

# Fiber and the Gluten-Free Lifestyle

## **Fiber – An Overview**

Dietary fiber is a multifaceted combination of plant material that the body does not digest easily. The two types of dietary fiber are soluble fiber and insoluble fiber. Soluble fiber helps bulk stool and can be found in fresh fruits and vegetables. Insoluble fiber helps prevent constipation and can be found in whole grain products.

It is recommended that adults consume 25-38 grams of fiber each day. A diet rich in fruits, vegetables and whole grains will ensure that this goal is met. Checking food labels for products that have fiber content greater than or equal to 3 grams per serving will also help meet this recommendation. When consuming a diet rich in fiber, it is important to drink water throughout the day to prevent constipation. Consuming about 8 (8-ounce) glasses per day is recommended.

Fiber is an essential component for individuals with celiac disease following a gluten-free lifestyle. When individuals are first diagnosed with celiac disease, they typically depend on low-fiber and low-nutrient grains like rice, corn and potatoes. Some foods that contain these products are fortified with extra nutrients, but the majority of companies do not fortify the products. Incorporating healthy sources of both soluble and insoluble fiber from fruits, vegetables, nuts, seeds and healthy whole grains will help improve intestinal motility and ensure that you are consuming an adequate amount of fiber and nutrients.

## **Great Sources of Soluble Fiber**

Legumes (beans, peas, and lentils), fruits (apples, pears, mangoes, papayas, strawberries, oranges, grapefruit, and prunes), vegetables (carrots, broccoli, Brussels sprouts, eggplant, and okra), sweet potatoes, and ground flax seeds and chia seeds

## **Great Sources of Insoluble Fiber**

Quinoa, buckwheat, millet, teff, sorghum, amaranth, wild rice, brown rice (**all grains must be labeled gluten free, except rice**), nuts (almonds, walnuts, soy nuts), chia seed and fruits and vegetables with skins and edible seeds

## **Tips to Increase Daily Fiber: GF= gluten free**

- Choose one of the “super-six” grains (quinoa, buckwheat, millet, teff, sorghum, amaranth labeled GF) instead of relying only on rice, potato and corn products.
- Sprinkle ground flax seed onto hot and cold GF cereals.
- Mix together half a portion of whole grain brown rice with half a portion of amaranth, quinoa or teff and cook; be sure to increase the amount of cooking water accordingly.
- Add cooked, dried beans to soups, salads and casseroles.
- Choose fresh fruits and vegetables rather than juices.
- Choose fruits, vegetables, and high fiber GF crackers for snacks.
- Substitute whole GF grains into your favorite recipes.

## **Meal Options for a High-Fiber Gluten-Free Lifestyle** (GF = gluten free)

### **Breakfast:**

- GF grain-based hot cereal made from quinoa, buckwheat, sorghum, millet or brown rice with milk or dairy-free alternative (GF rice milk or almond milk) sprinkled with ground flax seed and fruit
- Greek yogurt with berries and slivered almonds
- GF cold breakfast cereal with fiber-rich additions, such as berries and slivered almonds and nuts
- Berry, mango or papaya smoothie with Greek yogurt, ground flax seed or chia seeds, low fat milk or a dairy-free alternative (GF rice milk or almond milk) and fruit
- Homemade buckwheat pancakes topped with a nut butter, honey and cinnamon with orange slices on the side
- GF tortillas with egg or tofu, salsa, and cheese (regular, GF dairy, or GF vegan cheese)

### **Lunch:**

- Chickpeas on your favorite salad with citrus/olive oil dressing
- Hummus, spinach leaves, and roasted vegetables in a GF teff tortilla
- Bean soup with high fiber GF crackers
- Chicken/vegetable stir-fry (GF soy sauce) over cooked quinoa or millet
- Vegetable soup with teff, amaranth and/or quinoa added as a grain
- Wild rice with salmon and steamed asparagus
- Homemade split pea or lentil soup
- Sautéed kale salad with avocado, lemon juice, tomatoes, and slivered almonds

### **Dinner:**

- Veggie sushi made with brown rice, cucumbers, avocado (use unseasoned rice vinegar for sushi rice)
- Black beans, salsa, cilantro and low fat cheese on a GF teff or corn tortilla
- Roasted sweet potato with chicken breast and grilled vegetables
- Brown rice mixed with quinoa, teff or amaranth with beans and vegetables
- Bean chili made with teff or amaranth
- Quinoa pasta with black beans and roasted vegetables (red onion, parsnips, beets)
- Corn, quinoa, lentil or rice pasta with pasta sauce and ground/chopped lean beef or turkey and shaved parmesan
- Butternut squash soup with tofu chunks, mushrooms, green onions and lemongrass
- Risotto with short-grain rice, low sodium GF broth, vegetables, parmesan cheese, lemon and olive oil

**Snacks:**

- High fiber GF crackers with nut butter
- Edamame (boiled soybeans)
- Roasted sweet potato sticks sprinkled with cinnamon
- Trail mix: ¼ cup almonds or walnuts and ¼ cup dried fruit
  
- Air-popped popcorn
- High fiber GF chips with bean dip or hummus with tahini
- Apple or banana with a nut butter
- Roasted or grilled eggplant slices with GF tomato sauce and mozzarella
- Fresh fruits (berries, peaches, plums, apricots, bananas, melons, oranges, grapefruit, mango, papaya)
- Dried fruits (in small servings): cherries, cranberries, apples, pineapples, raisins, peaches, mango, banana chips, GF dry cereals mixed with GF low fat yogurt
- Snack mix: GF dried cereal, GF pretzels, GF chocolate bits, GF energy bars
- Canned tuna mixed with lemon juice and GF yogurt on high-fiber GF crackers
- Peanut butter or other nut butters and jelly or honey on whole-grain GF rice or corn cakes
- Raw vegetables with hummus, salsa, baba ghanoush (eggplant dip) or other GF dips
- GF low fat yogurt with almonds or walnuts

**Important Notes:**

- Gluten-free grains: all GF grains (quinoa, teff, amaranth, millet, sorghum, buckwheat, etc.) must be labeled gluten-free. Plain rice (white or brown) does not have to be labeled gluten-free but avoid rice mixes or pilafs unless labeled gluten-free.
- Nuts and Seeds: all nuts and seeds should be labeled gluten-free.
- Dried fruit: avoid dates rolled in oat flour.
- Be sure to wash fruits and vegetables well.
- Gluten-free oats can also be a great source of soluble fiber in the gluten-free diet. Tolerance depends on the individual. Talk to your celiac health care team to help you make an informed decision about when/if and how to add labeled gluten-free oats to your diet.

Beth Israel Deaconess Medical Center, Revised May 2019

Celiac Center: (617) 667-1272 and Nutrition Services: (617) 667-2565

Dietetic/Celiac Center Interns: Joanne Murray, Orianna Ellison, Rachel Vanderpool and Kelly McNulty