your liver to make glucose (sugar). It is given by injection and used in cases of severe low blood glucose. Severe low blood glucose reactions may cause the person with diabetes to pass out. People with diabetes cannot give themselves this treatment. You will need to teach someone traveling with you how to give you Glucagon. Glucagon should be stored at room temperature.



6. What to Do if Your Blood Glucose Gets Too High

Before you travel, ask your doctor or diabetes educator for a written plan if you develop high blood glucose. Ask for help deciding on the right extra doses of rapid (or short) acting insulin to get your blood glucose back in target range (See page 18).

- Check your blood glucose more often until the results fall back into the target range.
- Figure out **why** your blood glucose levels went up.
 - Have you been less active?
 - What types of food have you been eating?
 - Are you taking your diabetes medication as prescribed?
 - Have you taken less medication because of time changes?
 - Was the insulin stored in the correct way?
 - Do you feel sick?



- Test urine for ketones when blood glucose is greater than 240 mg/dl and/or if you are ill. If ketones are positive, take 1-2 cups of non-caloric (sugar-free) fluids every hour until ketones are gone. For more information about Sick Days, read, "My Doctor Says I Should Learn Sick Day Rules..." "What are they?"



7. In Case You Get Sick While Traveling

Before You Go

- Ask your doctor to recommend over-the-counter medicines that can help relieve colds, heartburn, nausea, vomiting and diarrhea. Ask for specific guidelines on how to treat each of these problems and when to get medical help.
- Make sure your travel shots are up to date.
- If you are considering a flu shot, remember that flu season may vary in different countries.
- A pneumonia shot may be a good idea, especially if you will be in another climate.⁴

During Your Trip (If You Are Traveling Overseas)

- The United States Embassy in your travel area may be able to help you find medical attention.
- If you are touring outside of the U.S.A., use caution when drinking or brushing your teeth with the local water and avoid drinks containing water such as iced tea or lemonade, or other iced drinks. Also avoid raw vegetables and peeled fruits, as well as dairy products and food sold by street vendors.

⁴ Kruger, D.F. The Diabetes Travel Guide. P119, American Diabetes Association, 2000.

8. Protect Your Feet During Your Trip

Watch for foot injuries and follow your doctor's advice.

- Wear and bring only shoes that are comfortable and broken in (even if new shoes fit perfectly, they can be stiff and cause blisters).
- **Avoid** socks with heavy seams and elastic that can stop circulation.
- Pack rubber sandals or sneakers for the beach or water.
- Wear sunscreen to protect the skin if exposed to sunlight.
- Check your feet daily with a mirror and keep up regular foot care.



9. Find Out How to Adjust for Crossing Time Zones⁵

If you will be crossing time zones, ask your doctor or diabetes educator how to change your diabetes treatment plan. (See page 17) Health professionals use many ways to adjust insulin/medications when crossing time zones. These may depend on the number of injections or medications you take daily.

If the Time Change **Adds** Three or More Hours To Your Day:^{*}

Your health team may advise a routine such as the following.

- Two days before your trip, move your dose(s) forward one hour.
- One day before your trip, move dose(s) forward another hour.
- The day of travel, move forward another hour (this gets you to a three-hour time change difference).



- Change the time and/or amount of your diabetes pills.
- Add extra injection of short or rapid acting insulin (usually with a meal).
- Add insulin, giving a "correction" amount with your usual mealtime doses if your blood glucose is higher than recommended.
- Adjust your longer acting insulin for the extra hours of travel.
- Re-set the time clock on your insulin pump to the local area when you get there. The basal rate will run based on rate programmed for the time of day regardless of your location.

If the Time Change **Subtracts** Three or More Hours From Your Day:^{*}

Your health team may advise a routine such as the following.

- Two days before your trip, move your dose(s) back one hour.
- One day before your trip, move dose(s) back another hour.
- The day of travel, move dose back another hour (this gets you to a three hour time change difference).
- Change the time and/or amount of your diabetes pills.
- Lower your insulin dose, taking less longer acting insulin for the loss of time with travel (shorter day).
- Re-set the time clock on your insulin pump to the local area when you get there. The basal rate will run based on the rate set for the time of day no matter where you are located.



⁵ Kruger, D.F. The Diabetes Travel Guide. Pp. 56-60, American Diabetes Association, 2000.
^{*} Consult your doctor or diabetes educator before changing your diabetes treatment plan.

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10. Know the Airport Security Rules for Diabetes Supplies

In the United States

- Tell security workers that you have diabetes and are carrying medical supplies.
- All diabetes-related supplies and equipment are allowed through the checkpoint once they have been screened.
- Unused syringes and insulin pump supplies are permitted when accompanied by insulin or other injectable medication.
- Medication and related supplies are normally X-rayed. However, TSA now allows you the option of requesting a visual inspection of your medication and associated supplies.
- Insulin pumps may be worn. You need to tell security workers that the pump cannot be removed because it is inserted with a needle under the skin.
- Tell security workers if you are experiencing low blood sugar and are in need of medical attention.



Outside the US

Check with your airline before your trip. Security measures may be different in other countries. Also talk to others with diabetes about any recent travel experiences. Pharmacy labels on your medications/supplies display the name/number of your pharmacy if a phone call is necessary. Also bring the phone/FAX number of your doctor and/or Diabetes Center.



Transportation Security Administration, U.S. Department of Homeland Security, Hidden Disabilities, *Travelers with Disabilities and Medical Conditions*, Web site. http://www.tsa.gov/travelers/airtravel/specialneeds/editorial_1374.shtm#3, Accessed March 31, 2010.

11. Understanding Your Health Insurance

Know your coverage before you leave for your trip.

- Know the forms and documents needed for insurance coverage.
- Medicare does not usually cover medical expenses outside the United States.
- If you have a secondary insurance, check and see if coverage is allowed.
- Find out if you need a special travel insurance policy.
- Consider insurance with "evacuation" if you are traveling to a remote area and transportation is needed to get to a hospital.
- High-risk activities, such as diving, mountain climbing or skiing are often **not covered**.



Personal Coverage

Record your insurance phone numbers and web-site. Keep a copy of the card with you at all times.

If You are Traveling Overseas You Should Know About Government Resources Overseas

- United States Embassy (check for the embassy closest to your travel location) at usembassy.state.gov
- United States Department Overseas Citizens' Emergency Center, Washington, D.C. 202-647-5225

Adapted from "Healthy Journeys" Department of Preventive Medicine and Environmental Health, University of Kentucky, Lexington, KY.



12. Your Travel Checklist

Make sure you have everything on this list before traveling.

- Your current updated **Diabetes Travel Plan** from your doctor (See page17).
- Important phone numbers.
- Medical Identification (Bracelet, Necklace, etc.).
- Necessary medications (at least double your usual amount) with prescription labels that have your local pharmacy contact information.
- Diabetes supplies (meter, extra batteries, test strips, lancet device, lancets, meter control solution, urine ketone strips if you have type 1 diabetes)—pack enough for extra checks and any delays in getting home.
- Treatment for low blood glucose such as glucose tablets or hard candy.
- Glucagon Emergency Kit (if recommended by your doctor).
- Snacks that are stable at room temperature or carried in a cooler.
- Medical insurance card and/or information for travel insurance.
- Names of local medical facilities and resources during your travel.
- Clothing that can worn in layers for comfort and protection from environment.
- Comfortable shoes.
- Make sure your travel companion is familiar with your diabetes management and location of your supplies and important phone numbers.
- Other personal and/or diabetes management supplies:

Travel Information Resources

United States Department of Transportation at 202-366-4000 or www.dot.gov – provides information and links to department of transportation organizations, such as the Federal Aviation Administration, Federal Highway Safety Administration and many others.

Diabetes Travel Plan for _____

Health Care Team:

Doctor: _____

Phone: _____ Fax: _____

Nurse/Nutrition Educator: _____

Phone: _____ Fax: _____

Pharmacist: _____

Phone: _____ Fax: _____

Target Blood Glucose Range When Traveling:

Fasting: _____

Before meals: _____

One hour after meals: _____

Two hours after meals: _____

Bedtime: _____

Other: _____

Diabetes Supplies Information:

Supply	Country	Company	Phone Number	Website
Blood Glucose Monitoring				
Insulin Injection				
<i>Syringes/Pen Needles</i>	<i>US</i>	<i>BD</i>	<i>1-888-BD Cares</i>	<i>www.bd.com/us/diabetes</i>
Insulin Pump				
Other Supplies				

Medication Adjustments for Travel Days (if necessary for time change):

The time change is ____hours forward/backward to get there and ____hours forward/backward to return. When traveling east, your day gets shorter, and when traveling west, you will have a longer day.

Oral Agent	Travel to:	Time Change:	Dosage schedule:

Insulin	Travel to:	Time change:	Dosage schedule:

Plan For Low Blood Glucose [____mg/dl or less]

If symptoms of low blood glucose are present:

1. Check blood glucose.
2. If blood glucose is too low, without symptoms, re-check immediately to verify the number.
3. Take 15 grams of sugar-carbohydrate:_____
4. Re-check blood glucose in 15 minutes. May repeat 15 grams of sugar-carbohydrate if blood glucose has not reached 80 mg/dl.

Plan For High Blood Glucose [____mg/dl or more]:

If blood glucose greater than ____mg/dl, I will_____

Signed:_____, M.D

BD provides this brochure for informational purposes only. It is not intended to be a substitute for professional medical advice, diagnosis or treatment. Always seek the advice of your physician or other qualified healthcare provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read in this brochure.

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