

## Guide to Fiber Supplements<sup>1</sup>

Wendy J. Dahl<sup>2</sup>

### Why might fiber supplements be needed?

Fiber supplements may be needed for older adults suffering from constipation. Constipation is a common health concern and may contribute to a lack of appetite as well as more serious health problems. A number of health conditions, diseases, and medications contribute to constipation. Lack of exercise also adds to constipation. Low fiber intake is a very common cause of constipation.

### How much fiber is recommended?

It is recommended that older women consume about 21g of fiber a day and older men aim for 30g per day (1). However, fiber intakes of older adults may fall below recommendations. It is often difficult for some older adults to meet their fiber needs through diet alone as they eat less food than healthier, younger people. Some older adults may avoid high-fiber foods due to expected problems chewing these foods.

When it is difficult for older adults to meet their recommended fiber intake within their usual diet, or when constipation is present, fiber supplementation may be recommended.

Older adults suffering from constipation should consult a doctor or Registered Dietitian (RD) prior to choosing a fiber supplement.

### What types of fiber supplements are available?

There are many different types of fiber supplements available and may be in powder, capsule, tablet, or "chew" form. Fiber supplement powders that can be added to beverages are the most common.

The fiber ingredient will be listed on the label of the fiber supplement. Common fiber ingredients used in fiber supplements include:

- Wheat dextrin
- Inulin (chicory root fiber)
- Methylcellulose
- Hydrolyzed guar gum
- Psyllium



### Do fiber supplements prevent constipation?

Fiber works to prevent constipation by bulking the stool, producing larger, soft stools that are more easily eliminated. To prevent constipation, fibers with the highest stool bulking capacity are recommended. Wheat bran, a fiber found in whole wheat bread and whole wheat cereals, has good stool bulking. It works well to prevent constipation. Wheat bran and other bran fibers, however, are too bulky to be used in fiber supplement capsules, pills, or chews. Bran fibers do not dissolve in water, so are not found in fiber supplement powders.

1. This document is FSHN11-01, one of a series from the Department of Food Science and Human Nutrition, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Published: January 2011. Visit the EDIS website at <http://edis.ifas.ufl.edu/>.  
2. Wendy J. Dahl, PhD, RD, assistant professor, Food Science and Human Nutrition Department, University of Florida, Gainesville, 32611.

Most fiber supplements available in the marketplace contain "soluble" (dissolve in water) fibers. Some soluble fibers, such as methylcellulose and psyllium, work well to prevent constipation. Other soluble fibers, such as fructooligosaccharides (FOS) and inulin have little to no effect on stool bulking. In general, you need to eat much more of most soluble fibers than bran fibers to prevent constipation.

Some fiber supplements contain sorbitol. Sorbitol is not a fiber, but rather a sugar that is not absorbed in the gut. Routine intake of small amounts of sorbitol contributes little to stool bulking and will result in intestinal gas. Higher intakes of sorbitol may cause diarrhea.

### **What are the potential side effects of taking fiber supplements?**

Fiber in food and supplements will result in intestinal gas production. Most older adults will experience noticeable flatulence (gas), usually within a few hours after taking the fiber supplement. Some people may experience uncomfortable bloating and abdominal discomfort. Increasing fiber intake gradually will help to determine one's tolerance to gas symptoms.

### **Do fiber supplements pose a risk for older adults?**

Psyllium fiber, which can become very thick when mixed with water, is a choking risk for older adults with swallowing problems. For older adults with normal swallowing, it is recommended that psyllium fiber supplements be taken with plenty of water. Soluble fiber supplements such as inulin (chicory root fiber) or wheat dextrin do not thicken water and therefore do not pose a risk of choking.

### **Tips for using fiber supplement powders**

Soluble fiber supplements containing either inulin (chicory root fiber) or various dextrans can be added to many foods and beverages with little or no effect on taste. Try adding to milk, juice, and other beverages, as well as to puddings, ice cream, and other desserts. Adding to soups and casseroles works well, too.

### **Where can I get more information?**

The Family and Consumer Sciences (FCS) agent at your county Extension office may have more information and classes for you to attend. Also, a registered dietitian (RD) can provide reliable information to you.

For more information on fiber, refer to the EDIS publication FCS8793, available at <http://edis.ifas.ufl.edu/fy849/>. For more information on constipation, refer to the EDIS publication FSHN10-07, available at <http://edis.ifas.ufl.edu/fs155/>.

### **References**

- (1) Institute of Medicine, Food and Nutrition Board. (2005). *Dietary reference intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein, and amino acids (macronutrients)*. Washington, DC: National Academy Press.