Lilly DIABETES

Personal solutions for everyday life.

A parent/caregiver guide

Carbohydrate Counting for Children with Diabetes

Lilly

Answers That Matter.

A parent/caregiver guide

Carbohydrate Counting for Children with Diabetes

Diabetes Care and Education (DCE), a dietetic practice group of the Academy of Nutrition and Dietetics, promotes quality diabetes care and education. DCE is comprised of members of the Academy of Nutrition and Dietetics who are leaders in the field of medical nutrition therapy (MNT) and care of people with diabetes. Their expertise is widely recognized throughout the diabetes community. We are pleased to have had the opportunity to collaborate with this group of professionals on the creation of Lilly's *Carbohydrate Counting for Children with Diabetes*.

We hope you find it a valuable resource.

Contents

A meal plan to fit your child's health goals should be individualized according to your child's needs. Talk with your registered dietitian or healthcare provider for a customized meal plan.

What Are Carbohydrates (Carbs)?

Carbs are found in many of the foods your child eats. They are important nutrients and supply the glucose (blood sugar) that your child's body and brain need to work at their best. Glucose is the form of carb that the body's cells use as a source of energy.

Your child's body uses carbs for energy to help him or her grow, walk, play and do other physical activities. Also, your child's brain must have glucose to develop, learn and respond.

Carbs = Energy

What Foods Have Carbs?

Fruits, vegetables, milk, yogurt, rice, cereals, bread and other grains all have carbs and give your child important nutrients, such as vitamins, minerals and fiber.

Though they don't offer as many nutrients, snack foods, such as pretzels, chips and popcorn have carbs. Sweets, including cakes, candy and cookies, also contain carbs.

Why Do You Need to Know About Carbs When Your Child Has Diabetes?

1st Your child's body turns carbs into blood sugar.

2nd Your child's body uses insulin to move blood sugar into the body's cells where it is used for energy. When your child has type 1 diabetes, his or her body doesn't make insulin.

3rd Balancing insulin with carbs at each meal and snack can help keep your child's blood sugar closer to target levels.

The American Diabetes Association generally recommends the following blood sugar goals for people with diabetes:

A1C and Blood Sugar Targets by Age			
Test	Toddlers and Preschoolers (<6 years)	School Age (6–12 years)	Teens (13–19 years)
A1C (is your child's average blood sugar over the past 2–3 months)	Below 8.5% (but above 7.5%)	Below 8%	Below 7.5%
Blood sugar (before meals)	100–180 mg/dL	90–180 mg/dL	90–130 mg/dL
Blood sugar (before bedtime/overnight)	110–200 mg/dL	100–180 mg/dL	90–150 mg/dL
Talk with your healthcare provider to set blood sugar targets that are right for your child.			

How Do You Count Carbs?

Carb counting helps children with diabetes plan their meals and snacks. Some people with diabetes count *carb choices* and others count *grams of carbs*.

1 carb choice = 15 (g) of carbs

This guide uses grams of carbs in counting carbs because it is more precise. If your family was taught to use carb choices for meal planning, the table below will help you convert grams of carbs to carb choices.

Grams of Carb	Number of Carb Choices
0 to 5 g	Do not count
6 to 10 g	½ carb choice
11 to 20 g	1 carb choice
21 to 25 g	1½ carb choice
26 to 35 g	2 carb choices
36 to 40 g	2½ carb choices
41 to 50 g	3 carb choices
51 to 55 g	3½ carb choices
56 to 65 g	4 carb choices
66 to 70 g	4½ carb choices
71 to 80 g	5 carb choices
81 to 85 g	5½ carb choices
86 to 95 g	6 carb choices

There are 2 methods of meal planning using carb counting:

1. Following a **consistent** carb meal plan with a consistent amount of insulin.
2. **Changing** carb intake with an adjustable amount of insulin.

What Is a Consistent Carb Meal Plan?

With this method of meal planning, your child eats a set amount of carbs at each meal and snack and takes a set amount of insulin. Many families start with this method of meal planning.

How Many Carbs Does Your Child Need to Eat?

Your registered dietitian (RD) can help you decide how many carbs your child needs. The amount depends on your child's age, gender and activity level. Each child has different needs. The carb amounts in the table below are general examples. If your child is physically active, he or she may need more carbs.

Carb Amounts by Age			
Boys	**<5 years** 30 to 45 grams of carbs at each meal	**5–12 years** 45 to 60 grams of carbs at each meal	**Teens** 60 to 75+ grams of carbs at each meal
Girls	30 to 45 grams of carbs at each meal	45 to 60 grams of carbs at each meal	45 to 75 grams of carbs at each meal
Snacks, if needed, are usually 15 to 30 grams of carbs. Talk to your RD or healthcare provider to help you decide on the amount of carbs that is right for your child at each meal and snack.			

Sample of an approximately 45 gram carb meal:

1/2 cup mashed potatoes
1/2 cup canned peaches
1 cup skim milk*

Add these to complete the meal:

2–3 ounces of chicken
1 green salad
1–2 tablespoons of dressing

*Children younger than 2-years-old should drink whole milk.

How Do You Adjust Insulin for Changing Amounts of Carbs?

With this method of meal planning, your RD or healthcare provider helps you decide how much rapid- or short-acting insulin (mealtime insulin) your child needs to cover a certain amount of carbs. That amount is called an **insulin-to-carb ratio**. Learning to adjust insulin for changing amounts of carbs gives your child the most flexibility with eating, but requires the most skill.

In addition, your child will need to take extra insulin for high blood sugar. Your RD or healthcare provider can help you decide how much rapid- or short-acting insulin your child needs to lower high blood sugar to target level. That amount is called a **blood sugar correction factor**.

What Is the Right Insulin-to-Carb Ratio for Your Child?

Insulin-to-carb ratios vary from child to child. As your child grows, his or her insulin-to-carb ratio will change. For example, a toddler may use an insulin-to-carb ratio of 1/2 to 1 unit of rapid- or short-acting insulin for 30 to 45 grams of carbs, while a teenager may use 1 unit for each 7 to 15 grams of carbs. Weight, activity level and gender are other factors that affect what insulin-to-carb ratio a child needs. Talk with your RD or healthcare provider to help you decide on an insulin-to-carb ratio that is right for your child.

As you monitor the effects of foods on your child's blood sugar, you may notice some carbs cause your child's blood sugar levels to rise more than you expect. If this happens a number of times for the same food, your RD or healthcare provider may recommend that you give more insulin or provide a smaller serving of that food.

Carbs are an important part of a healthy diet. With type 1 diabetes, balancing insulin with carbs and getting most of your carbs from fruits, vegetables, whole grains and low-fat milk and yogurt are key. Learn how to follow a consistent carb meal plan or adjust insulin for carbs to help keep your child's blood sugar close to target levels. Your RD can help you decide which meal planning method is best for your family.

Your RD or healthcare provider will fill in this table for you. He or she will help you decide on a premeal blood sugar target, insulin-to-carb ratio and blood sugar correction factor that are right for your child.

Example of How to Determine an Insulin Dose Using an Insulin-to-Carb Ratio and Blood Sugar Correction Factor

Insulin-to-Carb Ratio = 1 unit of rapid- or short-acting insulin for each ____ **grams** of carbs

Blood Sugar Correction Factor = 1 unit of rapid- or short-acting insulin for every ____ **points** (mg/dL) blood sugar level is over target of ____ **mg/dL**

You figure the dose in a 3-step process:

1st Step: Insulin-to-Carb Ratio

Determine how much rapid- or short-acting insulin is needed for the amount of carbs you are eating.

carbs = _____ grams

Divide the total grams of carbs in the meal by your insulin-to-carb ratio:

____ grams divided by ____ grams = ____ units

2nd Step: Blood Sugar Correction Factor

Determine how much rapid- or short-acting insulin is needed to lower your blood sugar to target level.

Premeal blood sugar = ____ mg/dL | Target blood sugar = ____ mg/dL

Subtract the target blood sugar from the premeal blood sugar, then divide by the blood sugar correction factor of _____:

_____ mg/dL (premeal blood sugar)- _____ mg/dL (target) = _____

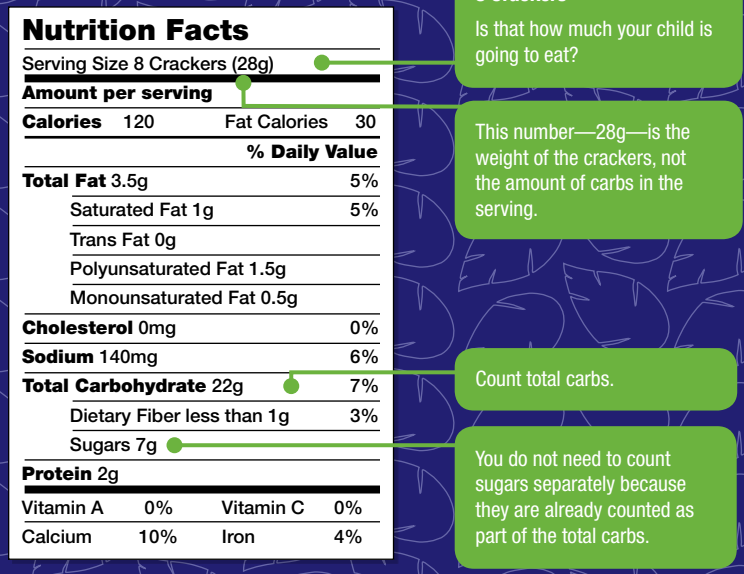
_____ divided by ____ (blood sugar correction factor) = ____ units

3rd Step: Total Dose

Add the number of units from the 1st and 2nd steps together to get the total dose.

Total Dose = ____ + ____ = ____ units (amount of rapid- or short-acting insulin needed for carbs+high blood sugar)

Be a Carb Detective—Read Food Labels



Fiber:

If the item has more than 5 grams of fiber, subtract 1/2 the amount of fiber from the total carbs. These crackers have only 1 g of fiber, so you do not subtract it.

Since some foods do not come with labels, you can often find nutrition information on food manufacturers' or restaurants' websites.

What's a Portion Size?

Portion size is the amount of food your child actually eats. Your child's portion size may be smaller or larger than the **serving size** listed on the food package. It may be one serving, half a serving or even 2 servings! Toddlers may eat half a serving or less, while teens may eat 2 or more servings. Carefully check the Nutrition Facts label to estimate the amount of carbs your child actually eats.

Did you know that portion sizes keep getting bigger and bigger? It is easy to lose touch with what a normal serving size is. Also, the larger the portion offered, the more people tend to eat!

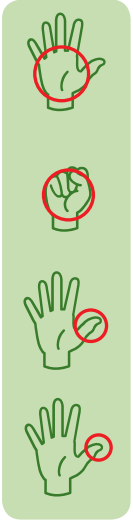
Portion Sizes – Past and Present

20 years ago Today

20 years ago Today

A Handy Guide for Portion Sizes

When eating out or away from home, it is helpful to use the hand guides to estimate **portion sizes** and carbs. Practice can help you learn the **portion sizes** and carb amounts that your child eats.



Your palm, not including fingers and thumb, is about 3 ounces of cooked and boneless meat.

A fist is about 1 cup or about 30 grams of carbs for foods such as ice cream or cooked cereal.

Your thumb is about 1 tablespoon or 1 serving of regular salad dressing, reduced-fat mayonnaise or reduced-fat margarine.

Your thumb tip is about 1 teaspoon or 1 serving of margarine, mayonnaise or other fats such as oils.

These portion estimates are based on a woman's hand size. Hand sizes vary. Many children have smaller hands and men have larger hands. Portion estimates will change based on the size of the hand you use. Measuring or weighing foods is the most accurate way to figure out a portion size.

What Is Healthy Eating for Children with Diabetes?

Healthy eating for children with diabetes is the same as healthy eating for all children.

As a parent or caregiver, it's your job to offer healthy foods at scheduled times. It may take many tries before a child eats a new food, so continue to offer healthy foods.

Your child needs to eat enough calories so that he or she can grow, develop and gain weight at a healthy rate. It's also important to serve foods from all the food groups, including lower-fat, higher-fiber foods.

Too little or too much?

Children often get too much of these:

Total fat
Saturated fat

Some children don't get enough of these:

Dietary fiber
Vitamin C
Vitamin E
Calcium

For enough vitamins, minerals and fiber, aim for **1 to 3** cups of vegetables and **1 to 2** cups of fruits a day.

For enough calcium, aim for **2 to 3** servings of dairy a day.

Toddlers need the smallest number of servings and teens need the largest.

Serving fruits and vegetables of all colors also provides important vitamins and minerals needed for good health.

Most foods can fit in a healthy meal plan. It all depends on:

- How much
- How often
- Other foods on the menu

Planning Healthy Meals and Snacks

A Healthy Meal Plan:

- focuses on whole grains, fruits, vegetables and fat-free or low-fat milk and milk products
- includes lean meats, poultry, fish, beans, eggs and nuts
- is low in saturated fats, trans fats, cholesterol, salt (sodium) and added sugars

When planning your child's meals and snacks, make sure to offer a variety from all the food groups.

What your child eats may help manage blood sugar and can help him or her stay healthy. The food your child eats may affect the health of his or her heart, bones and brain.

Current guidelines also suggest at least 60 minutes of physical activity every day or most days of the week.

Physical activity can lower blood sugar. Talk with your healthcare provider about your child's exercise or sports activities and how to lower insulin or increase carbs to reduce the risk of having low blood sugar.

Examples of Carb Amounts in Foods

For more information on carb amounts, see *Choose Your Foods: Exchange Lists for Diabetes* or *Official Guide to Diabetes Exchanges* by the Academy of Nutrition and Dietetics and the American Diabetes Association. Available at: eatright.org or store.diabetes.org

It is important to read food labels for the exact carb amount in a food item. Below are some common serving sizes.

Bread, Cereal, Grain, Pasta, and Rice	One Serving = 15 g Carbs
Breads: Bagel (⅓ large or 1 oz) Biscuit (2½ inches) Bread (1 slice or 1 oz) Bun, hamburger/hot dog (½ bun or 1 oz) Crackers (4 to 6) English muffin (½) French toast (1 slice) Melba toast (4 slices) Muffin (¼ or 1 oz) Oyster crackers (20) Pancake or waffle (4 inches) Stuffing (⅓ cup)	Tortilla (6 inches) **Cereals:** Bran, flakes (½ cup) Cold cereal, unsweetened (¾ cup) Cold cereal, sugar-frosted (½ cup) Granola (¼ cup) Hot cereal, oatmeal, grits (½ cup) Puffed cereal (1½ cups) **Grains (cooked):** Barley (⅓ cup) Couscous (⅓ cup) Pasta (⅓ cup) Rice, white or brown (⅓ cup)
Starchy Vegetables	**One Serving = 15 g Carbs**
Corn/peas (½ cup) Corn on the cob, large (½ cob) Mixed vegetables (1 cup) Potato, baked (1 small, 3 oz)	Potatoes, mashed (½ cup) Squash, acorn, butternut (1 cup) Sweet potato (½ cup)
Beans, Peas, and Lentils	**One Serving = 15 g Carbs**
Baked beans (⅓ cup) Beans, peas, lentils, cooked (½ cup) Garbanzo beans, cooked (⅓ cup)	Hummus (⅓ cup) Lima beans (⅔ cup) Refried beans, canned (½ cup)
Nonstarchy Vegetables	**One Serving = 5 g Carbs**
In general, 1 serving = 1 cup raw, ½ cup cooked, ½ cup juice or ½ cup tomato sauce Beans (wax or green), bean sprouts, beets, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, cucumber, eggplant, greens, lettuce, mushrooms, okra, onions, pea pods, peppers, radishes, rutabaga, spinach, tomatoes or zucchini.	

It is important to read food labels for the exact carb amount in a food item. Below are some common serving sizes.

Note: Meat/poultry/fish usually do not have carbs, but if they are prepared with sauces or breaded, they may contain carbs. Check the Nutrition Facts on the package or jar. Plan to serve lean meat and meat substitutes each day; amounts needed vary by age. Also, fats do not contain carbs, but eating too much fat may add extra calories to your child's meal plan.

Fruit	One Serving = 15 g Carbs
Apple or orange (1 small) Apricots (4 whole or 8 dried halves) Banana, extra small (1 or 4 oz) Blueberries (¾ cup) Canned fruit in juice (½ cup) Cantaloupe (1 cup cubed) Cherries (12) Grapes, small (17) Grapefruit (½) Juice, unsweetened (½ cup)	Juice, grape (⅓ cup) Kiwi (1 or 3½ oz) Papaya (1 cup cubed) Pear or peach (1 medium) Pineapple (¾ cup) Plum (2 small) Raisins or dried cherries (2 tbsp) Raspberries (1 cup) Strawberries (1¼ cup) Watermelon (1¼ cup)
Milk	**One Serving = 12–15 g Carbs**
Fat-free or reduced-fat soy or cow's (1 cup) Fat-free plain yogurt (⅔ cup)	Fat-free, artificially sweetened, flavored yogurt (⅔ cup)
Snack Foods	**One Serving = 15 g Carbs**
Animal crackers (8) Gingersnaps (3) Graham crackers (3 squares) Rice cakes (2)	Popcorn (3 cups) Pretzels (¾ oz) Snack chips (15–20) Vanilla wafers (5)
Sweets	**One Serving = 15–30 g Carbs**
One Serving = 15 g Carbs Brownie, unfrosted (1¼-in. square—1 oz) Cake, unfrosted (2-in. square—1 oz) Cookies (2 small, sandwich type) Doughnut, plain (1 small—1 oz) Fruit juice bars (1 bar—3 oz) Ice cream (½ cup) Jam/jelly (1 tbsp) Regular gelatin (½ cup) Sports drink (1 cup) Yogurt, frozen, fat-free (⅓ cup)	**One Serving = 30 g Carbs** Cupcake, small, frosted (1 ¾ oz) Doughnut, glazed (2 oz) Milk, chocolate (1 cup) Pie, pumpkin (⅛ pie) Regular pudding (½ cup) Sherbet (½ cup) Please note that these have more carbs: Pie, fruit, 2 crusts (⅛ pie is 45 g carbs) Sweet roll, 2 ½ oz (36 g carbs)

Combination Foods

Mixing It Up

How can you figure out how many carbs are in mixed foods such as salads, soups and casseroles?

Below are some examples to help you know what your child is getting.

1 carb choice = 15 grams of carbs

Food	Serving Size	Carbs
Casseroles	1 cup	30
Chili (beef and bean)	5 oz	45
Lasagna, meat	1 cup	30
Macaroni and cheese	1 cup	30
Hamburger	1 2-oz bun	30
Pizza, thin crust, cheese	¼ of a 12-inch pizza	30
Pot pie	1 7-oz pie	38
Spaghetti with meatballs	1 cup	30
Stew	1 cup	15
Taco (meat and cheese)	1 taco	15
Submarine sandwich	6-inch sub	45

Eating Out Tips

When dining out, choose meals that are within your child's meal plan. Some fast food restaurants provide "nutrition facts" brochures or offer information on their websites that you can use to look up the amount of carbs in meals. Practice measuring foods at home to learn how to estimate portion sizes in a restaurant.

Remember that you have options when eating out.

- Try different restaurants.
- Look over the whole menu and then select items that meet your child's carb needs.
- Ask for your family's foods to be prepared in another way—see tips below.

Some of the things to think about when eating out:

- Portion sizes are often large.
- You may get more fat and sodium (salt) than you need.
- Calories add up quickly.
- You may not get as many fruits and vegetables.
- You often won't get much fiber.

Be a role model for your kids. Choose healthy foods, too! If you want your kids to make good choices, you need to make them, too.

Here are some tips:

Browse the menu for dishes cooked by these healthier methods:

Steamed	Poached
Grilled	Red Sauces (instead of white sauces)
Roasted	
Broiled	
Baked	Lightly sautéed

Ask for what *you* want for your child:

- Nutrition information
- Description about how the food is cooked
- Salad dressing on the side (in order to use less than the whole serving)
- Smaller or half portions
- Less sauce in general
- Extra veggies on the side
- Skip appetizers, bread and butter

Best Choices When Eating Out

Here are some suggestions of items to choose when eating out.

Remember also that when eating out, your child can share or ask for a box/bag to take home half of the food for the next meal!

Chinese: Choose stir-fried meat, chicken, fish or tofu instead of breaded and fried meat choices. Choose lots of vegetables and brown rice if available. Try steamed dumplings instead of fried egg rolls.	**Hamburger Fast Food:** Order grilled plain hamburger, chicken burger or veggie burger sandwich; salads with grilled chicken and low-fat dressing; baked potato with chili or broccoli and chives. When choosing a dessert, try applesauce, apple dippers, fruit cup, yogurt parfait or small cone. For breakfast, try egg biscuit or egg English muffin and avoid the sausage or bacon.
Italian: Try pasta with tomato (marinara) sauce and vegetables; baked/broiled/grilled/poached fish/chicken/veal in appetizer-size portions; salads with dressing on the side. For dessert, try a small Italian ice.	**Fried Chicken Restaurants:** Select BBQ chicken sandwich; chicken breast (skinless, no breading); choose green beans, mashed potatoes or corn on the cob as sides.
Mexican: Choose soft tacos and small burritos (not fried) with lots of vegetables; vegetarian refried beans; GO EASY on cheese and choose small portions of guacamole and sour cream. GO EASY on chips.	**Mexican Fast Food:** Select grilled chicken, beef or fish tacos or small-size burrito items with soft tortillas; order food that includes fresh salsa. AVOID crispy (fried) shells and GO EASY on chips.
Pizza: Choose thin crust; try to limit meat toppings to only one kind or vegetarian; GO EASY on stuffed crust; eat a salad if available or if eating at home. Try to choose lower-fat toppings like ham, chicken, vegetables, lower-fat or less cheese.	**Sandwich Restaurants:** Choose small or regular-size turkey breast or veggie sandwich on wheat roll and add extra vegetables; choose baked chips if you decide to have chips.
Note that foods in restaurants or fast food places are usually very high in sodium. Try to choose low-fat milk or water instead of soda or juice when eating out.	

School Lunch Made Easy

Your child may be more interested in visiting with friends or going to recess than eating lunch. You may find your child has more time to eat lunch when at home than at school, so extra planning is needed for school lunch. Most children have the option of packing a lunch or eating school lunch. Your RD can help you calculate the carbs on your child's school menu to help you get started. Until you get an idea of what your child actually eats at school, you might ask him to bring home anything he doesn't eat from his packed lunch. You can also put notes on each food item with the grams of carbs. This will help your child, teacher, school nurse or cafeteria aid to figure out how many carbs your child is eating at school. Many schools have the nutrition information for the school lunch menu. Ask to see if this is available.

School Lunch Items	Grams of carbs
Beef burrito	45
Corn dog	23
French fries, 2 oz	30
Grilled cheese sandwich	30
Hamburger with bun	30
Hot dog with bun	23
Taco, hard or soft, 6 inch	15

Check with your RD or school food service director for accurate carb amounts.

Calculating Carbs in Lunch Foods	
School Lunch Items	**Grams of carbs**
6 baked chicken nuggets	15
½ cup mashed potatoes	15
½ cup green beans	5
½ cup canned fruit in natural juices	15
1 carton 2% white milk	12
	Total = 62 grams of carbs
Packed Lunch from Home	**Grams of carbs**
½ sandwich, meat/cheese	15
1 oz bag chips	15
15 small grapes	15
2 sandwich cookies	15
Bottled water	0
	Total = 60 grams of carbs

Check with your RD or school food service director for accurate carb amounts.

Snack Time

Most growing children need snacks whether they have diabetes or not. Snacks can help prevent low blood sugar and between-meal hunger and may be necessary to help your child grow. A child taking multiple daily injections or using an insulin pump may need to give insulin to cover carbs eaten at snack time. Typical snacks range from 0 to 30 grams of carbs for the school-age child. Teenagers may need more carbs.

Sample Snack Ideas: Always read food labels for "Total Carbohydrate" to see grams of carbs in your child's snack item.

0–5 grams of carbs (no additional insulin is usually needed):
1 string cheese
1 sugar-free gelatin
1 oz beef jerky
¼ cup cottage cheese
1 hard-boiled egg
1 oz nuts

15 grams of carbs:
4 peanut butter sandwich crackers
3 graham cracker squares
1 small granola bar
¾ oz of pretzels
1 packet fruit snacks
2 sandwich cookies
40 small fish crackers
1 small piece of fruit
5 vanilla wafers
8 animal crackers
3 cups air-popped popcorn

30 grams of carbs:
½ cup regular pudding (not sugar-free)
meat/cheese sandwich
1 cup unsweetened cereal with ¾ cup low-fat milk

Check with your RD or school food service director for accurate carb amounts.

How to Work Parties into Your Child's Meal Plan

Your child does not need to miss a party! It will just take a little more planning to find out what will be served and when. You will also want to know what types of activities are planned. Your child might need more food or less insulin if it is an active party. If it is a less active party centered around food, your child might need a little more insulin. It's a good idea to check blood sugar before and sometime during the party, if possible.

When Your Child Won't Eat

You may experience times when your child may not want to eat all of his or her carbs at a meal or snack. Your child may not be hungry, doesn't like a certain food or may be sick. You could try to offer a different or easier-to-eat food, such as a sandwich, cereal or milk with instant breakfast mix. If this is a regular issue, talk to your healthcare provider about the option of giving your child's rapid-acting insulin dose after a meal. This allows you to see how many grams of carbs your child actually eats before giving the insulin.

Sugar-Free and Fat-Free Foods

Be sure you know what you are getting!

Sugar-free foods can be part of a healthy meal plan in small amounts. Keep in mind that some of these foods still have carbs (which can be in the form of other sweeteners, such as sorbitol, isomalt and mannitol) that may affect your child's blood sugar levels.

Fat-free foods can also be included in healthy meal plans. Many lower-fat and fat-free foods may have extra sugar or carbs added, though.

My child can eat as much sugar-free food as he or she wants, right?

Not really...
Many sugar-free foods have calories, carbs and lots of fat. In fact, some sugar-free foods have the same amount of calories and carbs as non-sugar-free options. Therefore, make sure you read the labels!

Compare labels below. Notice that the regular ice cream has the same amount of carbs as the sugar-free ice cream.

Regular Ice Cream

Nutrition Facts

Serving Size 1 bar (42g)
Servings Per Container 6

Amount Per Serving	
Calories 120	Calories From Fat 60
	% Daily Value
Total Fat 7g	11%
Saturated Fat 4g	20%
Cholesterol 30mg	10%
Sodium 35mg	1%
Total Carbohydrate 13g	4%
Dietary Fiber 0g	0%
Sugar 13g	
Protein 2g	

Sugar-Free Ice Cream

Nutrition Facts

Serving Size 1 bar (49g)
Servings Per Container 6

Amount Per Serving	
Calories 120	Calories From Fat 70
	% Daily Value
Total Fat 8g	13%
Saturated Fat 6g	32%
Cholesterol 10mg	4%
Sodium 40mg	2%
Total Carbohydrate 13g	4%
Dietary Fiber 0g	2%
Sugar 4g	
Protein 3g	

Many foods come in sugar-free versions, such as gelatin, gum, hard candy, frozen pops, ice cream, chocolate and pudding. Always remember to count the carbs in these foods when planning your child's meals.

For More Information:

Please note that content in this booklet and the resources below are general guidelines. A meal plan to fit your child's health goals should be individualized according to your child's needs, so consult a registered dietitian for a customized meal plan.

Many health insurance plans pay for children with diabetes to see a registered dietitian. For more information, contact your insurance company to see if they provide reimbursement for these services.

Academy of Nutrition and Dietetics www.eatright.org

American Association of Diabetes Educators (AADE) www.diabeteseducator.org

American Diabetes Association www.diabetes.org

- **For kids** www.diabetes.org/living-with-diabetes/parents-and-kids/planet-d/

American Heart Association—Tips for Eating Out
www.heart.org/HEARTORG/General/Tips-for-Eating-Out_UCM_310131_Article.jsp#.T4Mf95IAboM

Diabetes Care and Education Practice Group www.dce.org

Juvenile Diabetes Research Foundation International http://kids.jdrf.org

Kids Health www.kidshealth.org/kid/health_problems/gland/treating_type1.html

National Diabetes Education Program (NDEP) www.ndep.nih.gov/diabetes/youth/youth.htm

National Institute of Diabetes & Digestive & Kidney Diseases (NIDDK)
www.niddk.nih.gov

United States Department of Agriculture (USDA) MyPlate www.choosemyplate.gov

National Heart, Lung & Blood Institute (NHLBI) Food Exchange List
www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/fd_exch.htm

For additional books and educational materials, visit the American Diabetes Association online bookstore at store.diabetes.org

Diabetes Care and Education (DCE), a dietetic practice group of the Academy of Nutrition and Dietetics, promotes quality diabetes care and education. DCE is comprised of members of the Academy of Nutrition and Dietetics who are leaders in the field of medical nutrition therapy (MNT) and care of people with diabetes. Their expertise is widely recognized throughout the diabetes community. We are pleased to have had the opportunity to collaborate with this group of professionals on the creation of Lilly's new *Carbohydrate Counting for Children with Diabetes*.

We hope you find it a valuable resource.

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With diabetes, knowledge is good medicine. Understanding carbohydrates and learning how to plan meals can help you manage your child's diabetes and reach their blood sugar (blood glucose) goals.

This brochure is part of the diabetes education program from Eli Lilly and Company. Ask your healthcare provider for more information.

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