

Fuel for Your Brain

Use these exchanges to help guide your portions on your meal plan. If you have questions, consult with your registered dietitian.

Complex Carbohydrates provide energy for the brain and muscles, fiber, B vitamins, minerals (iron, magnesium, selenium), and phytonutrients. Exchanges are measured in ounces. One ounce equivalents are listed here:

Measurement	Ingredient
1 slice	Bread (white, pumpernickel, whole wheat, rye)
2 slices	Reduced-calorie or "lite" bread
1	Mini bagel or bagel thin
1/2	Medium bagel
1/4	Large bagel
1/2	English muffin
1/2	Hamburger bun
3/4 C	Cold cereal
1/4 C	Granola or rolled oats
1/3 C	Rice, brown or white, cooked
1/3 C	Barley or couscous, cooked
1/3 C	Legumes (dried beans, peas or lentils), cooked
1/2 C	Pasta, bulgur, barley, quinoa, couscous, corn, potatoes, or peas, cooked
1/2	Medium baked potato
3/4 oz. OR 15 pieces	Pretzels
8-10	Crackers
1/2 C	Croutons
1	Nature Valley Granola Bar (1/2 package)
6	Tater tots: count as 1 complex carb, 1 fat
3 C	Popcorn, hot air popped or microwave (80% light)
1	Large croissant: count as 2 complex carbs, 1 fat
1	Garlic breadstick: count as 1 complex carb, 1 fat
6-8"	Flour tortilla/wrap
2	Corn tortillas
2	Hard shell taco shells: count as 1 complex carb, 1 fat
1	2 1/2" Biscuit: count as 1 complex carb, 1 fat
1	4" waffle or pancake
1	3" muffin: count as 2 complex carbs

Vegetables provide potassium, fiber, folate, vitamin A, vitamin C, vitamin K, antioxidants, and phytonutrients. Exchanges are measured in 1/2 cup servings. One serving equivalents are listed here:

Measurements	Ingredient
1/2 C	Cooked vegetables (carrots, broccoli, zucchini, cabbage, etc.)
1 C	Raw vegetables or cooked greens
2 C	Fresh leafy greens
1/2 C	Vegetable juice

Fats provide energy and support a healthy brain, skin, and nails. Exchanges are measured in teaspoons. One teaspoon equivalents are listed here:

Measurements	Ingredient
1 tsp	Oil (vegetable, corn, canola, olive, etc.)
1 tsp	Butter, margarine, or mayo
1 Tbsp	Reduced-fat margarine or mayonnaise
1 Tbsp	Salad dressing
1 Tbsp	Cream cheese
1 Tbsp	Pesto
1 Tbsp	Nuts/Seeds
2 Tbsp	Lite cream cheese
2 Tbsp	Hummus
1/4 C	Shredded cheese OR 1 slice (count as 1 fat, 1 milk OR 1 protein)
1/8 or 2 Tbsp	Avocado or guacamole
8 large	Black olives
10 large	Stuffed green olives
1 slice	Bacon
1/2 T	Nut Butter

Fruits provide potassium, fiber, vitamin C, folate, antioxidants, and phytonutrients as well as carbohydrates for energy. Exchanges are measured in 1/2 cup servings. One serving equivalents are listed here:

Measurements	Ingredient
1 small	Apple, banana, orange, nectarine
1 medium	Fresh peach or grapefruit
2	Clementines, apricots, tangerines, plums, or kiwis
1/2 C	Applesauce or canned fruit
1/2	Mango or large banana
1-1/4 C	Fresh berries (strawberries, raspberries, or blueberries)
1 1/2 C	Fresh melon (watermelon, cantaloupe, honeydew)
4 oz.	Unsweetened juice
4 tsp.	Jelly, jam, or preserves
2 T or 1 mini-box	Raisins or dried cranberries
1/4 c	Dried fruit
4	Apricot halves

Low-Fat Dairy provides calcium, potassium, phosphorus, vitamins A, B2, B12, and D, niacin, and protein.

Alternative Calcium sources provide calcium and a variety of other nutrients. Exchanges are measured in 1 cup servings. One serving equivalents are listed here:

Measurements	Ingredient
1 C	Milk, fat-free or 1% fat or original soy milk
1 ½ C	Original almond milk
¾ C	Yogurt, plain nonfat or low-fat (cow or coconut)
1 C	Yogurt, artificially sweetened
1/3 C	Shredded cheese
1	Slice cheese or cheese stick or original Baby Bel
2	Low fat Baby Bel
1 C	Cooked collard greens
1 C	Calcium fortified orange juice
½ oz./12 kernels	Almonds (not an optimal calcium source)
2 oz.	Fortified tofu

Very Lean Protein choices provide protein, very little fat, several B vitamins including vitamin B12, and minerals iron, zinc, and magnesium. ***Double your portions if choosing proteins from this group.*** Exchanges are measured in ounces. One ounce equivalents are listed here:

Measurements	Ingredient
1 oz	Turkey breast or chicken breast, skin removed
1 oz	Fish fillet (flounder, tilapia, sole, scrod, cod, etc.)
1 oz	Canned tuna in water
1 oz	Shellfish (clams, lobster, scallop, shrimp)
¾ C	Low fat cottage cheese
2	Egg whites
1/4 C	Egg substitute
1 oz	Fat-free cheese

Meat, Fish, and Dairy Proteins choices provide protein, some fat, several B vitamins including vitamin B12, and minerals iron, zinc, and magnesium. Exchanges are measured in ounces. One ounce equivalents are listed here:

Measurements	Ingredient
1 oz	Chicken—dark meat, skin removed
1 oz	Turkey—dark meat, skin removed
1 oz	Salmon, swordfish, herring
1 oz	Beef (flank steak, London broil, tenderloin, roast beef or any prime cut)
1 oz	Veal, roast or lean chop
1 oz	Lamb, roast or lean chop
1 oz	Pork, tenderloin, fresh ham, or pork chop
1 oz/3-4 slices	Low-fat lunch meats (with 3 g or less of fat per ounce)
1 oz	Mozzarella cheese
1/4 C	Ricotta cheese
1/4 C	4.5% cottage cheese
½ C	Nonfat Greek yogurt
1/3 C	2% Greek yogurt
1	Whole egg (medium)
1 oz	Low-fat cheese (with 3 g or less of fat per ounce)

Meat Alternatives provide protein and often other macronutrients, fiber, vitamins, and minerals. One ounce equals:

Measurements	Ingredient
½ C	Beans, cooked (black beans, kidney, chick peas or lentils): count as 1 complex carb, 1 protein
1 T	Peanut or almond butter: count as 1 protein, 1 fat
4 oz.	Tofu
1/4 C	Nuts/Seeds: count as 1 protein, 1 fat
1/4 C	Hummus: count as 1 protein, 1 fat
¾ C	Hummus: count as 3 proteins, 2 fats
1	Gardenburger: count as 3 proteins
1	Meatless “Chick’N” Patty: count as 3 proteins
6 oz. OR ¾ C	Greek yogurt: count as 2 protein OR 1 milk
1 scoop	Protein powder: count as 3 protein

Combination Foods provide a variety of exchanges. Here are some examples:

Measurements	Ingredient	Exchanges
1 slice	Pepperoni Pizza	1 complex carb, 2 protein, 1 fat
½ C	Chicken, Tuna, or Egg salad	3 protein 2 fats
4	Chicken Tenders	3 protein, 1 complex carb, 1 fat
1 C	Bean soup	1 complex carb, 1 protein
1 C	Creamy soup	1 complex carb, 1 fat
1 C	Chili	3 protein, 2 complex carbs
1/6	9” quiche	2 complex carbs, 3 protein, 2 fats
1 ½ C	Macaroni and cheese	2 complex carbs, 3 protein, 2 fats
9 small OR 5 large	Ravioli	2 complex carbs, 3 protein, 2 fats
4.5”x3.25”x2”	Meat Lasagna	2 complex carbs, 3 protein, 2 fats
1 C	Vegetable Lasagna	2 complex carbs, 2 protein, 1 fat
1	Beef and bean burrito	3 complex carbs, 2 protein, 1 fat
1	Egg roll	1 complex carb, 1 lean protein, 1 fat
1	Crispy chicken sandwich	3 complex carbs, 3 protein, 1 fat
1 large	Hamburger with cheese	2 complex carbs, 4 protein, 1 fat
1 small	French Fries order	3 complex carbs, 3 fats

Fun Foods may be higher in calories and/or fat and lower in nutrients, but they provide energy, enjoyment, and bring balance to healthy nutrition and eating patterns. One serving equivalents are listed here:

Measurements	Ingredient
4	Oreo cookies
2	Small/medium cookies
½ C	Regular ice cream
1	2” brownie
1 oz.	Bag of chips
½ C	Fruit cobbler or pie
1/12	Cheesecake
1	Donut
½	Breakfast pastry
1	Cupcake