

Fiber & Healthy Kids

WHAT IS FIBER?

Fiber is an indigestible complex carbohydrate that is only found in plant foods, such as fruits and vegetables. Because our bodies are unable to digest it, fiber is free of calories. There are 2 categories: soluble and insoluble. The major difference is in the way each type passes through the digestive tract.

- ❖ **Soluble fiber** retains water and is passed slowly through the digestive tract.
- ❖ **Insoluble fiber** does not retain water and passes through the digestive tract largely intact.

BENEFITS OF FIBER

A variety of childhood health concerns have been linked to low fiber consumption, including type 2 diabetes, obesity, and constipation. A high fiber diet may help, but it is important to note the differences between soluble and insoluble fiber in order to use them to your child's advantage.

The slow passage of soluble fiber through the digestive system allows more time for food to be absorbed and makes you feel full. This is important because it can prevent overeating that can lead excess weight gain. Also, soluble fiber helps to lower cholesterol and maintain steady blood sugar.¹

- ❖ **Sources include:** oatmeal, nuts, seeds, apples, strawberries, pears, legumes - dried peas, beans, lentils

Insoluble fiber helps with constipation because it creates soft, bulky stools and helps pass food quickly through the stomach and intestines.

- ❖ **Sources include:** carrots, celery, tomatoes, cucumbers, and whole grains – whole wheat bread, barely, couscous, brown rice, and whole wheat cereals.



HOW MUCH FIBER SHOULD I GIVE MY CHILD?

It is important to maintain an adequate intake of fiber every day. One way to determine how much fiber is appropriate for children is to add 5 to the age of the child. For instance, a 7 year old would need 12 g fiber/day ($7 + 5 = 12$). This calculation can be used to determine the minimum daily requirement for fiber. However, the American Heart Association encourages a higher goal in order to optimize the health benefits fiber provides. The chart below can be used as a guide to figure out how much daily fiber your child needs.

Gender/Age	Fiber (grams)
1 – 3 years	19
4 – 8 years	25
9 – 13 years Female	26
Male	31
14 – 18 years Female	29
Male	38

TIPS ON INCREASING FIBER INTAKE IN CHILDREN:

When you start to add more fiber to your child's diet it is important to do it gradually to prevent gas and bloating. It is also important to make sure you increase your child's fluid intake, as well. Encourage your child to drink 1– 2 C above their usual fluid intake.

Here are some simple ways to add fiber to your child's daily diet:

- ❖ Serve cereals made with whole grains – such as oats, wheat, rye, barley and corn. Whole grains should be listed as one of the 1st ingredients on the nutrition label
- ❖ Use 100% whole grain bread for French toast and sandwiches
- ❖ Try whole wheat pasta and/or brown rice – start out slow by mixing half regular and half whole grain when first introducing it
- ❖ Encourage at least 5 whole fruits and vegetables, and when possible, eat with skins – this is where the most fiber is found. Remember to thoroughly wash fresh fruit and vegetables before eating!
- ❖ Dip sliced apples in peanut butter or spread on celery
- ❖ Serve vegetables with low-fat dip or salsa
- ❖ Add diced/shredded cooked vegetables to pasta dishes or macaroni and cheese
- ❖ Offer low-fat, air-popped popcorn as a snack [1C = 4 g fiber]
- ❖ Add low fat granola to yogurt or ice cream
- ❖ Make trail mix using a high fiber, whole grain cereal, dried fruit and nuts or seeds

Reference:

1. www.ahealthyme.com/topic/fiberdiabetes

This table includes some fiber rich foods that you may also want to consider making part of your child's diet.

	Source	Serving Size
High Fiber 5 gm/serving	Raisin bran cereal	1 C
	Bran flakes	¾ C
	Pear with skin	1 med
	Whole wheat pasta	1 C
	Lentils or beans	½ C
	Peas	1 C
Good Source of Fiber 2.5 – 4.9 gm/serving	Oatmeal	1 C
	Orange, banana, or apple with skin	1 med
	Raspberries	½ C
	Strawberries or blueberries	1 C
	Whole wheat English muffin	1 muffin
	Almonds	1 oz
	Dried fruit	
	Peaches	3 halves
Apricots	10 halves	
Raisins	½ C	
Please note: food is the recommended source of dietary fiber, but if it is not possible for your child to obtain adequate fiber this way, you may want to talk to your child's doctor about a fiber supplement.		

Websites to visit for more information:

www.kidshealth.org/parent/nutrition_fit/nutrition/fiber.html

www.ahealthyme.com/topic/fiber

www.aafp.org/afp/20060201/481ph.html

www.mayoclinic.com/health/high-fiber-foods/ NU00582