

Fiber is your body's natural guide to weight management

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Fiber might just be the key to healthy weight management—and nature packages it in perfectly balanced ratios with carbs when you eat them as whole foods. Think unprocessed fruits, vegetables, whole grains, beans,



nuts and seeds. Research suggests that carbohydrates are meant to come packaged in <u>nature-balanced ratios</u> of total carbohydrates to fiber. In fact, certain types of fiber affect how completely your body <u>absorbs</u> <u>carbohydrates</u> and <u>tells your cells how to process them</u> once they are absorbed.

Fiber slows the absorption of sugar in your gut. It also orchestrates the fundamental biology that recent blockbuster weight loss drugs like Wegovy and Ozempic tap into, but in a natural way. Your microbiome transforms fiber into signals that stimulate the gut hormones that are the natural forms of these drugs. These in turn regulate how rapidly your stomach empties, how tightly your <u>blood sugar levels</u> are controlled and even how hungry you feel.

It's as if unprocessed carbohydrates naturally come wrapped and packaged with their own instruction manual for your body on how to digest them.

I am a <u>physician scientist and gastroenterologist</u> who has spent over 20 years studying how <u>food affects the gut microbiome</u> and metabolism. The research is clear—fiber is important not just for happy bowel movements, but also for your <u>blood sugar</u>, weight and overall health.

Carbohydrates without their wrappers

Unfortunately, most Americans get the majority of their carbohydrates stripped of their <u>natural fibers</u>. Modern processed grains like <u>white rice</u> and white flour as well as many ultraprocessed foods like some sugary breakfast cereals, packaged snacks and juices have removed these fibers. They essentially come unwrapped and without instructions for the body on how much it should absorb and how it should process them. In fact, <u>only 5% of Americans</u> eat the recommended amount of carbohydrates with enough of their natural packaging intact. Guidelines recommend <u>at</u>



least 25 to 30 grams of fiber a day from food.

It may not be surprising that lack of fiber <u>contributes to diabetes and</u> <u>obesity</u>. What is surprising is that the fiber gap also likely contributes to <u>heart disease</u>, certain <u>types of cancer</u> and maybe even <u>Alzheimer's</u> <u>disease</u>.

One popular approach to mitigating some of the ill health effects of low fiber and high refined carbohydrates has been to <u>limit carbohydrate</u> <u>intake</u>. Such approaches include the low-carb, keto, paleo and Atkins diets. Each diet is a variation on a similar theme of limiting carbohydrates to varying amounts in different ways.

There is scientific backing to the benefits of some of these diets. Research shows that limiting carbohydrates <u>induces ketosis</u>, a <u>biological</u> <u>process</u> that frees energy from fat reserves during starvation and prolonged exercise. Low-carbohydrate diets can also help people lose weight and <u>lead to improvements</u> in blood pressure and inflammation.

That said, some keto diets may have negative effects on <u>gut health</u>. It is also unknown how they may affect <u>heart health</u>, <u>some forms of cancer</u> and other conditions in the long term.

Even more confusing, research shows that people with diets high in plantsourced carbohydrates, like the Mediterranean diet, tend to lead the <u>longest and healthiest lives</u>. How can this be reconciled with studies that suggest that <u>low-carbohydrate diets</u> can benefit metabolic health?

Is a carb a carb?

The answer may have to do with the <u>types of carbohydrates</u> that studies are evaluating. Limiting simple sugars and refined carbohydrates may improve certain aspects of metabolic health, as these are some of the



most easily digested and absorbed calories. But a more sustainable and comprehensive way of improving health may be <u>increasing the</u> <u>percentage</u> of unprocessed, more complex and slowly absorbed carbohydrates that come with their natural packages and instructions intact—those that have fiber.

These natural carbohydrates can be found in whole grains, beans, nuts, seeds, fruits and vegetables. They come in ratios of total <u>carbohydrate</u> to fiber that <u>rarely exceed 10-to-1 and are often 5-to-1 or lower</u>. Eating mostly whole foods is a simple way to ensure you're consuming quality carbohydrates with the right ratios.

But who doesn't like to have a big bowl of pasta or cake with <u>ice cream</u> on occasion? Focusing on packaged processed foods that maintain carbto-fiber ratios of at least as low as 10-to-1 or ideally 5-to-1 can help you make the best choices when picking more processed foods at the store. Take a look at the nutrition facts label and simply divide total carbohydrates by dietary fiber.

On occasions when you're eating out or celebrating someone's birthday, consider taking a fiber supplement with your meal. One pilot study found that a <u>supplement containing a blend of fibers</u> decreased the blood sugar spike—an increase in glucose levels in the blood that if <u>too high</u> <u>can damage the body over time</u>—after a meal in healthy individuals by roughly 30%.

Listen to your body

While almost all fiber is generally good for health in most people, not all fiber affects the <u>body in the same way</u>. Consuming a <u>range of different</u> <u>types</u> of fiber generally helps ensure a diverse microbiome, which is linked to gut and overall health.



But certain medical conditions might preclude consuming certain types of fiber. For example, some people can be particularly sensitive to one class of fiber called FODMAPS—fermentable oligosaccharides, disaccharides, monosaccharides and polyols—that are more readily fermented in the upper part of the gut and can contribute to symptoms of irritable bowel syndrome like bloating and diarrhea. <u>High-FODMAP</u> <u>foods</u> include many processed foods that contain inulin, garlic powder and onion powder, as well as whole foods including those in the onion family, dairy products, some fruits and vegetables.

Listen to how your body responds to different high-fiber foods. Start low and go slow as you reintroduce foods like beans, seeds, nuts, fruits and vegetables to your diet. If you have trouble increasing your fiber intake, talk with your health care provider.

Tools like this <u>online calculator</u> I've created can also help you find the highest-quality foods with healthy fiber and other nutrient ratios. It can also show you what proportions of fiber to add back to sugary foods to help achieve healthy ratios.

I wouldn't endorse eating sweets all the time, but as my three daughters like to remind me, it's important to enjoy yourself every once in a while. And when you do, consider putting the carbs back in their fiber wrappers. It's hard to improve upon nature's design.

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