

Fiber: Harnessing the Health & Healing Benefits of Complex Carbohydrates

Let's talk about fiber! While fiber is not a macronutrient like Fat or Protein (the other two components of our core **Fat/Fiber/Protein** principle for health and healing), it is critical for full body systems health and balance. In fact, it's a key factor supporting our *Non-Negotiable Triecta of Sleep, Poop, and Blood Sugar Balance!*

Fiber, also known as *dietary fiber* or *roughage*, is a type of complex carbohydrate found primarily in plant-based foods. Unlike macronutrients like proteins, fats, and carbohydrates, fiber cannot be broken down and absorbed by the body's digestive system and used for energy. Instead, it passes through the digestive tract mostly intact, providing various health benefits which we'll explore below.

Fiber is composed of the indigestible parts of plants, such as:

- cellulose
- hemicellulose
- pectin
- lignin

It's found in foods like fruits, vegetables, whole grains, legumes, nuts, and seeds. Fiber comes in two main types: soluble fiber and insoluble fiber.

Soluble Fiber: This type of fiber dissolves in water to form a gel-like substance in the digestive tract. It can be fermented by beneficial gut bacteria. Soluble fiber is found in foods like:

- oats and oat bran
- fruits (such as apples and citrus fruits)
- berries
- vegetables
- legumes (beans and lentils)
- psyllium husk
- and some nuts and seeds

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Insoluble Fiber: This type of fiber does not dissolve in water and adds bulk to the stool. It helps to promote regular bowel movements and can also help to prevent constipation. Insoluble fiber is found in foods like:

- whole wheat products
- brown rice
- vegetables (such as cauliflower and green beans)
- potatoes
- and some nuts and seeds

Most plant-based foods contain both soluble and insoluble fiber. The exact breakdown of soluble and insoluble fiber in specific foods can vary based on factors like growing conditions, harvesting methods, and testing procedures.

In this handout we'll explore the health benefits of a fiber-rich diet and share resources that help you to explore further.



THE HEALTH BENEFITS OF FIBER

Fiber offers numerous health benefits, including improved digestion, better blood sugar regulation, heart health support, and gut microbiome nourishment. It is an essential part of a balanced diet that supports overall well-being in all of the following ways.

- **Improved digestion:** Both soluble and insoluble fiber promote regular bowel movements and prevent constipation by adding bulk to stool and supporting smooth passage through the digestive tract.
- **Weight management:** High-fiber foods contribute to satiety, promoting a feeling of fullness, which can support overall well-being and a balanced approach to eating.
- **Blood sugar regulation:** Soluble fiber slows down the absorption of sugars, which helps to stabilize blood sugar levels and reduces the risk of type 2 diabetes and other challenges associated with blood sugar dysregulation.
- **Heart health:** Fiber has been associated with a reduced risk of heart disease by helping to lower LDL cholesterol levels and promote heart-healthy blood pressure levels.
- **Gut health:** Fiber nourishes beneficial gut bacteria, contributing to a healthy gut microbiome, which is essential for digestive health, immune function, and so much more.
- **Enhanced nutrient absorption:** A healthy gut lining supported by fiber can improve nutrient absorption.
- **Reduced inflammation:** A fiber-rich diet may help lower markers of inflammation in the body.
- **Healthy aging:** Fiber-rich diets have been associated with improved cognitive function and a reduced risk of age-related diseases.
- **Liver health & detoxification:** Fiber plays a vital role in supporting liver health and detoxification processes, aiding in the efficient elimination of waste and toxins from the body, reducing the burden on the liver, and promoting its optimal function.



START LOW, GO SLOW!

When adding more fiber to the diet, it's essential to follow a "start low, go slow" approach to avoid potential digestive discomfort. Remember, everyone's digestive system is different, and what works well for one person may not work the same for another. A gradual and mindful approach to adding fiber will help ensure a positive experience as you incorporate more fiber-rich foods into your diet.

Here are some recommendations:

- **Gradual increase:** Begin by incorporating small amounts of fiber-rich foods into the diet. Slowly increase the portions and servings over time. This allows your digestive system to adjust to the additional fiber intake.
- **Hydration:** Ensure you drink plenty of water throughout the day when increasing fiber intake. Adequate hydration helps fiber move smoothly through the digestive tract and can reduce the risk of constipation that can arise when we add too much fiber at once.
- **Diversity:** Include a variety of fiber sources in your diet! This will provide different types of fiber and a broader range of nutrients. Rotate between fruits, vegetables, whole grains, legumes, nuts, and seeds (as are individually tolerable).
- **Cooking methods:** If certain high-fiber foods cause digestive discomfort, don't give up fiber-loving hope! Try different cooking methods. For example, steaming or roasting vegetables may be gentler on your digestive system than eating them raw. You may also want to try blending or pureeing to make the fiber more easily digestible.
- **Listen to your body:** Pay attention to how your body responds to the increased fiber intake. If you experience bloating, gas, or discomfort, reduce the amount of fiber temporarily and slowly reintroduce it as your digestive system adapts. It will!



FIBER FREQUENTLY ASKED QUESTIONS

Q: What's the difference between soluble and insoluble fiber?

A: Soluble fiber dissolves in water and forms a gel-like substance, slowing down the digestion process and stabilizing blood sugar levels. Sources include oats, apples, and legumes (see above). Insoluble fiber does not dissolve in water and adds bulk to stool, promoting regular bowel movements. Sources include whole wheat products, brown rice, and vegetables like cauliflower (see above).

Q: When should fiber be increased or decreased?

A: Fiber is something we aim to include with every meal or snack (ie. Fat/Fiber/Protein). It's a great principle to anchor on in relation to ditching dietary theory and creating some autonomy around food choices. You may want to consider an increase in fiber intake when there is constipation or you want to stabilize blood sugar levels. (Hello Non-Negotiable Trifecta!) You may want to decrease fiber intake temporarily if you have certain digestive issues, such as diarrhea or irritable bowel syndrome (IBS).

Q: How much fiber should I eat daily?

A: Here at Functional Nutrition Alliance we are not fans of counting or measuring. We do like to consider adding fiber to every meal or snack. The recommended daily fiber intake varies based on many factors including age, gender, health status and health goals. On average, adults should aim for around 25 to 35 grams of fiber per day. Remember to "start low and go slow", gradually increasing fiber intake to avoid digestive discomfort and drink plenty of water alongside high-fiber foods.



FIBER RESOURCES

RECOMMENDED LISTENING

Mapping Soluble Fiber with Megan Barnett (15-Minute Matrix episode #315)

Mapping Resistant Starch with Dr. Chris Dammon (15-Minute Matrix episode #319)

Mapping Prebiotics with Dr. Liz Lipski (15-Minute Matrix episode #13)

Mapping Short-Chain Fatty Acids with Dr. Michael Ash (15-Minute Matrix episode #52)

RECOMMENDED READING

Sow Your Wild Oats (oat bran)

Pick a Peck of Pectin (pectin)

Psyllium Husk for Husky Poop (psyllium)