

Travel information

With a little forward planning, travel should pose no problems, whether just going into town or on holiday abroad. Some tips include:

- Carry biscuits or sandwiches to cover unforeseen delays.
- A few small packets (each of 1-2 biscuits) are easier to carry than one large packet.
- Always carry a hypo remedy - glucose tablets are convenient.
- As always, if situations are different, check the blood glucose frequently.

Early Starts

- If making an early start, an extra snack after getting up might be needed (especially if everyone is excited!)
- Insulin and breakfast can be given at the usual time, even if this means eating rolls or sandwiches in the car or bus.
- Taking food with you can be easier than finding an eating place at the right times.

Travel Sickness

- Your GP or Diabetes Team can suggest suitable medication.
- Try taking carbohydrate in small, frequent amounts.
- Don't fill up with fizzy diet drinks.



Camping

Meals are often delayed, especially on the first day when the tent is being put up and the cooking items are being unpacked. Have a snack at the usual meal time (such as a biscuit or a slice of bread) to stop the blood glucose falling too low, and then the rest of the carbohydrate allowance when the meal is ready.

Activity holidays, such as Scout, Guide, School and Diabetes UK camps will usually involve a lot more exercise - and late nights, too! Generally, more carbohydrate is needed, and insulin dose reduction of 10-20% is also a good idea.

Evening Meals

If the evening meal is served much later in the day than usual, swap around the bedtime and evening meal carbohydrate allowances. For example, move the bedtime carbohydrate allowance to the usual evening meal time and have the evening meal carbohydrate at bedtime, so that the meal can be enjoyed.

Travel Abroad

The Diabetes Team will be happy to discuss managing trips abroad. Here are some suggestions to help make your trip as problem-free as possible.

- A Customs letter is available outlining need to carry injection devices and insulin.
- Carry identification e.g. SOS Talisman or Medic-alert.
- Check holiday insurance cover.
- Don't order "diabetic" meals - they may not contain enough carbohydrate.
- Take double the supplies needed, and divide them through your carry-on luggage, as a precaution against loss or breakage.
- Low-calorie drinks are available in most countries. It may be useful to carry low-calorie squash or concentrated low-calorie cola. Dilute this with bottled water.

Travel information (continued)

- A change of climate may change activity levels - hot weather makes some want to swim all day (and need extra carbohydrate), while making others want to sunbathe. To find out the effects on the diabetes, check blood glucose regularly.
- Reduce initial insulin doses 10-20% until the effects of temperature change, extra activity, and altered diet can be assessed.
- When crossing time zones (such as when flying to the United States), insulin dosing should be discussed with your diabetes team. Usually the total daily insulin dose is separated into 4 equal doses, given approximately 6 hours apart - this should provide the insulin required until resuming usual injections.
- Take care of insulin while on holiday. Never expose it to extremes of temperature. Insulin should be neither too cool nor too hot, and never frozen. Never pack insulin into luggage going into the hold of a plane as it will freeze, and become ineffective. When travelling in a hot country, insulin can be carried in a cool bag or in a vacuum flask which has been cooled overnight in a fridge.

Food Poisoning

- Prevention is better than having to deal with this problem - consider food preparation and water sources carefully.
- Drink bottled water (or sterilise local tap water using tablets available at chemists). Use this purified water for brushing teeth. Avoid ice cubes in drinks as they may be made using the local water supply.
- Peel fresh fruit, and avoid raw vegetables washed in local water.
- Follow “sick day” guidelines, and seek medical attention if concerned.

General Points Regarding Air Travel

- When flying across different time zones, you will need to plan the best way to give insulin. A simple plan is to divide the day into four separate **six-hour sections**, and take insulin at the start of each of these. The insulin is then equally spread over a 24-hour period, and in case of delay or cancellation, this method can simply be continued until arrival at the destination, or until you are back home again.
- The sort of insulin to use is regular soluble insulin (Actrapid and Humulin S), and you may need to **obtain this before you travel**. These insulins are effective for several hours - usually at least until the next meal arrives! Use the guide on the following page to calculate the dose of fast-acting insulin required.

Reduce insulin doses if more active or local temperature higher when travelling



▲ NovoPen 3 & insulin cartridge



▼ HumaPen Luxura



Working out insulin doses when flying

If travelling abroad you should discuss your plans with the diabetes team at least one month before departure. This allows time to ensure adequate and appropriate planning for the trip.

- Find “time difference” between flight departure and arrival points (in hours).
- If 3 hours or less - take usual insulin at usual times
- If *more* than 3 hours - follow the following plan:
 - Ask the diabetes team for a GP letter requesting prescription of:
 - HumaPen Luxura insulin pen - or other insulin delivery device
 - Humulin S (3 ml cartridges) - or other soluble insulin
 - Add together *all* insulin doses taken daily = Total Daily Dose
 - Divide Total Daily Dose by 4 = Travel Dose
 - Give Travel Dose as Humulin S insulin (or other soluble insulin)
every 6 hours (approximately)
immediately before meals (do NOT wait usual 30 mins)
 - On the day of travel - do NOT take usual insulin doses
- Take Travel Dose every 5 or 6 hours before food, starting at usual breakfast time. This usually fits in well with airline meal plans. One hour earlier or later will make little difference if insulin is taken immediately before meals.

Example: Glasgow to Florida – 5 hour time difference

- Normal daily insulin = 22 units before breakfast.
8 units before tea
10 units before bed
- Total daily dose (TDD) = 40 units
- Travel dose = TDD ÷ 4 = 40 units ÷ 4 = 10 units
 - Take travel dose (10 units of fast-acting insulin) before breakfast (e.g. 8 a.m.)
 - Have normal morning snack.
 - Take travel dose immediately before lunch-time meal (e.g. 1-2 p.m.)
 - Have normal afternoon snack.
 - Take travel dose immediately before next meal.
 - Arrive in Florida.
 - Have travel dose before later evening meal.
 - Take large bed-time snack.
 - Have last travel dose approximately 6 hours after last insulin injection given.
 - Next morning restart usual insulin injections - consider reducing doses slightly.
- Always carry snacks, insulin and pens in your hand luggage in case of delays.
- Check blood glucose results more frequently than normal.
- If blood glucose more than 14 mmol/l → give extra insulin = Travel Dose ÷ 4.
e.g. Travel dose = 10 units Blood glucose = 18.0 mmol/l
Extra dose = 2.5 units 10 units divided by 4
Total dose = 12.5 units short-acting insulin (round down to 12 units).
- Continue travel doses every 6 hours until start of first full day at destination.
- Restart your normal insulin regimen on start of destination’s first full day.
- Monitor your blood sugars and make any changes as needed.
- Check that your customs letter (in “At the Start” section) is complete (if extra needed, they can be printed from the online version on the Service’s website).

Customs Letter for Travel

Greater Glasgow & Clyde Children's Diabetes Service



To whom it may concern:

Please retain for future travel

Dear Sir/Madam,

Re: Name: _____
Address: _____

The above-named person has diabetes mellitus, and requires a number of items to be available at all times. These items therefore need to be taken as carry-on luggage, and include the following:

- Insulin pen delivery device
- Insulin pen needles
- Blood glucose test lancets
- Glucagon injection kit
- Lucozade® (buy in Departure Lounge)
- Insulin cartridges
- Blood glucose meter
- Blood glucose test strips
- Glucogel
- Snacks

High or low temperatures may cause insulin to lose its effectiveness, and so this must not be carried in the hold of an aircraft. A family member or friend may also need to carry a second set of items as hand luggage, in case of loss or damage.

Yours faithfully,

Dr. Amita Sharma
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