

## FIBER BASICS

Dietary fiber is a type of complex carbohydrate found in vegetables, fruits and whole grains. Most Americans get only about half of the recommended amount of dietary fiber and, thus, could benefit from consuming more fiber-rich foods.<sup>1,2</sup>

### KEY FACTS

- One medium (5.3 ounce) potato with skin-on provides 2 grams of fiber, or 7% of the daily value per serving.
- Dietary fiber has been shown to have numerous health benefits, including improving blood lipid levels, regulating blood glucose, and increasing satiety, which may help with weight loss.<sup>1</sup>
- A common misconception is that all of the fiber in a potato is found in the skin. While the skin does contain approximately half of the total dietary fiber, the majority (> 50 percent) is within the potato itself.<sup>3</sup>
- When compared with 46 other commonly consumed vegetables, potatoes and beans were found to be the least expensive sources of fiber.<sup>4</sup>
- In the United States, recommendations for fiber intake are often made relative to calorie intake. The current recommend intake for fiber is 14g/1,000 kcal; thus, an average adult woman should consume 25 grams of fiber per day and the average male should consume 38 grams of fiber per day.<sup>2</sup>

### FUNCTIONS OF FIBER

Dietary fiber cannot be digested by human digestive enzymes and, thus, is not absorbed into the bloodstream. Despite the fact it is not digested or absorbed, dietary fiber has been shown to have numerous health benefits, including improving blood lipid levels, regulating blood glucose, and increasing satiety, (makes you feel full longer), which may help with weight loss.<sup>1</sup>

### RELEVANT RESEARCH

A study which examined the association between white potato consumption and dietary fiber intake indicated that when controlling for possible confounding variables (e.g., age, race, ethnicity, education, income, body mass index and energy consumed), white potatoes were positively associated with higher dietary fiber intakes among both adults and children. Specifically, potatoes provided more than 6% of dietary fiber to adults and almost 7% to children, while providing only 3% of total energy, suggesting potatoes have favorable fiber-to-calorie ratio.<sup>6</sup>

### FIBER RECOMMENDATIONS

The current recommended dietary allowance (RDA) for fiber is 25 g per day for women 19-50 years of age (28 g per day if pregnant or lactating) and 38 g per day for men 19-50 years of age.<sup>5</sup> The Dietary Guidelines for Americans recommends consuming a variety of nutrient-dense foods that are good sources of dietary fiber, such as beans and peas, fruits, unsalted nuts and seeds, vegetables, and whole grains.<sup>7</sup>

### REFERENCES

1. Dahl WJ, Steward ML. Position of the Academy of Nutrition and Dietetics: Health Implications of Dietary Fiber. *J Acad Nutr Diet.* 2015;115:1861-70.
2. Dietary Guidelines Advisory Committee 2015 Scientific Report. <https://health.gov/dietaryguidelines/2015-scientific-report/> Accessed December 27, 2018.
3. Woolfe JA. *The Potato in the Human Diet.* New York: Cambridge University Press. 1987.
4. Drewnowski A, Rehm CD. Vegetable cost metrics show that potatoes and beans provide most nutrients per penny. *PLoS One.* 2013;15:8(5).
5. Institute of Medicine. 2005. *Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids.* Washington, DC: The National Academies Press. <https://doi.org/10.17226/10490>.
6. Storey ML, Anderson PA. Contributions of white vegetables to nutrient intake: NHANES 2009-2010. *Adv Nutr.* 2013; 4: 335S-344S.
7. [https://www.accessdata.fda.gov/scripts/InteractiveNutritionFactsLabel/factsheets/Dietary\\_Fiber.pdf](https://www.accessdata.fda.gov/scripts/InteractiveNutritionFactsLabel/factsheets/Dietary_Fiber.pdf)