



Counting carbohydrates in your favourite recipes

Eating healthy when you have diabetes does not mean you have to get rid of all your favourite recipes. Instead, you can figure out the amount of carbohydrate in your recipes and fit them into your meal plan.

Do I need to decrease the sugar in a recipe?

In general, you do not need to change your recipe at all. But if you are concerned about the amount of sugar in a recipe and wish to reduce it, follow this tip.

Some sugar is needed in most baked goods to cause browning, tenderness and to produce the right texture. To make sure your baked goods turn out as they should, here is the least amount of sugar you need to use:

- 1 teaspoon of sugar for each serving
- $\frac{1}{4}$ cup of sugar for 12 servings

If you like, you can use an artificial sweetener to replace the rest of the sugar in your recipe. You will need to check the label on the package for the right amount of sweetener to use.

How do I figure out the amount of carbohydrates in my recipe?

Follow these steps:

1. List all of the ingredients.
2. Use **Nutrient Values Table** on pages 4 to 7 or a food composition book to figure out the amount of carbohydrate and fibre in each ingredient. Put the numbers into a chart.
3. Add the columns for carbohydrate and fibre.
4. Divide the totals by the number of servings in the recipe in order to get the amount of carbohydrate and fibre per serving.
5. Look at the grams of carbohydrate. Subtract the grams of dietary fibre from the total carbohydrates. Fibre is not digested well, so it does not affect your blood sugar.
6. Let's try an example on page 3, Bran Apple Muffins. If you want to know how to prepare this recipe, see page 8.

OR

Use the Recipe Analyzer on the Dietitian's of Canada website:

- go to www.dietitians.ca
 - click on Eat Well, Live Well
 - click on Recipe Analyzer and follow instructions
-

Bran Apple Muffins

Makes 18 muffins

Ingredients	Amount	Carbohydrate grams (g)	Fibre grams (g)	Protein grams (g)	Fat grams (g)
Brown sugar, packed	1 cup	208	0	0	0
Egg	1	0	0	4	5
Buttermilk	1 cup	12	0	8	2
Margarine, melted	6 tbsp.	0	0	0	24
Molasses	3 tbsp.	42	0	0	0
Wheat bran	1 ½ cups	60	39	15	3
All purpose flour	1 cup	98	4	13	1
Baking soda	1 tsp.	0	0	0	0
Baking powder	½ tsp.	1	0	0	0
Salt	½ tsp.	0	0	0	0
Apples, chopped finely, peeled (4 medium)	1 ½ cups	80	8	0	0
Raisins	½ cup	62	3	3	0
Total for recipe		563	54	43	35
1 serving (totals ÷ 18)		31	3	2.4	2

The grams of protein and fat are also listed in the table for your information.

1 muffin has 31 grams of carbohydrate and 3 grams of dietary fibre.

$$\begin{array}{r}
 31 \\
 - 3 \\
 \hline
 28 \text{ grams of carbohydrate}
 \end{array}$$

Therefore, 1 muffin has 28 grams of carbohydrate which will affect your blood sugar level.

Nutrient Values Table

Food	Measure	Carbohydrate g	Fibre g	Protein g	Fat g
Cereal Products:					
Bran, natural raw	1 cup	40	26	10	2
Bran, All Bran®	1 cup	52	23.5	8	2
Breadcrumbs	½ cup	40	2.5	7	3
Corn Meal	1 cup	105	8	11	2
Corn Starch	1 tbsp.	7.5	0	0	0
Flour, all purpose, sifted	1 cup	98	4	13	1
Flour, whole wheat	1 cup	90	16	16	2
Oat bran	½ cup	33	7	9	3
Rolled oats, dry	1 cup	55	9	11	6
Wheat germ	1 tbsp.	3	1	2	1
Rice, white dry:					
• instant	¼ cup	18	0	2	0
• parboiled	¼ cup	38	0	4	0
• long grain	¼ cup	35	0	3	0
Rice, white cooked:					
• instant	1 cup	40	0	4	0
• parboiled	1 cup	44	0	4	0
• long grain	1 cup	45	0	4	0
Rice, brown dry:					
• instant	¼ cup	17	1	2	1
• long grain	¼ cup	37	2	3	1
Rice, brown cooked:					
• instant	1 cup	51	3	6	2
• long grain	1 cup	46	3.5	5	2
Dairy Products:					
Buttermilk	½ cup	6	0	4	1
Milk Skim	½ cup	6	0	4	0
2%	½ cup	6	0	4	2
Homogenized	½ cup	6	0	4	4
Sour cream(14% m.f.)	¼ cup	2	0	2	10
Yogurt (plain-1-2% m.f)	1 cup	13	0	8	2-4

Counting carbohydrates in your favourite recipes

Food	Measure	Carbohydrate g	Fibre g	Protein g	Fat g
Cheese:					
Cottage:					
• creamed	1 cup	7	0	31	10
• not creamed (1-2%)	1 cup	6	0	30	2-4
Cheddar:					
• shredded	¼ cup	0	0	7	9
• 1 oz	¼ cup	0	0	7	9
Processed Cheese slice (¾ oz):					
• skim	1 slice	2	0	5	3
• regular	1 slice	1.5	0	4	5
Cheese spread:					
• skim	2 tbsp.	4	0	8	2
• reg (Cheese Whiz®)	2 tbsp.	3	0	5	7
Sugar, Syrup:					
Corn syrup	¼ cup	60	0	0	0
	1 tbsp.	16	0	0	0
Honey	¼ cup	70	0	0	0
	1 tbsp.	18	0	0	0
Molasses	¼ cup	56	0	0	0
	1 tbsp.	14	0	0	0
Sugar:					
• brown (packed)	¼ cup	52	0	0	0
• white	¼ cup	50	0	0	0
• icing	¼ cup	32	0	0	0
Fruits and Vegetables:					
Apple, peeled	1 medium	20	2	0	0
Apple juice	½ cup	15	0	0	0
Applesauce (unsweetened)	1 cup	27	3	0	0
Bananas	1 medium	25	3	1	0
Carrots, shredded	1 cup	11	4.5	1	0
Orange juice (unsweetened)	1 cup	28	1	2	0
Pumpkin (canned)	1 cup	20	4.5	2	0
Dried Fruit:					
Dates, pitted	10 dates	61	7	2	0
Raisins, seedless	¼ cup	31	1.5	1	0

Food	Measure	Carbohydrate g	Fibre g	Protein g	Fat g
Nuts and Nut Products:					
Almonds, dry roasted	¼ cup	9	4	6	19
Cashews	¼ cup	10	1	5	16
Coconut, shredded, unsweetened	¼ cup	6	1	1.5	15
Peanuts	¼ cup	8	3.5	9	19
Peanut butter, regular, smooth	¼ cup	12	4	16	32
Pecans	¼ cup	6	2	2.5	20
Walnuts	¼ cup	5	1	4	17
Dried Seeds:					
Sesame seeds	1 tbsp	2	1	2	5
Sunflower seeds	1 tbsp	2	1	1.5	4
	¼ cup	6	3	6	16
Legumes:					
Chick peas:					
• dry	¼ cup	29	6	10	2
• canned	½ cup	28	5	6	1.5
• cooked	½ cup	23	6.5	7	2
Kidney beans:					
• dry	¼ cup	30	10	11	0.5
• canned	½ cup	20	4.5	7	0
• cooked	½ cup	20	6.5	7	0.5
Lentils:					
• dry	¼ cup	27	9	11	0
• cooked	½ cup	20	8	9	0.5
Fats:					
Butter, margarine	¼ cup	0	0	0	48
Oils, vegetable	1 tsp	0	0	0	5
Shortening, vegetable oil and lard	¼ cup	0	0	0	52

Food	Measure	Carbohydrate g	Fibre g	Protein g	Fat g
Other:					
Baking powder	1 tsp.	1	0	0	0
Baking soda	1 tsp.	0	0	0	0
Bakers' yeast	1 tbsp.	5	3.5	5	1
Biscuit mix, eg. Bisquick®	1 cup	75	3	9	18
Corn starch	1 tbsp. ¼ cup	7.5 30	0 0	0 0	0 0
Cream of tartar	1 tsp.	2	0	0	0
Candied cherries	½ cup	82	1	0	0
Chocolate:					
• unsweetened	1 square	8	4	3	15
• semi-sweet	1 square	24	2	2	10
• semi-sweet chips	½ cup	56	5	4	25
Cocoa Powder	1 tbsp.	3	1.5	1	1
Eggs:					
• yolk	1	0	0	0	5
• white	1	0	0	4	0
Salt	1 tsp.	0	0	0	0
Sweetened condensed milk (canned)	½ cup	90	0	13	14
Tomato:					
• ketchup	1 tbsp. ¼ cup	4 16	0 1	0 0	0 0
• paste	¼ cup	13	3	2	0
• sauce (spaghetti)	¼ cup	5	1	1	0
Pumpkin, canned	1 cup	20	5	3	0
Vanilla extract	1 tsp.	1	0	0	0
Whipped cream (35% M.F)	¼ cup	1	0	0.5	11
Whipped topping, e.g. Dream Whip® Cool Whip®	¼ cup	4	0	2	2
Spices, all types	any amount	0	0	0	0



Let's practice ...

Pumpkin Loaf with Orange Glaze Makes 16 slices

Ingredients	Amount	Carbohydrate grams (g)	Fibre grams (g)
Whole wheat flour	1 cup		
All purpose flour	2/3 cup		
Cinnamon	1 1/2 tsp.		
Baking soda	1 tsp.		
Baking powder	1/2 tsp.		
Nutmeg	1/2 tsp.		
Salt	¼ tsp.		
Soft margarine	1/3 cup		
Granulated sugar	2/3 cup		
Vanilla	½ tsp.		
Eggs	2		
Cooked pumpkin	1 cup		
Water	1/3 cup		
Raisins	¾ cup		
Glaze:			
Icing sugar	2 tbsp.		
Orange juice	¼ cup		
Total for recipe			
1 serving (totals ÷ ___ servings)			

1 serving has _____ grams of carbohydrate and _____ grams of fibre.

How many grams of carbohydrate will affect your blood sugar?

Please turn over to check your answers. ➔

Pumpkin Loaf with Orange Glaze

Makes 16 slices

Ingredients	Amount	Carbohydrate grams (g)	Fibre grams (g)
Whole wheat flour	1 cup	90	16.
All purpose flour	2/3 cup	65	2.5
Cinnamon	1 1/2 tsp.	0	0
Baking soda	1 tsp.	0	0
Baking powder	1/2 tsp.	0.5	0
Nutmeg	1/2 tsp.	0	0
Salt	1/4 tsp.	0	0
Soft margarine	1/3 cup	0	0
Granulated sugar	2/3 cup	134	0
Vanilla	1/2 tsp.	0.5	0
Eggs	2	0	0
Cooked pumpkin	1 cup	20	4.5
Water	1/3 cup	0	0
Raisins	3/4 cup	93	4.5
Glaze:			
Icing sugar	2 tbsp.	16	0
Orange juice	1/4 cup	7	0
Total for recipe		426	27.5
1 serving (totals ÷ 16 servings)		27 g	2 g (round up to 2)

1 serving has 27 grams of carbohydrate and 2 grams of dietary fibre.

$$\begin{array}{r}
 27 \\
 -2 \\
 \hline
 25 \text{ grams of carbohydrate}
 \end{array}$$

Therefore, 1 serving has 25 grams of carbohydrate which will affect your blood sugar level.

How to make Pumpkin Loaf with Orange Glaze

1. Lightly grease and flour 9 x 5 inch (2L) loaf pan.
2. In small bowl, combine whole wheat flour, all purpose flour, cinnamon, baking soda, baking powder, nutmeg and salt.
3. In a large bowl, cream margarine, sugar and vanilla; add eggs one at a time, beating well after each addition. Stir in pumpkin.
4. Alternately stir in flour mixture and water just until smooth. Stir in raisins and pour into prepared pan.
5. Bake in 350°F (180°C) oven for 1 hour or until cake tester inserted in center comes out clean. Let cool in pan for 10 minutes; turn out onto rack.

Glaze: Pierce hot cake with fork. Mix icing sugar with orange juice; pour over cake. Let cool completely.

Source: Anne Lindsay. Lighthearted Everyday Cooking, 2002.