

Increasing Dietary Fiber in School Meals



Types of Dietary Fiber

For years dietary fiber has been divided up into two types: soluble and insoluble. Soluble fiber dissolves in water and is found in dried beans and peas, oats, barley, flaxseeds and many fruits and vegetables. Insoluble fiber absorbs water and is found in whole-wheat products; wheat, oat, and corn bran; flaxseeds, and many vegetables.

A diet that contains fresh fruits and vegetables, whole grains, beans, lentils, and dried beans will provide the body with both types of fiber. Fiber is lost during the processing of plant foods. Since the typical American diet includes high amounts of processed and refined foods, total fiber is commonly low in the American diet.

Dietary Fiber Needs

The American Dietetic Association's recommendation for children older than 2 years, is referred to as the "Age + 5" guideline, i.e. dietary fiber equal to or greater than the child's age plus 5 grams per day. The goal is to consume 25 to 35 grams of fiber a day after age 20.

The 2010 Dietary Guidelines for Americans recommends that half of all daily grains be whole grains.

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- Serve whole-grain cereal, such as oatmeal, bran flakes, raisin bran, or wheat flakes and/or use these items as ingredients.
- Serve whole-wheat bread, oatmeal bread, multi-grain bread, bran bread, graham crackers and whole-wheat bagels.
- Serve fresh fruit or dried fruits for dessert and/or use as ingredients.
- Serve fruits and vegetables with peels.
- Serve more cooked or canned dry beans, split peas, and lentils as a separate item or as part of soups, stews and salads.
- Compare Nutrition Fact labels of like products to make the best knowledgeable choice. There is not a standard of identity for "wheat bread" so the amount of dietary fiber will vary from one product to another.

Dietary Fiber

Dietary fiber is not a nutrient in the classical sense because it is not digested or absorbed into the blood stream. It is the part of plants that our bodies cannot digest. However, it is vital to health and the prevention of several chronic diseases. There is significant scientific agreement that diets rich in fiber play an important role in the prevention of obesity, colon cancer, diverticulosis, constipation, heart disease, and diabetes.

DPI – SNT Nutrient Targets For Lunch Grade Groupings

| | |
|------|-----------|
| K-3 | ≥ 4 grams |
| K-4 | ≥ 4 grams |
| K-6 | ≥ 5 grams |
| 5-8 | ≥ 6 grams |
| 4-12 | ≥ 6 grams |
| 7-12 | ≥ 7 grams |
| 9-12 | ≥ 7 grams |





Fiber in Foods*



| Food Source | Serving Size | Grams of Dietary Fiber |
|----------------------------|--------------------------|------------------------|
| Apple | 1 medium | 4.4 |
| Banana | 1 large (8-8 7/8 inches) | 3.5 |
| Baked Beans | ½ cup, USDA recipe | 5.2 |
| Beans, Refried | ½ cup, canned | 6.1 |
| Bread, Whole Wheat | Slice | Varies (read label) |
| Broccoli | ½ cup, chopped, raw | 1.1 |
| Burrito, Beef | 1, USDA recipe | 2 |
| Cantaloupe | ½ cup, diced | 0.7 |
| Carrot | 1 medium, raw | 1.7 |
| Celery | ½ cup sticks | 1.2 |
| Cereal | 1 oz | Varies (read label) |
| Chili Con Carne With Beans | ½ cup, USDA recipe | 2 |
| Coleslaw | ½ cup, USDA recipe | 1 |
| Corn | ½ cup, frozen, cooked | 2 |
| Cucumber | ½ cup, peeled | .3 |
| Grapes | ½ cup | .4 |
| Kiwi Fruit | 1 large without skin | 2.1 |
| Lentils | ½ cup, cooked | 7.8 |
| Lettuce, Romaine | 1 cup, shredded | 1 |
| Mixed Vegetables, Frozen | ½ cup, cooked | 4 |
| Oatmeal | ½ cup, cooked | 2 |
| Peanuts | ¼ cup, dry roasted | 2.9 |
| Peas, Split | ½ cup, cooked | 8.1 |
| Potato, Baked with Skin | 1 medium (2.25" x 3.25") | 3.8 |
| Raisins | ¼ cup | 1.5 |
| Rice, Brown, Medium Grain | ½ cup, cooked | 1.8 |
| Rice, White, Long Grain | ½ cup, cooked | .3 |
| Strawberries | ½ cup, whole | 1.4 |

*Source: USDA Database Release: CN14; through Nutrikids Version 12.50

Note: Nutrient Fact labels are a tool for evaluating the fiber in processed foods. It is difficult to determine how much fiber is in these purchased products. The dietary fiber content in breads and breakfast cereals depend on the product. Cereals that contain between three to five grams of fiber per serving are recommended.

09/11 School Nutrition Team: www.dpi.wi.gov/fns

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