Studies conducted over the past decade have repeatedly shown that children with type 1 diabetes can live long and healthy lives. In all of these studies, a key factor was keeping blood glucose levels as close to normal as possible most of the time. Doing this significantly lowered the chances of life-threatening complications related to diabetes. However, you may be unsure if this is a realistic goal for your own child in your situation. How do you keep blood glucose in the “zone” (as some like to call it) or as close to normal as possible? Learning a New Lifestyle

The amount of information that comes with the diagnosis can seem so overwhelming at the beginning. Trying to figure out all of the pieces that it takes to care for and manage type 1 is daunting. It can be hard to picture working at something year after year so nothing bad happens. Treating lows, going to doctor visits, getting lab work done, checking blood glucose, counting carbs, and giving insulin all take time and skill to navigate each day. Not to mention, it can be hard to know what “normal” is when it might be different every day, such as when your child is sick, very active, or inactive, or on a day when they eat a lot of extra carbs. Frequent monitoring may seem overwhelming in the beginning, but will eventually become routine. Pricking your child’s finger and giving an insulin injection are very difficult at first. Over time as you gain more experience, these will become much easier for both you and your child. You can also check with your provider to see if there are any new devices available that make blood glucose testing and insulin injections less painful and more precise.

Successfully Living with Diabetes

Essentially, living successfully with diabetes means learning how to be as close to a virtual pancreas as possible. Without a working pancreas to make insulin, it becomes critical that someone else injects insulin. As you have learned, you must regularly monitor blood glucose levels and adjust the levels of insulin needed. Checking blood glucose levels frequently gives you the information you need: if your child needs more insulin for high or out-of-range levels, or if they need food, sometimes quickly, for low glucose levels.
Here are four basic tips for success:

- **Check blood glucose levels several times a day**, especially before each meal or snack, and before bed.
- **Encourage your child to eat at about the same time each day**, as timing of meals and the amounts of carbohydrates eaten can help blood glucose stay at a steady level.
- **Make physical activity part of every day**. It helps use blood glucose.
- **Taking insulin throughout the day helps to steady the blood glucose level**, without a lot of high or lows.

**Resources and Support**

Diabetes care is not easy or simple. However, you don’t have to do it alone! Your healthcare team (CDE dietitian or RN, provider, and family) will support you and your child in developing an individual plan for monitoring, insulin, nutrition, and exercise. Don’t hesitate to utilize your healthcare team as your main helpline.

There are many wonderful books with great information on diabetes written for parents, teens, and children. Here are some useful books to help you and your child on your journey:

- **Think Like a Pancreas, a Practical Guide to Managing Diabetes with Insulin** by Gary Scheiner, MS, CDE
- **Kids First, Diabetes Second: tips for parenting a child with type 1 diabetes** by Leighann Calentine and Robin Porter
- **Until There is a Cure The Latest and Greatest in Diabetes Self-Care** by Gary Scheiner, MS CDE
- **Cooking up Fun for Kids with Diabetes** by Patti B. Geil MS, RD CDE and Tami A. Ross RD CDE
- **Everything Guide to Cooking for Children with Diabetes** by Moira McCarthy and Leslie Young, MD

Staying in the glucose range recommended by your diabetes care provider can be a realistic goal. Remember that the future is getting brighter every day and your child will live a long, happy, and healthy life—all they need is a little help and encouragement along the way.

**New Product Shows Promise as Injection Alternative**

**Will an inhalable glucagon be as effective as an injection?**

Randomized clinical trials will soon be conducted in several states for a new treatment that might replace glucagon injections. The newly developed product is several years away from being approved, however it looks very promising. The purpose of this study is to assess how glucagon administered as a puff into the nose (AMG504-1) works in children and adolescents compared with commercially available glucagon given by injection. In addition, the safety and tolerability of glucagon given as a puff into the nose will be evaluated.

AMG504-1 is a novel way of delivering glucagon. Used as a treatment for severe hypoglycemia, glucagon is currently only available as a powder that requires mixing before injection—a procedure that is time-consuming and complex, especially in an emergency. Some companies are working to improve glucagon for patients, and the T1D Exchange is now teaming up with AMG Medical to assess the safety and effectiveness of using AMG504-1 in children and adolescents compared to currently available glucagon.

The clinical trial is: **Assessment of Intranasal Glucagon in Children and Adolescents with Type 1 Diabetes**, ClinicalTrials.gov Identifier: NCT01997411

Looking for an easy way to eat healthier?

The U.S. National Heart, Lung, and Blood Institute (part of the National Institutes of Health) suggests we think about foods in terms of Go, Slow, or Whoa.

Think of the healthiest foods as “go” foods. These are foods like steamed or raw veggies, apple slices, and skim or low-fat milk that are good to eat almost anytime.

Foods that are OK to eat sometimes are “slow” foods. Foods like hamburgers or pancakes aren’t off limits — but they shouldn’t be eaten every day. At most, you’ll want to eat these foods just a couple of times a week.

Some foods should make you stop, think, and say, “Whoa! Should I eat that?” These foods are the least healthy and the most likely to cause weight problems, especially if a person eats them all the time. “Whoa!” foods are once-in-a-while foods, like French fries, potato chips, or ice cream.

For more information, visit the U.S. National Heart, Lung and Blood Institute, We Can!® website: [http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan](http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan)


## Diabetes Camps for 2014

Soon it will be summer and school will be out. Most kids love summer camp, and kids with diabetes are no exception. Have you thought about diabetes summer camp for your child? Most states have a diabetes summer camp program. Camp offers unique and fun experiences for kids with diabetes. Kids can learn to manage their diabetes with peers and trained professionals in an exciting, adventurous, and safe environment.

Many camps offer scholarships or reduced rates. If you think your child/teen would like to attend summer camp, check out this website to find a camp near you:

[Diabetescamps.org/camp-finder](http://www.diabetescamps.org/camp-finder)
Ready to get active?

This time of year, when winter weather begins to retreat, you may be ready to get outside again. If you have been living with diabetes for very long, you know how important it is to exercise and move. Whether you play team or individual sports, dance, walk, or run, it all counts. You can still take part in all of the physical activities you did before your type 1 diabetes diagnosis. But remember, you may have a low blood sugar (glucose) reading after vigorous activity. Make sure you have anything you might need during exercise, as well as anything needed to manage an emergency.

What is glucagon?

Glucagon is a potentially lifesaving treatment for severe hypoglycemia or insulin reaction. It works by telling the liver to release stored glucose into the bloodstream to quickly bring the blood sugar level back up. Glucagon kits are small and portable and you should carry one with you if you are engaging in any physical activity. Most healthcare providers will prescribe more than one kit so you may have one at home and carry one with you whenever you exercise.

The possibility of severe low blood sugar and of needing a glucagon injection can be scary. It is very important that the people you are with understand how to recognize severe low blood sugar and are able to give an emergency glucagon injection if needed. Anyone you spend time with—family, friends, teammates, coaches, and exercise partners—could need to help you in an emergency. It might be a good idea to wear a medical ID bracelet or necklace indicating that you have type 1 diabetes.

Be Prepared

- Know how to recognize the symptoms of low blood sugar (hypoglycemia) and high blood sugar (hyperglycemia). Pay attention, take a time out, and make adjustments.
- Tell your coach, teammate, or exercise partner how to help you in case of an emergency.
- Keep your emergency glucagon emergency kit handy. Tell others where it is and how to use it. If your mild or moderate low blood sugar is not treated quickly, it can become severe and may cause you to lose consciousness. If you are physically unable to eat or drink a rapid-acting source of glucose, you will need a glucagon injection. A friend or coach will need to give it to you.
- At other times, such as during an illness or infection, strenuous exercise may cause already-high blood sugar levels to go even higher because of the release of stress hormones. For these reasons, it’s important to check blood sugar levels before you begin to exercise, and at other times as well during and after strenuous exercise, as instructed by your diabetes healthcare team.
- As you know, a possible side effect of using insulin is low blood sugar, which can be severe and cause unconsciousness (passing out) and even seizures. Again, it is important to frequently test your blood sugar levels when you are increasing your exercise or activity level so you know how your body is responding.

Always check with your diabetes healthcare team before you start a new exercise routine or return to increased physical activity if you have not exercised in a while. Your healthcare provider or other diabetes team members will be able to tell you the best way to manage your type 1 diabetes before, during, and after exercise. Keep moving, and take care of yourself through good planning.

Did you know?

- Physical activity and exercise can have different effects on your blood sugar levels. Exercise can lower blood sugar levels because more sugar is leaving the bloodstream to enter the body’s cells.
- You may need an extra-large snack during physical activity. Foods with protein, like cheese sticks, and complex carbohydrates (carbs), like whole wheat crackers or an apple, may be best. Make sure you have plenty of water or sports drinks available.