

Client Name _____ Date _____

RD/DTR _____

Email _____ Phone _____

Type 2 Diabetes Nutrition Therapy



Why Is Carbohydrate Counting Important?

- Counting carbohydrate servings may help you to control your blood glucose level so that you feel better.
- The balance between the carbohydrates you eat and insulin determines what your blood glucose level will be after eating.
- Carbohydrate counting can also help you plan your meals.

Which Foods Have Carbohydrates?

Foods with carbohydrates include:

- Breads, crackers, and cereals
- Pasta, rice, and grains
- Starchy vegetables, such as potatoes, corn, and peas
- Beans and legumes
- Milk, soy milk, and yogurt
- Fruits and fruit juices
- Sweets, such as cakes, cookies, ice cream, jam, and jelly

Carbohydrate Servings

In diabetes meal planning, 1 serving of a food with carbohydrate has about 15 grams of carbohydrate:

- Check serving sizes with measuring cups and spoons or a food scale.
- Read the Nutrition Facts on food labels to find out how many grams of carbohydrate are in foods you eat.
- The food lists in this handout show portions that have about 15 grams of carbohydrate.

Notes:

Food Lists for Carbohydrate Counting

1 serving = about 15 grams of carbohydrate

Starches

- 1 slice bread (1 ounce)
- 1 tortilla (6-inch size)
- ¼ large bagel (1 ounce)
- 2 taco shells (5-inch size)
- ½ hamburger or hot dog bun (1 ounce)
- ¾ cup ready-to-eat cereal
- ½ cup cooked cereal
- 1 cup broth-based soup
- 4-6 small crackers
- ⅓ cup pasta or rice (cooked)
- ½ cup beans, peas, corn, sweet potatoes, winter squash, or mashed or boiled potatoes (cooked)
- ¼ large baked potato (3 ounces)
- ¾ ounce pretzels, potato chips, or tortilla chips
- 3 cups popcorn (popped)

Fruit

- 1 small fresh fruit (4 ounces)
- ½ cup canned fruit
- ¼ cup dried fruit (2 tablespoons)
- 17 small grapes (3 ounces)
- 1 cup melon, berries
- 2 tablespoons raisins
- ½ cup fruit juice

Milk

- 1 cup fat-free or reduced-fat milk
- 1 cup soy milk
- ⅔ cup (6 ounces) fat-free yogurt sweetened with sugar-free sweetener

Sweets and Desserts

- 2-inch square cake (unfrosted)
- 2 small cookies (⅔ ounce)
- ½ cup ice cream or frozen yogurt
- ¼ cup sherbet or sorbet
- 1 tablespoon syrup, jam, jelly, table sugar, or honey
- 2 tablespoons light syrup

Other Foods

- Count 1 cup raw vegetables or ½ cup cooked nonstarchy vegetables as zero carbohydrate servings or “free” foods. If you eat 3 or more servings at one meal, count them as 1 carbohydrate serving.
- Foods that have less than 20 calories in each serving also may be counted as zero carbohydrate servings or “free” foods.
- Count 1 cup of casserole or other mixed foods as 2 carbohydrate servings.

Meal Planning Tips

- A meal plan tells you how many carbohydrate servings to eat at your meals and snacks. For many adults, eating 3 to 5 servings of carbohydrate foods at each meal and 1 or 2 carbohydrate servings for each snack works well.
- In a healthy daily meal plan, most carbohydrates come from:
 - 5 servings of fruits and vegetables
 - 3 servings of whole grains
 - 2 to 4 servings of milk or milk products
- Check your blood glucose level regularly. It can tell you if you need to adjust the timing of when you eat carbohydrates.
- Eating foods that have fiber, such as whole grains, and having very few salty foods is good for your health.
- Eat 4 to 6 ounces of meat or other protein foods (such as soybean burgers) each day. Choose low-fat sources of protein, such as lean beef, lean pork, chicken, fish, low-fat cheese, or vegetarian foods such as soy.
- Eat some healthy fats, such as olive oil, canola oil, and nuts.
- Eat very little saturated fats. These unhealthy fats are found in butter, cream, and high-fat meats, such as bacon and sausage.
- Eat very little or no *trans* fats. These unhealthy fats are found in all foods that list “partially hydrogenated” oil as an ingredient.

Label Reading Tips

The Nutrition Facts panel on a label lists the grams of total carbohydrate in 1 standard serving. The label’s standard serving may be larger or smaller than 1 carbohydrate serving.

To figure out how many carbohydrate servings are in the food:

- Look first at the label’s standard serving size.
- Then check the grams of total carbohydrate. This is the amount of carbohydrate in 1 standard serving.
- Divide the grams of total carbohydrate by 15. This number equals the number of carbohydrate servings in 1 standard serving. Remember: 1 carbohydrate serving is 15 grams of carbohydrate.
- Note: You may ignore the grams of sugars on the Nutrition Facts panel because they are included in the grams of total carbohydrate.

Notes:

Sample 1-Day Menu

Total carbohydrate servings: 13

Meal	Menu
Breakfast	½ grapefruit (1 carbohydrate serving) ½ cup bran cereal (1 carbohydrate serving) 1 cup skim milk (1 carbohydrate serving) 1 slice whole wheat toast (1 carbohydrate serving) 1 teaspoon margarine
Lunch	2 ounces ham 2 slices rye bread (2 carbohydrate servings) 1 teaspoon margarine 1 cup soup (1 carbohydrate serving) Lettuce and tomato salad with 1 tablespoon light salad dressing 6 ounces artificially sweetened yogurt (1 carbohydrate serving) 1 can diet soft drink
Evening Meal	3 ounces baked chicken 2 small new potatoes (3 ounces) (1 carbohydrate serving) ½ cup green beans 2 teaspoons margarine Tossed salad with 1 tablespoon light salad dressing 1 cup skim milk (1 carbohydrate serving) 1 small apple (1 carbohydrate serving)
Evening Snack	½ cup ice cream (1 carbohydrate serving) 1¼ cup strawberries (1 carbohydrate serving) 1 tablespoon nuts

Approximate Nutrition Analysis:

Calories: 1,700; Protein: 92g (22% of calories); Carbohydrate: 196g (47% of calories),
 Carbohydrate Servings: 13; Fat: 60g (31% of calories); Sodium: 3000mg; Fiber: 30g;
 Cholesterol: 157mg

Notes: