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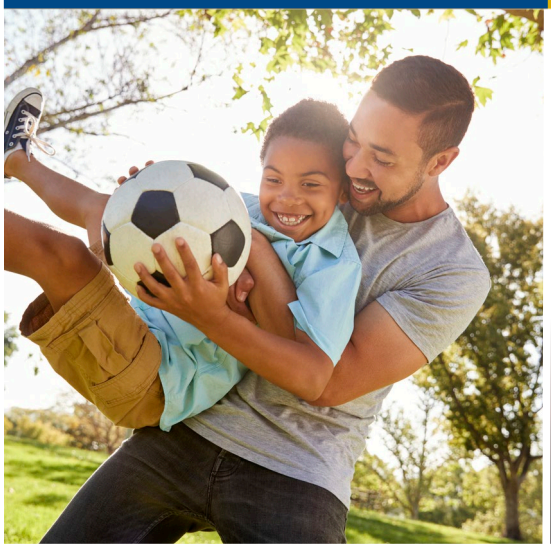

Pediatric Diabetes

Important Phone Numbers

- Diabetes Clinic 916-734-3112 (M-F 8AM TO 5PM)
- On-call Pediatric Endocrinologist 916-734-2011 (5PM TO 8AM, WEEKENDS, AND UNIVERSITY HOLIDAYS)

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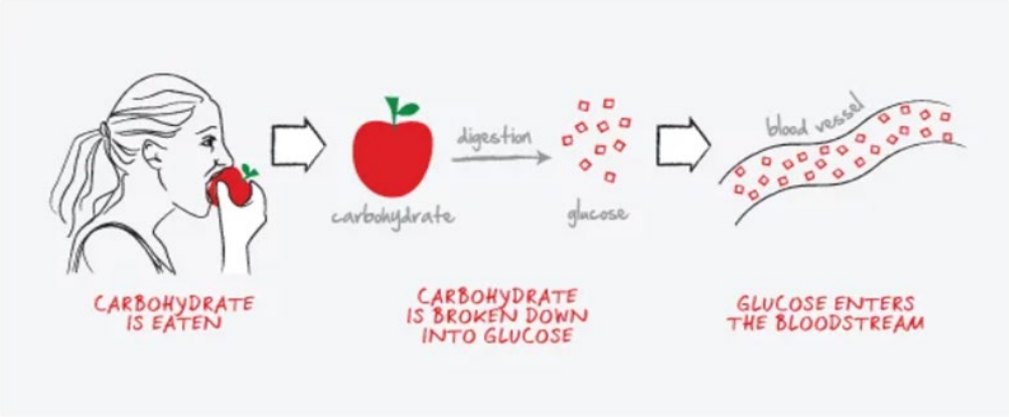
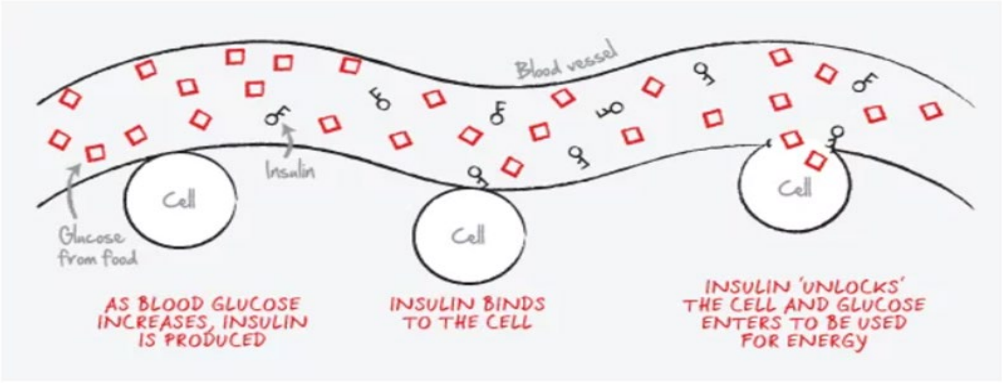
What is Diabetes?

With careful attention to a personalized medical plan – as well as keeping a healthy diet and lifestyle – people with diabetes can live long, active, and healthy lives.

When we eat food, it is broken down into sugar (glucose) and enters the blood stream. When everything is working normally, the body senses sugar in the blood, and the pancreas releases the right amount of insulin. Insulin is a hormone that helps move sugar into your body's cells to be used for energy.





ethoshealth.com.au/blog2-confused-by-diabetes-heres-a-simple-explanation

Symptoms of Diabetes: Excessive urination, bed-wetting in a child who was previously toilet trained, excessive thirst and/or dry mouth, increased appetite, weight loss despite overeating, fatigue, and weakness.

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Type 1 Diabetes

Insulin is made by cells in the pancreas called beta cells. In type 1 diabetes, the body's own immune system starts attacking the beta cells (autoimmune disease). The beta cells are slowly destroyed in the pancreas, which happens over a few months to a few years.

The body breaks down carbohydrates from foods into glucose (sugar), which is needed for energy. Insulin is needed to move the glucose from the blood into the cells of the body. Because the beta cells that make insulin no longer work in people with type 1 diabetes, they need to take insulin to keep blood glucose in a normal range. At this time, insulin can only be given through injection (syringe, insulin pen, or insulin pump).

Type 2 Diabetes

In type 2 diabetes, the body may make insulin but does not make enough or does not use it correctly. This is called insulin resistance. Most people diagnosed with type 2 diabetes still have normal or increased levels of insulin. However, they can no longer make enough insulin to match their body's resistance to insulin action. Glucose builds up in the blood and causes high blood glucose. Type 2 diabetes is often treated with diet and lifestyle changes. Some people may also take oral medications and/or insulin.

In the United States, more and more adolescents are being diagnosed with type 2 diabetes. Many of these adolescents are overweight (obese). If the child is sick at the time of diagnosis and/or has very high blood glucose levels associated with other symptoms such as weight loss or excessive urination, insulin therapy may be started first. Another reason to start insulin is that not every child who is overweight has type 2 diabetes. Therefore, the doctors may need to run some tests to check that the child does not have type 1 diabetes.

What is Type 1 Diabetes vs. Type 2 Diabetes T1D Toolkit

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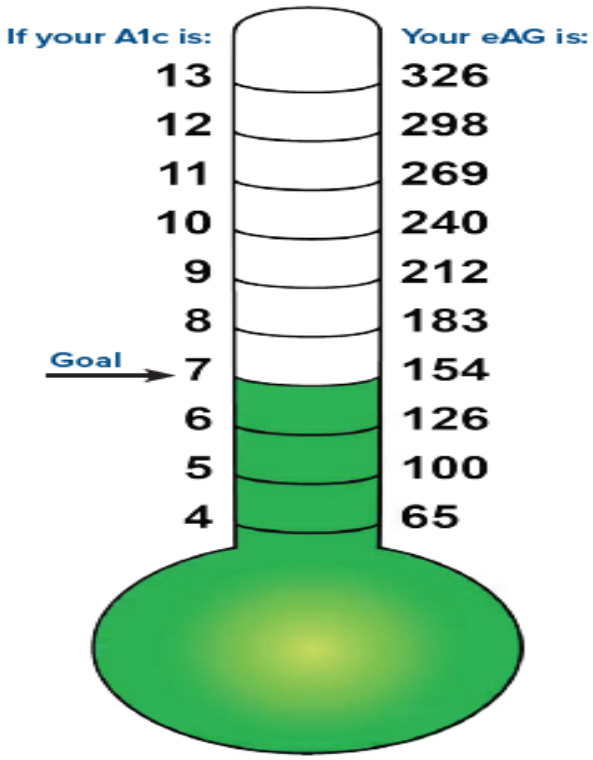
Hemoglobin A1c (also called "A1c")

Hemoglobin A1c is a blood test that measures the average blood glucose over the past 3 months. It is measured as a percentage. A higher A1c means blood glucose has been regularly higher over those three months.

A1c is a useful tool for monitoring risk for complications related to diabetes. Long-term high blood glucose are related to negative effects on brain function, brain structure, and brain development in children and teens with diabetes.

Your A1c will be checked with each clinic visit with a fingerstick, with your labs, or with an at-home testing kit. For children, the A1c goal is 7% unless unable to verbalize symptoms of hypoglycemia.



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Checking Blood Glucose (BG) and Blood Glucose Goals

When do you check blood glucose?

You will check your blood glucose at home using a blood glucose meter (glucometer).

You should check your blood glucose:

- before meals, before bedtime, and at 2am (5 times per day), and
- when there are symptoms of high or low blood glucose

What are your blood glucose goals?

Here are starting blood glucose goals:

Daytime	71-180 mg/dL
Bedtime	101-200 mg/dL

The goal is to keep blood glucose in the target range most of the time. Target blood glucoses will change as you learn more about diabetes.

How to check your blood glucose? Watch this video to learn more.

Checking Blood Glucose with a Meter T1D Toolkit

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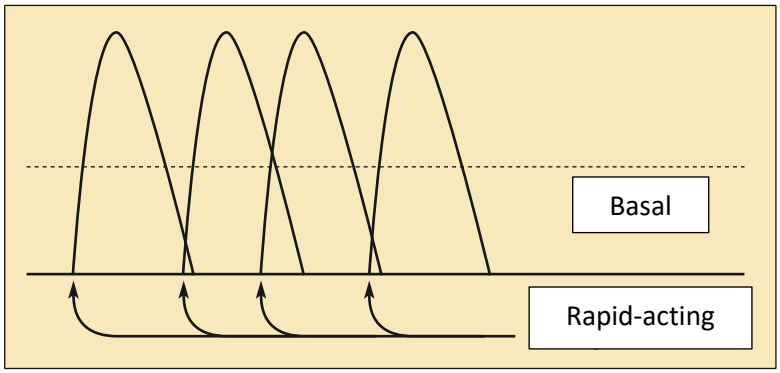
Insulin



Basal insulin is your 24-hour, long-acting insulin and is usually taken once per day. Take it at the same time every day. It will keep your blood glucose in range if you don't eat.

Rapid-acting insulin is taken every time you eat carbohydrates (nutrition dose) and/or when blood glucose is above goal (correction dose). It is active in your system for about 3 hours. Your total dose before each meal will be nutrition + correction dose.

correction dose + nutrition dose = total units of rapid acting insulin

To calculate how much rapid-acting insulin to take:

1. Check your blood glucose. Compare to your correction scale to determine the correction dose.

   EXAMPLE: Correction dose = 1 unit for every 50mg/dL
   (or 50 "points") blood glucose over 150mg/dL
   BG = 180
   Correction dose = 1 unit

2. Count the grams of carbohydrate in your food. Divide the total carbohydrate grams by your insulin to carbohydrate ratio to determine the nutrition dose.

   EXAMPLE: Insulin to carbohydrate ratio = 1 unit for every 10 grams of carbohydrate
   Total carbohydrates = 30g
   Nutrition dose = 30 grams / 10 = 3 units

3. Add the correction dose to the insulin to carbohydrate dose.
   This is your total dose of rapid-acting insulin.

   EXAMPLE: Correction dose (1 unit) + Nutrition dose (3 units) = 4 units

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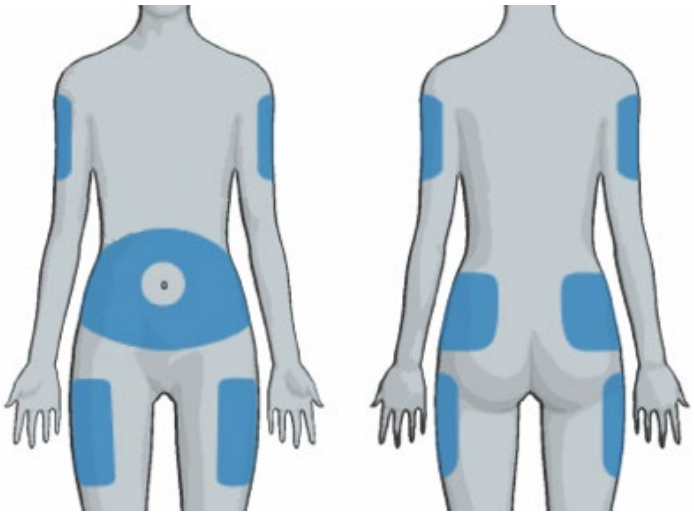
Insulin injections

- Rotate/change the spot where you give your insulin to prevent swelling, lumps, and scar tissue.
- Inject insulin into fatty tissue. Wait 5-10 seconds before removing the syringe (needle)/insulin pen from your body.

Injection Sites

- **Abdomen (stomach)**: Stay 2 inches away from the belly button or scars. Insulin is absorbed the best from the abdomen.
- **Arms**: Measure one hand width down from the shoulder and one hand width up from the elbow. Use the fleshy outer surface.
- **Legs**: Measure one hand width down from the groin and one hand width up from the knee. Use the top and outer part of the leg, staying away from the inner part of the thigh.
- **Buttocks**: Use the upper outer area.



Injecting cold insulin may sting. If you store your insulin in the refrigerator, warm it to room temperature before injecting.

Insulin Storage

- Keep **unopened** bottles/pens of insulin in the refrigerator or in a cool place (less than 86 degrees Fahrenheit).
- **Open** bottles/pens of insulin may be stored at room temperature (less than 86 degrees Fahrenheit) and away from direct sunlight **for up to one month**.
- NEVER store insulin in the freezer.
- Write the date on the bottle/pen when it is opened. Expiration dates of insulin will vary. Check the product instructions or ask the pharmacist for information about insulin expiration.

Care and Storage of Insulin T1D Toolkit

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Step-by-Step Guide to Using an Insulin Pen

1. Wash and dry your hands.
2. Arrange your supplies: sharps container, alcohol wipes, insulin pen and needle.
3. Remove the pen cap and wipe the stopper using an alcohol wipe.
4. Remove the seal and push the new needle straight onto the pen.
5. Screw needle on tight.
6. Remove the outer shield (a), and then remove the inner shield (b).
7. Check the flow of the medication by dialing two units. With the needle facing up, press the thumb button until you see a drop of medication. If necessary, repeat until you see a drop of medication.
8. Dial your medication dose.
9. Clean a small area of skin using an alcohol wipe. Insert needle.
10. Press the thumb button down. Post injection, count for ten (10) seconds before removing the needle from your skin.
11. Throw the needle away after one use. Use a safe sharps container.

Using an Insulin Pen T1D Toolkit

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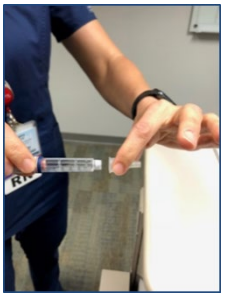

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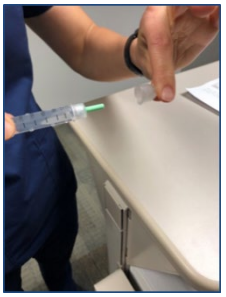

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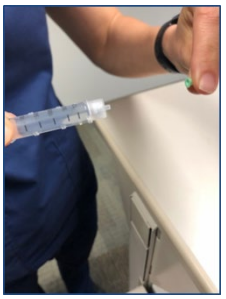

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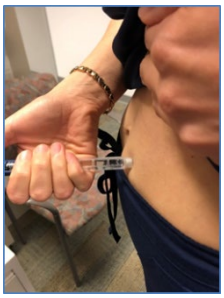

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Step-by-Step Guide to Using an Insulin Syringe

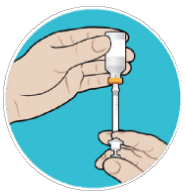
Source: Diabetes Forecast® (American Diabetes Association)

If You Use Vials and Syringes

Step 1
Clean the top of the vial with an alcohol pad, then remove the cap from the syringe needle.

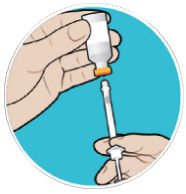
Step 2
Draw air into your syringe—an amount equal to the units of insulin you'll be injecting. To do so, pull back the syringe's plunger until its black stopper reaches your insulin dose amount on the syringe barrel. So if you will be taking 6 units of insulin, pull back the plunger until the stopper hits the 6 etched onto the barrel.

Step 3
Put the vial on a flat surface and hold it. Insert the syringe into the vial, and press down on the plunger to inject the air from Step 2 back into the vial.



Step 4
With the syringe still in the bottle, turn the vial and syringe upside down. The tip of the needle should be fully covered by insulin.

Step 5
Make air bubbles less likely by slowly pulling down on the plunger. Draw insulin past your dose. Tap the syringe a few times so any bubbles rise to the top.



Step 6
Without removing the syringe from the vial, slowly push the plunger until the edge of its black stopper reaches the number of units in your dose, as marked on the syringe. If you see any bubbles, push all that insulin back into the vial and repeat these steps until no bubbles are present.

Step 7
Identify an injection site. Pinch up a bit of skin (if necessary). Insert the needle at a 90-degree angle. Hold the needle in the skin for 5 seconds to ensure there is no leakage.

Step 8
Dispose of your syringe and needle in a sharps container.

Using a Syringe and Vial to Inject Insulin T1D Toolkit

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Hypoglycemia (Low Blood glucose)

Common Causes:

- Too little carbohydrate
- Too much insulin
- Extra activity or exercise

If your blood glucose is low, you may feel:

- Shaky
- Fast heartbeat
- Sweaty
- Dizzy or shaky
- Anxious
- Hungry
- Burry vision
- Weak or tired
- Headache
- Nervous or upset

Treating Low Blood Glucose

1. You should treat blood glucose 70 mg/dL or less. Here's how:
2. Tell someone you feel low and check blood glucose.
3. If blood glucose is 70 mg/dL or less, treat by eating or drinking 15g of fast-acting carbohydrate.
4. Wait 15 minutes then re-check blood glucose. Repeat step 3 if blood glucose is 70 mg/dL or less.

Never give food to a person who is unconscious/unresponsive (will not wake up / does not respond) from hypoglycemia. **If the person is unconscious/ unresponsive, give Baqsimi or Glucagon and call 9-1-1.**

What is Hypoglycemia? T1D Toolkit

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Glucagon/Baqsimi

A person needs Glucagon when they are having a severely low blood glucose AND:

1. they are unresponsive or unconscious
2. having a seizure
3. are unable to take fast-acting carbohydrate by mouth

Directions for use

Glucagon Injection Kit (<4 years of age)

1. Mix the sterile water and glucagon power together in the vial
2. Draw the clear liquid back into the syringe and inject into the buttock, thigh, or arm.

Baqsimi Nasal Glucagon (≥4 years of age)

1. Remove from packaging and insert the tip into one nostril
2. Push plunger all the way in. Dose is complete when the green line disappears.

After glucagon/Baqsimi administration, turn the person on their side and call 911

Giving Emergency Glucagon T1D Toolkit

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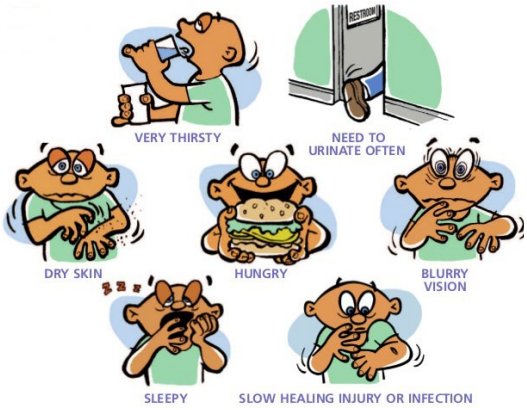
Hyperglycemia (High Blood Glucose)

Common Causes:

- Too much carbohydrate/ sugar
- Too little insulin
- Illness/ stress



If your blood glucose is high, you may feel:

- Need to urinate often
- Dry skin
- Hungry
- Blurry vision
- Sleepy
- Slow healing injury or infection
- Very thirsty

Treating High Blood glucose

1. Test blood glucose.
2. **If more than 3 hours since the last insulin injection,** give insulin according to your correction scale.
3. If blood glucose stays over 350 mg/dL 3 hours after giving correction dose, or the child is sick or vomiting, test urine for ketones.

What is Hyperglycemia T1D Toolkit

Causes of Highs and Lows T1D Toolkit

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Ketones

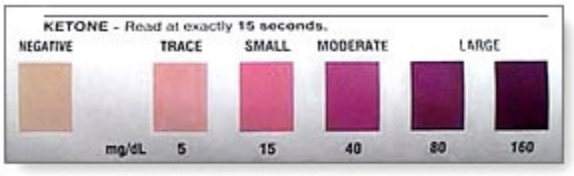
Ketones are made by the body when there is not enough insulin in the body, or when the insulin you are taking has gone bad. A build-up of too many ketones in the blood can lead to a dangerous condition called diabetic ketoacidosis (DKA).

When to Test for Ketones:

1. If blood glucose is higher than 350 mg/dL for two readings in a row (more than 3 hours)
2. For any illness even if blood glucose value are normal or low
3. If you vomit, even once
4. Before exercising and you blood glucose is greater than 350

You will check for ketones by dipping a urine ketone strip in urine.

What to do with ketone strip results:	
Moderate or Large	Check blood glucose every 3 hours, drink fluids, and take correction insulin. Call your diabetes team: Diabetes Clinic 916-734-3112 (M-F 8AM TO 5PM). On-call Pediatric Endocrinologist 916-734-2011 (5PM TO 8AM, WEEKENDS, AND UNIVERSITY HOLIDAYS) **Go to the nearest emergency department if unable to keep fluids down, continuous vomiting, rapid breathing/short of breath, confused or not responding normally**
Small	Drink plenty of water, take correction insulin if appropriate, and recheck ketones in 2-3 hours
Trace	Continue routine diabetes care and drink plenty of water. Recheck for ketones in 2-3 hours.
Negative	Continue routine diabetes care.



What are Ketones? T1D Toolkit

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Nutrition and Type 1 Diabetes

Which foods have carbohydrate? Carbohydrates come from starch and sugar in food. Carbohydrates can be found in the following food groups:

Starches

Milk and yogurt

Fruits

Foods with added sugar

To find the amount of carbohydrates in the food you eat:

- read nutrition labels,
- use online resources, and/or
- use smartphone applications.

Smartphone apps

Calorie King

caloriekking.com

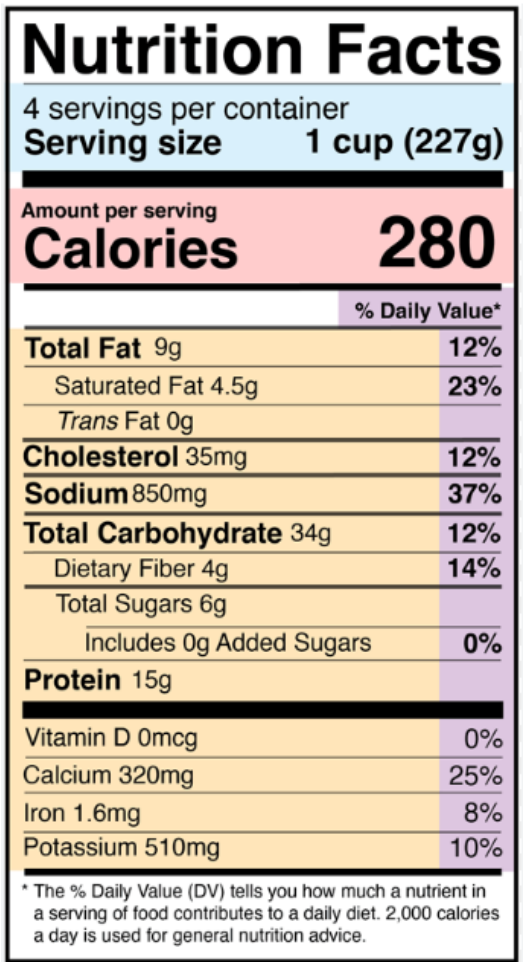
Measuring cups or food scales will help you be most accurate in measuring the amount of carbohydrate-containing foods you eat at meals and snacks.

Food Labels

If a food has a label, use these steps to count how many carbohydrates you are eating.

1. Check the serving size.
   - Use a measuring cup or food scale to measure your food portion accurately.
2. Check the "Total Carbohydrate".
   - This is the amount (in grams) of carbohydrate per 1 serving. This number includes starch, sugars, and fiber. Do not count grams of "Sugars" (listed under "Total Carbohydrate") separately.
3. Adjust your carbohydrate count if you are eating more or less than 1 serving.

   Examples
   - If you eat ½ cup of the food in the sample label, your carb intake would be 17 grams.
   - If you eat 2 cups of the food in the sample label your carb intake would be 68 grams.



Nutrition Facts

4 servings per container

Serving size **1 cup (227g)**

Amount per serving

Calories **280**

	% Daily Value*
Total Fat 9g	**12%**
Saturated Fat 4.5g	**23%**
Trans Fat 0g	
Cholesterol 35mg	**12%**
Sodium 850mg	**37%**
Total Carbohydrate 34g	**12%**
Dietary Fiber 4g	**14%**
Total Sugars 6g	
Includes 0g Added Sugars	**0%**
Protein 15g	
Vitamin D 0mcg	0%
Calcium 320mg	25%
Iron 1.6mg	8%
Potassium 510mg	10%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Nutrient Information Lists

Menu Item	Calories	Total Fat (g)	Cholesterol (mg)	Total Carbohydrate (g)	Dietary fiber (g)	Sugars (g)	Protein (g)
Chicken Burrito (Chipotle)							
12" flour tortilla	320	9	0	50	3	0	8
4 oz chicken	180	7	125	0	0	0	32
4 oz white rice	210	4	0	40	1	0	4
4 oz pinto beans	130	1.5	0	21	8	1	8
2.5 oz fajita vegetables	20	0	0	5	1	2	1
3.5 oz tomato salsa	25	0	0	4	1	1	0

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Carbohydrate Food Lists

These food lists may be helpful in estimating carbohydrates when you do not have a food label or other resource available. Remember that each choice is only an estimate of carbohydrate content.

Starches (15 grams carbohydrate each choice)

- ½ small bagel or ¼ large bagel (1 oz)
- 1 slice bread (1 oz)
- ½ cup cooked beans or lentils
- ½ cup cooked cereal
- ¾ cup dry cereal, unsweetened
- ½ English muffin
- 20 thin French fries
- ½ hamburger or hot dog bun
- 1 pancake (4 inches across)
- ⅓ cup cooked pasta
- 3 cups popcorn
- ⅓ cup cooked rice or quinoa
- 6 saltine crackers
- 1 (6-inch) tortilla
- 13 tortilla chips (1 oz)
- 1 waffle (4 ½ inches)

Starchy Vegetables:

- ½ cup corn or green peas
- 1 small potato
- ½ cup mashed potato, sweet potato, or yam
- 1 cup winter squash (acorn, butternut, pumpkin)

Fruits (15 grams carbohydrate each choice)

- 1 small (4 oz) apple
- 8 dried apricot halves
- 1 (4-inch) banana
- ¾ cup blueberries
- ½ cup canned fruit, in juice
- 2 Tbsp dried fruit
- 17 small grapes
- ½ cup kiwi, sliced
- 1 cup cubed melon (cantaloupe or honeydew)
- 1 medium (5 ½ - 6 ½ oz) nectarine, peach, orange
- ¾ cup fresh pineapple
- 1¼ cup strawberries
- 1¼ cup watermelon

Milk and Yogurt (12 grams carbohydrate each choice)

- 1 cup milk
- 1 cup sweetened soy milk
- 1 cup plain nonfat or low-fat yogurt

Sweets, or "Other Carbohydrates" (15 grams carbohydrate each choice)

- 1 small (1¼- inch square) brownie, unfrosted
- 3 small sugar-free cookies
- 1 (2-inch square) piece cake, unfrosted
- ½ cup sugar-free pudding
- ½ cup ice cream, sorbet, or sherbet
- 1 (3 oz) fruit juice bar
- 5 vanilla wafers

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Low-carbohydrate food groups

Non-starchy vegetables
Include vegetables in your diet every day. Remember to count starchy vegetables (such as potatoes, corn, and peas) as carbohydrate.

- Artichokes
- Asparagus
- Beets
- Broccoli
- Carrots
- Cauliflower
- Cucumber
- Eggplant
- Green beans
- Lettuce, greens
- Mushrooms
- Onions
- Peppers
- Radishes
- Spinach
- Tomato
- Water chestnuts
- Zucchini

Meats and other proteins
Choose lean protein sources more often. Try to eat protein foods with your meals.

- Chicken or turkey
- Cheese
- Cottage cheese
- Eggs
- Fish
- Jerky
- Lean beef, lamb, or pork
- Meatless breakfast "sausage" patties
- Peanut butter
- Tofu or tempeh

Fat
Eat more fat as unsaturated fat, which comes from non-animal sources like avocado, olives, nuts, and seeds.

- Avocado
- Bacon
- Butter
- Coconut milk
- Cream cheese
- Margarine
- Mayonnaise
- Nuts
- Oil
- Olives
- Peanut/nut butter
- Salad dressing
- Seeds

"Free foods"
These foods contain less than 5 grams carbohydrate per serving. Limit "free foods" to 3 servings per day.

- ¼ cup salsa
- 1 Tbsp low-fat sour cream
- 2 Tbsp whipped topping
- 1 sugar-free hard candy
- 2 tsp light jam or jelly
- Sugar-free gelatin
- 1 Tbsp honey mustard or ketchup
- Vinegar or lemon juice
- 1 large dill pickle
- 1 Tbsp fat-free cream cheese
- Diet soda, diet beverage
- 4 tsp sugar-free coffee creamer

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Meal Planning for Type 1 Diabetes

This activity will help you identify which foods and beverages contain carbohydrates and let you practice calculating insulin doses for meals and snacks.

Directions for Foods List:

- Start by writing down all of your normal foods and drinks. It may be helpful to think of this like a grocery list: write down all of the individual items you eat and drink during a normal week.
- Use the Calorie King book or any of the electronic resources to find the carbohydrate content of each item on your list.
- Once complete, keep this list as a reference guide for carbohydrate counting.

Directions for Sample Menu Plans:

- Write down breakfast, lunch, and dinner meals for three days. Include foods and drinks that you normally eat and drink. If you eat at restaurants often, include a meal from your favorite restaurant.
- Use your foods list, Calorie King book or any of the electronic resources to count the total carbohydrate content of meals and snacks.
- Use your insulin to carbohydrate ratio to calculate the amount of insulin needed for each meal and snack.

Helpful Information for this Activity:

Your Insulin to Carbohydrate Ratio: _____ units of insulin per _____ grams carbohydrate

Aim for _____ grams of carbohydrate per meal.

Children should consume at least 130 grams of carbohydrate per day for brain function.

Foods list

Food Name	Amount	Grams of Carbohydrate per Amount Listed

Menu day 1

Insulin to Carbohydrate Ratio: _____ units of insulin per _____ grams carbohydrate

Food and Drink *List each item separately*	**Amount**	**Grams of Carbohydrate**	**Insulin Dose <u>Per Meal or Snack</u>**

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Diabetes plate method

The diabetes plate method can help you control portion sizes of all foods, including carbohydrates, throughout the day.

¼ plate: Protein

Keep lean protein to 3-4 oz. portions.

- Choose loin or round cuts of meat
- Include fish twice a week
- Remove skin from chicken

Examples:

- chicken or turkey
- lean beef
- fish
- beans
- lentils
- eggs
- tofu

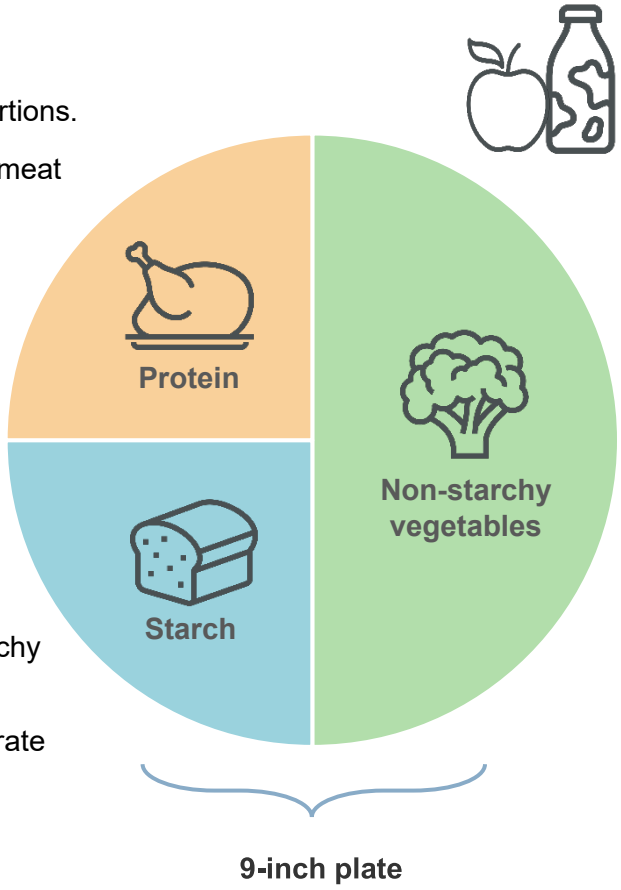
¼ plate: Starch

Keep grains, starches and starchy vegetables to ¼ of your slate.

- This is a controlled carbohydrate
- Choose whole grains for more fiber

Examples:

- whole-wheat bread
- bagel
- tortilla
- pita bread
- waffle
- pancake
- pasta
- brown rice
- unsweetened cereal
- potato
- corn
- peas



½ plate: Non-starchy Vegetables

Fill half your plate with non-starchy vegetables. These items are:

- Low in calories
- Low in fat
- High in fiver
- Slower to digest and keep you full longer

Examples:

- salad
- green beans
- tomatoes
- carrots
- broccoli
- asparagus

Basic Exercise Guidelines

Check Blood Glucose (BG)

before exercise

(BG must be greater than 100mg/dL to begin exercise)

If 101 - 200 mg/dL

10-15 gram carb snack WITHOUT INSULIN

If 201-350 mg/dL

No snack needed

If greater than 350 mg/dL

Check for ketones

No ketones

OK to exercise, no snack needed

Ketones present

Do not exercise. Rest, drink water, give correction insulin

Monitor BG every ½ - 1 hour while exercising

Examples of snacks for exercise (all 15 grams of carbohydrate):
1 small piece of fruit
1 small granola bar
8 oz Gatorade or milk
3 graham cracker squares
4 peanut butter/cracker sandwiches (packaged, ex: Ritz, Keebler)

Diabetes and Exercise T1D Toolkit

Type 1 diabetes apps and resources

These apps and the information therein are neither associated with nor endorsed by UC Davis or the University of Calfornia. Any information of guidance provided within the app is solely that of the app developer. Use at your own risk. Always check with your doctor if you have questions or concerns about your health and wellness.

MyUCDavisHealth

Download the **MyUCDavisHealth** app to communicate securely with your diabetes care team, access test results, request prescription refills, and manage your appointment

BG management

MySugr: Integrates CGM with Accuchek Guide. Health coach option. **$**

Nutrition

Calorie King: Look up carb counts in this accurate nutrition database

Medical Alert

We recommend that people with diabetes always wear a medical alert on them.

Laauren's Hope: https://www.laurenshope.com/

StickyJ Medical ID: https://www.stickyj.com/

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How to Help with Needle Related Procedures

Helping a child with a needle related procedure is not always easy. But there are ways to make it less scary, while also giving the child a sense of control.

Some tips to keep in mind:

- Children are sensitive to their space and the emotions of others. Aim to stay positive.
- Let your child know what to expect when they need their procedure. Explain honestly why it is needed.
- Have your supplies ready to go before doing your child's procedure.
- Create a routine so your child knows what will happen each time.
- When possible, give choices. For example, your child can choose a comfort position (see below), count to three before the poke, watch the poke, or focus on something else, like a video.
- For younger children, there are other ways to help your child focus on something else. You can sing a song, blow bubbles, look at an "I Spy" book, or make up a story.
- To reduce the feeling of the poke, try putting ice or a heat pack where the needle will go before cleaning the skin.
- Ask your Certified Child Life Specialist for more information about medical play.

Comfort Positions




If you are interested in support from a Certified Child Life Specialist, please see the contact information at ucdavis.health/childlife.

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Helpful Diabetes Websites

The following websites contain a lot of information. Topics include Diabetes education, recipes, peer-to-peer support, tip sheets, information on managing Diabetes at school, Diabetes support targeted specifically towards parents, kids, and teens, opportunities for community involvement, and much more.

- **American Diabetes Association diabetes.org**

  Diabetes basics, Parents and Kids section, etc.

- **Diabetes Research Institute Foundation diabetesresearch.org**

  Support for parents, Parents Empowering Parents: "The PEP Squad".

- **Diabetes Youth Families dyf.org**

  Many resources, camp information, peer programs. "Brave Buddies" online support group for parents of children with Type 1 Diabetes.

- **International Diabetes Federation idf.org**

  Diabetes information, support, and resources in multiple languages.

- **Juice Box Podcast – Type 1 Diabetes juiceboxpodcast.libsyn.com/**

  Free online blog and stories about families managing Type 1 Diabetes.

- **Juvenile Diabetes Research Foundation jdrf.org**

  Get connected with an adult JDRF volunteer who has diabetes themselves or has a child with diabetes.

- **Kids Health kidshealth.org**

  Diabetic facts and myths, dealing with feelings, teen Diabetes Center, etc.

- **National Institute of Diabetes and Digestive and Kidney Diseases niddk.nih.gov/health-information/diabetes**

  Information on Type 1 and Type 2 Diabetes.

If you are interested in support from a Certified Child Life Specialist, please see the contact information at ucdavis.health/childlife.

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How to Help Your Child Cope with Diabetes

Younger age group: Infant to Pre-School

What to expect	Possible reactions to new diagnosis
▪ Look for people they can trust and will take care of their needs ▪ Fear strangers and new, unfamiliar spaces ▪ Want consistency of caregivers and a daily routine ▪ Are in the process of making a bond and attachment with caregiver(s) ▪ Learn about the world through their senses ▪ Like to do things by themselves ▪ Use play to express themselves, learn, and gain control ▪ Increase verbal skills, may associate specific words with pain (i.e., "Owie")	▪ Increase in infant stress responses: looking away, arching back, changes in activity level ▪ Behavior changes such as clinginess to parents, increased stranger anxiety, increased protest of cares (i.e., biting crying, kicking) ▪ Possible regressive behaviors such as changes in eating, sleeping, toileting, or strong reactions to pain ▪ May see diabetes cares as a punishment or consequence for being "bad"

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Older age group: School-Age to Teenage

What to expect	Possible reactions to new diagnosis
▪ Importance of family and friends ▪ Recognition and success may be important to your child ▪ Begin to desire privacy and independence in daily tasks ▪ Learn best with clear, simple explanations ▪ Can understand basic body parts and how they work ▪ Have a fear of the unknown and fear of pain	▪ May know others with diabetes which can impact their view and understanding ▪ May not understand diabetes well ▪ May feel like they caused diabetes, may need reminders that it is not their fault ▪ Can have a wide variety of emotional reactions ▪ May initially become more stressed as they realize that diabetes is a life-long diagnosis

Ways to support your child with Diabetes Management

- Children watch cues from their caregivers. Try to remain calm and confident when performing diabetic cares.
- Have materials ready before checking you child's blood sugar, giving insulin, and/or changing the infusion set.
- Help give your child simple explanations before doing diabetes cares and give them a warning before diabetes cares such as "before lunch" or setting a 5-10 minute timer.
- Create a consistent routine so your child knows what to expect and try to not do diabetes cares in the child's bed so this can remain a "safe space".
- Help your child comfort themselves with favorite comfort items and/or object to suck on (i.e., pacifier).

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- Provide appropriate choices such as where your child wants the blood sugar check or insulin injection. As they get older encourage them to participate in their cares, such as pushing on the syringe or giving the injection to their own body .
- Give your child appropriate “jobs” such as washing hands, holding a band aid, and choosing a distraction activity. As they get older, jobs can include carb counting.
- Use distraction techniques to help your child focus on something else (i.e., sing a song, listen to music, provide light-up toys, play peek-a-boo, blow bubbles, take deep breaths, look at a picture book).
- Use Comfort Positions (see How to Help with Needle Related Procedures document in binder).
- Allow opportunities for safe medical play such as acting out diabetes cares on a stuffed animal. This can help a child understand their cares better and help you see any misconceptions the child may have.
- Read books with your child about emotions and care routines to support expression of feelings.
- Ask your child to explain their understanding of steps and why diabetic cares need to happen.
- Help your child find ways of sharing their diagnosis with friends, classmates, and family to ease transition back to school and in the community (I.e., “My body needs help turning my food and drink into energy so I can still do fun things!”)

Welcome to UC Davis Pediatric Diabetes Clinic

Glassrock Building, 2521 Stockton Blvd (3rd Floor)-Free Parking is available in the lot southeast of the Glassrock Building.

Contacting clinic: M-F 8-5: (916) 734-3112. After hours, weekends and holidays: 916-734-2011. Ask hospital operator to page the "pediatric endocrinologist" on-call.

Immediately following discharge

- You will get regular phone calls from our team to discuss blood sugars and adjust insulin if needed. Make sure we have updated contact info and the best way to reach you.

To assist you and your child with your transition back home and provide ongoing diabetes care/education/support, your child will have three diabetes clinic appointments scheduled after leaving the hospital:

First diabetes clinic appointment

The first diabetes clinic appointment will be within the next few weeks.

- This first appointment will be in our clinic with the pediatric endocrinologist or physician's assistant and the clinic social worker.

Second and third appointments

The second and third appointments may be scheduled as in clinic or as Video Visits.

- The second appointment will be a group class scheduled with a diabetes nurse.
- The third visit will take place 1-2 weeks after your 2nd appointment and is with the pediatric endocrinologist or physician's assistant and dietitian.

Bring your binder, blood glucose diary, and diabetes devices (ex: glucose meter, Continuous Glucose Monitor) to each in-person appointment and to every appointment in the future.

You'll see the entire team during these first visits. Our team consists of the following and below is a brief description of how we can help assist you:

Endocrinologist: Your diabetes doctor will make insulin updates to match changes needed with your meal plan and blood sugars, address your labs, and clarify your type of diabetes.

Dietitian: Carb counting clarification, meal plan adjustments, label confusion, snack/meal planning, timing of meals, exercise/sports nutrition.

Nurse educator: Our nurse educator will review important information about diabetes management, and answer questions about your child's diabetes needs.

Social worker: Our social worker will provide support, assessing your child's mood and coping following their diagnosis. Social work can also provide info on the following: support groups, summer camps, and information on returning to school and work. They can also answer questions about applying for financial assistance or medical insurance if needed.

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Diabetes blood glucose diary

Name _____ **Month and year** _____

Date	Breakfast					Lunch					Dinner					Bedtime						2 a.m.
	Blood Glucose (BG) --- TIME	Carbohydrates (Carbs)	Insulin (units) for BG	Insulin (units) for Carbs	**Total Insulin Dose**	BG --- TIME	Carbs (grams)	Insulin (units) for BG	Insulin (units) for Carbs	**Total Insulin Dose**	BG --- TIME	Carbs (grams)	Insulin (units) for BG	Insulin (units) for Carbs	**Total Insulin Dose**	BG --- TIME	Carbs (grams)	Insulin (units) for BG	Insulin (units) for Carbs	**Total Insulin Dose**	Long-Acting Insulin Dose (units)	BG
Sun.																						
Mon.																						
Tues.																						
Weds.																						
Thurs.																						
Fri.																						
Sat.																						

Hypoglycemic (Low Blood Glucose) Events

Date/ Time	BG	Treatment (i.e., 4 oz. juice)	Follow-up BG

Date/ Time	BG	Treatment (i.e., 4 oz. juice)	Follow-up BG