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Day-to-Day Tips for Using your Insulin Pump

There are many ways to manage your insulin pump day-to-day, and what works best can be different for everyone. If you have questions or want to explore new ideas, your diabetes team is here to help. Talk with your educators—they can offer helpful tips and creative solutions just for you.

An insulin pump is not a cure for diabetes. It is a management tool. The pump helps a lot by delivering insulin more precisely, but it doesn't do everything. You will still need to make decisions and complete tasks for your safety based on your daily routine. The information below can help you use your insulin pump day-to-day.

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Starting an insulin pump

What age or stage of life is best to start an insulin pump?

Any age or stage of life can be appropriate if you are willing and able to learn about pumping. Talk with the pump companies and your diabetes team about pump features available that may suit you or your child/dependent best.

According to guidelines from Diabetes Canada, an automated insulin delivery (AID) system, which integrates an insulin pump with a continuous glucose monitor (glucose sensor), is the preferred method for managing type 1 diabetes for those willing and able to use the technology, including parents and support persons.

Do I need to keep counting carbohydrates?

All insulin pumps currently approved by Health Canada will give you better results if you keep doing carbohydrate counting in some form. Do your best. It does not have to be perfect.

Do I need to carry extra supplies?

Yes. It's important to carry a pump safety kit. If insulin delivery through the pump is interrupted for any reason, the supplies in your kit can help prevent diabetic ketoacidosis (DKA). You may choose to include extra infusion sets or reservoirs in that kit.

Who can I contact if I have problems with my insulin pump?

If you experience any issues with your pump, you should contact the pump manufacturer's customer support team. All pump companies offer 24/7 technical support helplines to assist with troubleshooting and device concerns.

Where to wear the insulin pump

Where can I insert pods and infusion sets?

Both pods and infusion sets can be inserted in your arms, stomach, buttocks, hips, or thighs. When choosing your insertion site, keep in mind that pods and pumps (not infusion sets) usually need to be in line of sight of your glucose sensor. This often means placing them on the same side of your body as your glucose sensor.

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How can I wear my tubed insulin pump?

Tubed pumps can be worn in many ways:

- Clip it to your belt or waistband.
- Put it in your pocket or bra.
- Strap it to a pouch on your waist, arm, or thigh.

You can also think of your own creative ways to wear it. You may wish to search online for ideas and accessories. There are many.

What can I do if I have skin irritation or an allergy to the adhesive?

Some people experience sensitivity or allergic reactions to the adhesives used with glucose sensors, pods, infusion sets, or cannulas. There are different products and techniques available to help protect your skin and reduce discomfort. These include barrier wipes, alternative adhesives, or protective dressings. You can try these products to see what might work for you. Talk with your diabetes team if you need more help.

Is an insulin pump comfortable to wear?

After a few weeks, most people don't notice they are wearing a pump. Talk to your diabetes team if you are finding things uncomfortable.

When to wear the insulin pump

Can I shower or bathe while wearing my insulin pump?

Pods and some tubed pumps are waterproof. Check with the company that made your pump to see if your pump is waterproof and whether it can be used in water. Most people find it easier to disconnect a pump with tubing when they shower or bathe. Remember to **reconnect it when you're done**.

Can I use a tubeless system (pod) in a hot tub?

It is not recommended to have pods, infusion sets or pumps in hot tubs because the extreme heat will reduce the effectiveness of the insulin.

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Can I swim with my insulin pump?

Some people can swim with their pumps if they are waterproof. Check with the company that made your pump to know if it is waterproof or if there are accessories available to help protect it from water. If you disconnect from your pump for **2 hours or more**, follow the instructions provided by your diabetes team to replace the insulin you miss. Not replacing this insulin can increase your risk of diabetic ketoacidosis (DKA).

How can I wear my insulin pump when sleeping or in bed?

When sleeping, you can:

- Wear the pump in the pocket of your pajamas or shirt
- Put the pump in a belt or pouch designed specifically for pump users
- Wrap the pump in your pajama shirt with a hair elastic to keep it secure

Everyone has their own preferences for sleeping with their pump. There is no one “right” way. Avoid sleeping on pods, pumps and glucose sensors. It can make communication between them difficult. It can also lead to falsely low glucose sensor readings. But it is fine to sleep on tubed infusion sets and their infusion sites.

Can I wear my insulin pump when I exercise?

Yes. Most people wear their pump during exercise to control their blood glucose. There are exceptions to this. Talk with your diabetes educator if you play a contact sport like hockey or football, or practice hot yoga. For activities like these, you may need to take special steps with your pump.

Remember, if you take off your pump, your risk for diabetic ketoacidosis (DKA) gets higher if the pump is disconnected for 2 hours or more. **Never forget to reconnect your pump.**

Can I wear my insulin pump in cold or extreme weather?

You can wear a pump in cold weather if you take a few precautions. Make sure to protect your pump and don’t let your insulin freeze. Keep the pump inside your jacket, close to your skin.

If you spend time in very hot or cold environments, or do outdoor activities in extreme weather, talk with your diabetes educator. There are different ways to protect your pump and insulin, and your diabetes team can help you find the best approach for your lifestyle.

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Glucose sensor

Can I use any glucose sensor with an automated insulin delivery (AID) pump?

No. Each pump works with specific glucose sensors. Check with the pump companies or your diabetes team to find out which glucose sensors are compatible with your pump.

Disconnecting the insulin pump

Can I disconnect my insulin pump?

- You may need to disconnect or remove your pump, glucose sensor, or both for a short time, like when you're having a medical imaging test like an x-ray, CT-scan or MRI scan.
- You can disconnect your tubed pump when showering, swimming or having sex.

The longer your pump is disconnected, the higher your blood glucose might go. Your risk for DKA gets higher if your pump is disconnected for 2 hours or more. **Never forget to reconnect your pump.**

Travelling with an insulin pump

Can I travel with an insulin pump?

Yes, you can travel with a pump. Go over your travel plans with your diabetes team to make sure you have enough supplies and the information you need about travelling with diabetes and a pump.

If you're travelling outside of Canada, know that pump companies in Canada don't ship replacement pumps outside the country. Before you leave Canada, ask your pump company about a loaner pump. Always have a plan for how to replace your insulin with injections if your pump stops working.

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Can I travel by airplane with an insulin pump?

Airport security staff in most countries are familiar with pumps and glucose sensors. It's a good idea to ask your diabetes team for a travel letter, in case security has questions. Most people ask for a manual inspection of their pump and supplies at airport security.

If you choose not to have a manual inspection, check with the companies that make your pump and glucose sensor for other airport security screening options.

Medical tests, procedures, and hospital stays

Can I wear my insulin pump during medical tests?

You can wear your pump during ultrasounds.

Check with the company that made your pump and glucose sensor regarding other tests. When going for medical tests, be sure you have your safety kit with you in case you need to remove your pump. Bring a glucose sensor in case you need to remove yours.

Do not place your pod or infusion set over the area that is being examined in the test.

Can I wear my insulin pump during surgery?

You might continue with your pump for some short or minor surgeries. For other surgeries, you may need to remove your pump and get insulin replaced through an intravenous (I.V.) or with injections. After your surgery, your doctor will check if and when it's safe for you to go back on pump therapy.

Can I be on an insulin pump when I'm in the hospital?

If you are staying in the hospital, your healthcare team uses many factors to decide if you can be on your pump. If you are able to keep using your pump, you'll need to agree to some self-management terms.

If your hospital stay is planned in advance, visit ipumpit.ca and choose "I am an insulin pump user." This Alberta Health Services website will tell you how to prepare for a hospital stay and what forms to fill out.

If you continue to use your pump in hospital, the hospital staff will still check your blood glucose using a hospital-approved blood glucose meter. Because illness, medications, procedures and other factors can affect the accuracy of glucose sensor readings and insulin delivery, these checks act as a safety net during your hospital stay.

If your hospital visit is not planned or if you go to the emergency department, tell the medical staff that you have diabetes and are on a pump.

Pregnancy

Can I be on an insulin pump while I'm pregnant?

Yes. Automated insulin delivery (AID) pumps may have many benefits for you and your baby during pregnancy. Talk with your diabetes team about the research supporting pregnancy and pump therapy.

Children and dependents

Can parents, guardians, and caregivers view glucose readings remotely?

Most glucose sensors have a feature to allow for remote viewing and remote alerts. Talk with the company that made the glucose sensor or pump to learn about these features.

How can I keep my child/dependent from accidentally giving bolus insulin on the insulin pump?

Most pumps have a lock-out feature that a parent, guardian, or caregiver can override to give boluses. Talk with the company that made your child's or dependent's pump to learn about features like these for parents, guardians, and caregivers.