

# The Diabetes Food Pyramid

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The food choices that persons with diabetes make influence how well they manage their diabetes. The Diabetes Food Pyramid can help you plan your meals and snacks. Choosing foods from each food group in the amounts you need can help you manage this disease.

## Benefit of the Diabetes Food Pyramid

- Provides a guide for choosing an overall healthy diet.
- Focuses on carbohydrate content of foods.
- Fits with a diabetes meal plan.
- Promotes variety in the diet.

## What should I know about the Diabetes Food Pyramid?

There is a difference between the Diabetes Food Pyramid and the United States Department of Agriculture (USDA) MyPyramid food guide. Both pyramids are divided into six sections of varying sizes.

## USDA MyPyramid

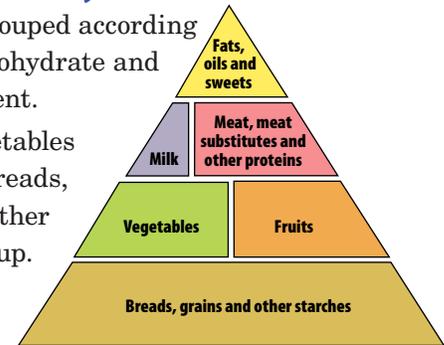
- Items are grouped according to their classification as foods.
- Starchy vegetables are in the vegetable group (one of five subgroups).
- Cheese is in the milk group.
- Guidelines for physical activity are also included in MyPyramid.

Source: USDA



## The Diabetes Food Pyramid

- Foods are grouped according to their carbohydrate and protein content.
- Starchy vegetables are in the breads, grains and other starches group.
- Cheese is in the meat, meat substitutes and other proteins group.



**Diabetes Food Pyramid**

Source: American Diabetes Association

- There are six food groups:
  - > Breads, grains and other starches
  - > Vegetables (non-starchy vegetables)
  - > Fruits
  - > Milk
  - > Meat, meat substitutes and other proteins
  - > Fats, oils and sweets
- The largest section, the breads, grains, and other starches group, is at the bottom of the pyramid. You should eat more servings from this group than any other.
- The fats, oils and sweets group is at the top. These foods should be used only in moderation.
- The Diabetes Food Pyramid provides a range of servings to meet different calorie needs. A person with lower calorie needs would eat fewer servings from each food group than someone with higher calorie needs.
- The exact number of servings a person needs from each group depends on his or her diabetes goals, calorie and nutrient needs, and lifestyle.

- Divide the number of servings you need from each food group among the meals and snacks you eat each day. For example, if your goal is to eat three servings of fruits, you could have one fruit serving at breakfast, afternoon snack, and at dinner. In this way the three servings of fruits are spread throughout the day.

## Food Groups

### Breads, grains and other starches

**Servings:** 6 or more a day

**Nutrients:** Good source of dietary fiber, vitamins (thiamin, niacin, riboflavin, folate) and minerals (iron, magnesium and selenium)

What equals one serving	Best choices
<ul style="list-style-type: none"> <li>- 1 slice of bread</li> <li>- ¾-inch corn bread (1½ oz)</li> <li>- ¼ bagel (1 oz)</li> <li>- ½ English muffin or pita bread</li> <li>- ¾ cup unsweetened ready-to-eat cereal</li> <li>- 3 cups popcorn</li> <li>- 4-6 crackers</li> <li>- 1 corn tortilla (6-inch size)</li> <li>- ½ cup cooked cereal</li> <li>- ½ cup potato, yam, peas, corn, or cooked beans</li> <li>- 1 cup winter squash (butternut, acorn)</li> <li>- ½ cup of cooked rice or pasta</li> </ul>	<p><b>Whole grains</b></p> <ul style="list-style-type: none"> <li>• whole wheat bread, bagel, English muffin or pita bread</li> <li>• brown rice</li> <li>• whole wheat pasta</li> <li>• popcorn (no butter)</li> </ul> <p><b>Starchy vegetables</b> (no added fat, sugar, or salt)</p> <ul style="list-style-type: none"> <li>• butternut squash</li> <li>• pumpkin</li> <li>• potato</li> <li>• peas or corn</li> <li>• dried peas and beans</li> <li>• lentils</li> <li>• red, pinto, garbanzo or black beans, vegetarian baked beans</li> </ul>

#### Making wise choices

- Choose whole grain bread or cereal, brown rice, bulgur and couscous.
- Include beans in your diet every day. They are a good source of fiber and other nutrients.
- Choose whole wheat or other whole grain flours in cooking and baking.
- Have popcorn without butter as a snack.

## Vegetables

**Servings:** 3 to 5 a day

**Nutrients:** Good source of dietary fiber, folate, vitamins A, E and C

What equals one serving	Best choices
<ul style="list-style-type: none"> <li>- ½ cup cooked carrots</li> <li>- 1 cup tossed green salad</li> <li>- ½ cup steamed broccoli</li> <li>- ½ cup collard or other greens (no added fat)</li> <li>- ½ cup summer (yellow or zucchini) squash</li> <li>- 1 cup spinach salad</li> <li>- 1 cup cucumber</li> <li>- ½ cup steamed spinach</li> <li>- ½ cup zucchini</li> <li>- ½ cup vegetable juice (low-sodium is best)</li> <li>- 1 cup cut-up raw non-starchy vegetables (carrots, cabbage, bell peppers, zucchini, cucumber, celery, snap beans, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Fresh</li> <li>• Frozen, without sauce</li> <li>• No salt, sugar or fat added</li> </ul>

#### Making wise choices

- Choose more vegetables that are dark green, yellow, or orange in color.
- Limit the use of sauces and seasonings on vegetables.
- Buy vegetables that are fresh and in season as they are cheaper and have good flavor.
- Choose frozen vegetables (no sauce) for quick and easy cooking.
- When buying canned vegetables, choose those that are low in salt.
- Include vegetables at lunch, dinner, and as snacks.

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## Fruit

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**Servings:** 2 to 4 a day

**Nutrients:** Good source of dietary fiber, vitamin C, folate, and potassium

What equals one serving	Best choices
<ul style="list-style-type: none"><li>- 1 small unpeeled apple</li><li>- 1 small orange</li><li>- 1 extra small banana</li><li>- 1 cup melon (cantaloupe, honey dew)</li><li>- 1¼ cup watermelon</li><li>- 1 cup raspberries</li><li>- ½ cup canned, unsweetened fruit</li><li>- 2 tbsp raisins</li><li>- ½ cup orange, grapefruit or prune juice</li><li>- 1¼ cups of whole strawberries</li><li>- ¾ cup blueberries</li><li>- 1 cup fresh blackberries</li></ul>	<ul style="list-style-type: none"><li>• Fresh</li><li>• Frozen, with no added sugar</li></ul>

### Making wise choices

- Choose fresh fruit instead of fruit juice. Fresh fruits are a good source of dietary fiber and have no added sugar.
- Choose unsweetened fruit juice.
- Buy fruits canned in water or 100 percent fruit juice rather than in syrup.
- Vary fruit choices to get a variety of nutrients.

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## Milk

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**Servings:** 2 to 3 a day

**Nutrients:** Good source of protein, calcium, phosphorus, vitamin D

What equals one serving	Best choices
<ul style="list-style-type: none"><li>- 1 cup fat-free or low-fat (1%) milk</li><li>- 1 cup of yogurt</li><li>- 1 cup soy milk</li></ul>	<ul style="list-style-type: none"><li>• Fat free or low-fat (1%) milk</li><li>• Non-fat yogurt, without added sugar</li><li>• Unflavored soy milk</li></ul>

### Making wise choices

- Use fat-free or low-fat milk and yogurt.
- Use fat-free or low-fat milk when making:
  - > cooked cereals
  - > cream soups
  - > desserts
- Use fat-free or low-fat yogurt:
  - > As dips for fruits
  - > To top a baked potato
  - > With cut-up fruits for dessert
  - > As a healthy snack

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## Meat, meat substitutes and other proteins

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**Servings:** 4 to 6 ounces a day

**Nutrients:** Good source of protein, B vitamins (niacin, thiamin, riboflavin, vitamin B<sub>6</sub>), vitamin E, iron, zinc, and magnesium

What equals one serving	Best choices
<ul style="list-style-type: none"><li>- 1 oz of chicken, turkey, fish, pork, beef</li><li>- ¼ cup cottage cheese</li><li>- 1 ounce of hard cheese</li><li>- 1 egg</li><li>- 1 tbsp peanut butter</li><li>- ½ cup tofu</li></ul>	<ul style="list-style-type: none"><li>• Lean cuts of meat or pork with fat removed</li><li>• Chicken or turkey with skin removed before cooking</li><li>• Salmon, tuna, herring</li></ul>

### Making wise choices

- Choose lean cuts of meat.
- Remove skin and fat from poultry and meat.
- Bake, grill or roast meat, poultry, and fish instead of frying.
- Limit the use of sauces and breading because they add fat and calories.
- Choose fish such as salmon, trout, and herring.
- Limit cheese, hotdogs, processed sandwich meats, bacon, and sausage.
- Choose fat-free or low-fat cheese.
- Drain excess fat that appears during cooking.

## Fats, oils and sweets

Keep servings small.

What equals one serving	Best choices
<ul style="list-style-type: none"> <li>- ½ cup ice cream</li> <li>- 1 small cupcake or muffin</li> <li>- 2 small cookies</li> <li>- 1 tsp oil</li> <li>- 1 tsp margarine</li> <li>- 2 tbsp sour cream</li> <li>- 1 tsp regular mayonaise or 1 tbsp reduced fat mayonaise</li> </ul>	<ul style="list-style-type: none"> <li>• Fat-free or low-fat ice cream</li> <li>• Baked goods made with whole grains and low in added sugars</li> <li>• Vegetable oils such as olive and canola oils</li> <li>• Avocado</li> <li>• Olives</li> <li>• Nuts</li> <li>• Flaxseed</li> </ul>

### Making wise choices

- Keep servings small; foods in this group contain a lot of fat and sugar.
- Eat healthy choices such as whole grains, vegetables, and fruits before eating foods from this group.
- Use these foods for special occasions.

## Diabetes Food Pyramid Activity

Test your knowledge of the food groups and appropriate serving sizes. Write the name of the food group and the appropriate serving size next to the food.

Food	Food Group	Serving Size
Egg		
Cooked carrots		
Ice cream		
Tossed salad		
Cooked cereal		
Cottage cheese		
Banana		
Cooked beans		
Bread		
Corn		
Butternut squash		

## Resources

- American Diabetes Association. Food and fitness. [http://www.diabetes.org/food-and-fitness/food/my-food-advisor/?utm\\_source=Homepage&utm\\_medium=Carousel1&utm\\_campaign=MFA](http://www.diabetes.org/food-and-fitness/food/my-food-advisor/?utm_source=Homepage&utm_medium=Carousel1&utm_campaign=MFA).
- Medline Plus. Diabetic diet. <http://www.nlm.nih.gov/medlineplus/diabeticdiet.html>.
- National Diabetes Education Program. <http://ndep.nih.gov/index.aspx>.
- National Diabetes Education Program. Tasty recipes for people with diabetes and their families. [http://ndep.nih.gov/media/MQC\\_recipebook\\_english.pdf](http://ndep.nih.gov/media/MQC_recipebook_english.pdf).

## References

- American Diabetes Association. (2002). *Complete guide to diabetes*. 3<sup>rd</sup> ed. Alexandria, VA.
- American Diabetes Association. The diabetes food pyramid. Accessed May 21, 2010 from <http://www.diabetes.org/food-and-fitness/food/planning-meals/diabetes-food-pyramid.html#Vegetables>.
- National Diabetes Information Clearinghouse. What I need to know about eating and diabetes. Accessed May 21, 2010 from [http://diabetes.niddk.nih.gov/dm/pubs/eating\\_ez/#meat](http://diabetes.niddk.nih.gov/dm/pubs/eating_ez/#meat).