Food Sources: Dietary Fiber

Dietary fiber comes from plant foods, including fruits, vegetables, legumes, nuts, seeds, and grains. The fiber in plant foods is not digested by enzymes present in the digestive tract, but it may be digested by the microorganisms that inhabit the intestines.

Dietary fiber is usually described as "soluble" or "insoluble," based on its ability to dissolve in water. For example, the inner portion of an apple contains soluble fiber, whereas the peel is made of insoluble fiber. Soluble fiber contributes to a feeling of fullness and helps maintain a healthy weight. It also decreases the absorption of dietary sugars and fats, thereby helping to manage blood sugar and blood fat levels. Soluble fiber also serves as a food source for the beneficial bacteria that inhabit the digestive tract. The insoluble fiber in plant foods is helpful in moving waste products through the digestive tract. It also provides bulk to the stool and is beneficial in preventing constipation, hemorrhoids, and diverticuli.

The Dietary Reference Intake for dietary fiber (soluble and insoluble fiber, combined) is as follows:

- Females, age 18-50: 25 grams per day
- Females, ages 51 and above: 21 grams per day
- Males, ages 18-50: 38 grams per day
- Males, ages 51 and above: 30 grams per day

| Food Sources of Soluble Fiber |  |
| :--- | :--- |
| (food, standard serving size) | Amount of Dietary fiber (c) |
| Oat bran, $1 / 2$ cup | 7.0 |
| Black beans (cooked), $3 / 4$ cup | 5.4 |
| Lima beans, $3 / 4$ cup | 5.3 |
| Tofu, $3 / 4$ cup | 2.8 |
| Avocado, $1 / 2$ whole | 2.1 |
| Brussels sprouts, $1 / 2$ cup | 2.0 |
| Sweet potato (cooked), $1 / 2$ cup | 1.8 |
| Asparagus (cooked), $1 / 2$ cup | 1.7 |


| Food Sources of Insoluble fiber <br> (food, standard serving size) |  |
| :--- | :--- |
| Amount of Dietary fiber (g) |  |
| Wheat bran, $1 / 2$ cup | 12.5 |
| Navy beans (cooked), $1 / 2$ cup | 9.5 |
| Kidney beans (cooked), $1 / 2$ cup | 8.2 |
| Lentils (cooked), $1 / 2$ cup | 7.8 |
| Black beans (cooked), $1 / 2$ cup | 7.5 |
| Okra, $1 / 2$ cup | 3.1 |
| Turnip (cooked), $1 / 2$ cup | 3.1 |
| Peas, $1 / 2$ cup | 3.0 |

## References

1. Food Composition Databases Nutrients List. Food Composition Database. https://ndb.nal.usda.gov/ndb/nutrients/index. Accessed March 23, 2020.
2. U.S. Department of Agriculture, Agricultural Research Service. FoodData Central. fdc.nal.usda.gov. Accessed March 23, 2020.
3. Oregon State University, Linus Pauling Institute. Micronutrient Information Center. Fiber. https://lpi.oregonstate.edu/mic/othernutrients/fiber. Updated June 2019. Accessed March 23, 2020.
