

Coconut Dietary Fiber

A New Dietary Supplement

Nutritionists recommend that we get 20-35 grams of dietary fiber a day. Most Americans only get about 15 grams. Good sources of dietary fiber are whole grains, legumes, and nuts. Coconut is an ideal source of dietary fiber. Coconut has one of the highest percentages of fiber among all plant foods. *Seventy-five* percent of the total carbohydrate content is fiber. In comparison, the carbohydrate in green beans is only 30 percent fiber, in okra it is only 25 percent, and—corn it is 18 percent.

Because of its high fiber content, coconut can make an excellent dietary fiber supplement. Coconut flour is a new source of dietary fiber made from finely ground, dried, and defatted coconut. Coconut flour has a higher fiber content than many other flours. It contains four times as much fiber as oat bran and twice as much fiber as wheat bran or flaxseed meal. Unlike psyllium husk and wheat bran and most other sources of dietary fiber, coconut tastes good!

A tablespoon or two of coconut flour can be added to beverages, smoothies, baked goods, casseroles, soups, and hot cereal. This is a simple and easy way to add fiber into your daily diet without making drastic changes in the way you eat. Another way to add coconut fiber into your diet is by using it in your baking. You can add a few spoonfuls of coconut flour into batter and dough when making bread, muffins, cookies, etc. This would greatly increase the fiber content of your baked goods without altering the taste.

Coconut flour has all the benefits of other dietary fibers; it lowers risk of heart disease, helps prevent cancer, improves digestive function, helps regulate blood sugar, etc. It also has several advantages over most other forms of fiber, including relieving symptoms associated with Crohn's disease, expelling intestinal parasites, and improving mineral absorption. Let me briefly discuss a few of these.

Intestinal Health

Although we do not get nourishment from fiber, it feeds friendly bacteria in our gut that are essential for good health. These bacteria produce vitamins and other substances that are beneficial in promoting health and wellness. When we eat adequate amounts of fiber, intestinal bacteria flourish. Harmful bacteria and yeast such as candida, which compete for space in the intestinal tract, are kept under control.

One of the most important reasons why friendly bacteria are important to our health is that they produce short-chain fatty acids (SCFAs). Short-chain fatty acids are fats that are synthesized from dietary fiber by intestinal bacteria and are vital to our health and the health of the colon.

While these SCFAs are harmless to our tissues and friendly bacteria, they are deadly to many forms of disease-causing bacteria and yeasts that can infect the intestinal tract. SCFAs can kill these troublesome organisms. The benefits which intestinal bacteria provide us are dependent on the amount of fiber we feed them. The more fiber we eat, the more friendly bacteria will thrive and produce SCFAs, thus keeping our colon healthy and nasty microorganisms in check.

Another benefit is SCFAs ability to pass through cell membranes and into the mitochondria without the aid of special hormones (insulin) or enzymes (carnitine). Therefore, they can easily enter the cells in the colon where they are utilized as fuel to power metabolism. SCFAs are an important source of nutrition for the cells in the colon. In fact, SCFAs are the preferred food of colonic cells and are necessary for a healthy intestinal environment.

Researchers have discovered that an abnormally low level of SCFAs in the colon can lead to nutritional deficiencies, which can cause inflammation and bleeding. Researchers found that SCFAs administered rectally into the colon relieve these conditions.

The fiber in coconut acts as food for gut bacteria. Consequently, coconut helps increase SCFAs in the gut and helps prevent and relieve symptoms associated with Crohn's disease, irritable bowel syndrome, colitis, and other digestive disorders. Many people have reported that even eating as little as two coconut macaroon cookies a day relieves their symptoms. A newspaper health column from King Features Syndicate published a letter from a reader who had an interesting experience involving coconut.

"More than 20 years ago I was diagnosed with irritable bowel syndrome (IBS). Tests revealed no cause. Diarrhea attacks accompanied by severe abdominal pain rarely gave me time to find a bathroom before it was too late. I would suffer several times a week. At 6 feet 2 inches tall I weighed only 147 pounds and could not gain weight, even eating 5,000 calories a day. Imodium A-D daily provided minimal help. Ten months ago I read in your column about a man with Crohn's disease who had been helped by eating two Archway Coconut Macaroons daily. I had nothing to lose, so I gave it a try. IT HAS CHANGED MY LIFE! In these past 10 months I have had only a few mild attacks, none involving pain. Even the worst of these was milder than a good day before. I stopped carrying a change of clothes in my car, as I haven't needed them once. Twenty years of suffering, and all I needed to do was eat cookies! There is not one medication on the market that can boast fewer side effects. My weight is now stable at 180 pounds, ideal for my height."

Sometime later another reader wrote in and stated, "I've read in your column about coconut macaroon cookies as a treatment for chronic diarrhea. My dog has been diagnosed with irritable bowel syndrome, for which he has been prescribed prednisone. I know you were suggesting the cookies for people, but I figured, why not for my dog? On two coconut macaroons a day and no prednisone, he is getting much better. I wish I had known about this approach for my mother who had Crohn's disease."

While the people reported here used cookies made with coconut, coconut flour added to foods can be just as beneficial.

Diabetes

Dietary fiber in general is known to slow down the absorption of sugars thus helping to keep blood sugar under control. Coconut flour is highly effective in controlling blood sugar. Studies have shown that when coconut flour is added into foods or taken with meals, it significantly lowers the glycemic index of the foods and thus lowers the effect foods have on raising blood sugar levels. In one study, for example, it was shown that adding coconut flour into a meal consisting of sweet breads (brownies, cake, etc.) that diabetic subjects' blood sugar levels were the same as the nondiabetic subjects. In other words, the sugar and other carbohydrate in the foods

did not have an adverse effect on blood sugar levels when coconut flour was included in the meal.

Simply adding a tablespoon of coconut flour into a glass of juice or mixing it into the foods during a meal can have dramatic results. Diabetics are experiencing incredible results. For example, one lady explained that her diabetic husband suffered a stroke and was in the hospital. While in the hospital he was given the American Diabetic Association (ADA) diet. His blood sugar levels were in the 300-400 mg/dl range. This is extremely high. A person is diagnosed as being diabetic when blood sugar levels are 126 or higher. Levels of 100 and lower are considered normal.

She took her husband off the ADA diet and placed him on her own low-carb diet. His blood sugar levels dropped to 140-170 range. Still high, but much lower than the ADA diet. She then purchased some coconut flour and started giving it to him with his meals. His blood sugar levels dropped to 100-108.

Vermifuge

An interesting benefit of coconut fiber, not found in other fibers, as far as I'm aware, is that it acts as a vermifuge (i.e., expels parasitic worms). Eating coconut to get rid of parasites is a traditional practice in India that was even recognized among the early medical profession. It was included in a handbook of tropical medicine published in India in 1936 and in an Indian Materia Medica with Ayurvedic medicine published in 1976.

In 1984 researchers in India published a study on the effectiveness of this traditional remedy. Fifty individuals infected with tapeworm participated in the study. Various coconut preparations followed by Epsom salt were administered to the volunteers. The researchers found that within 12 hours after eating dried coconut, 90 percent of the tapeworms were expelled. Some of those tapeworms were over six feet long. Continued use resulted in 100% expulsion.

At the time of the study, the researchers reported that except for Niclosomide, no drug was as effective in the treatment of tapeworm infestation as was coconut. Niclosomide, however, causes tapeworms to waste away or separate, releasing toxins that can cause undesirable side

effects. The researchers concluded that since coconut is nontoxic, palatable, easily available, and fairly cheap, and because it is highly effective in expelling tapeworms without causing side effects, it is a safe and effective treatment for tapeworm infestation. They recommended the use of coconut dietary fiber as a good source of fiber to use for the purpose of removing intestinal parasites.

Mineral Absorption

Many researchers believe that the fiber in our foods can influence mineral absorption. The foods with the highest fiber content are legumes and grains like soy, wheat, and oats. One drawback that has been reported by researchers with the bran or fiber from these sources is that they contain phytic acid, which binds with minerals in the digestive tract and pulls them out of the body. Consequently, mineral absorption is decreased. Some of the minerals that are bound to phytic acid include zinc, iron, and calcium. It has been suggested that eating too much phytic acid can lead to mineral deficiencies. Even dietary fiber levels of 10 to 20 percent are believed to interfere with absorption of minerals in the digestive tract. Yet, we are counseled to get between 20 and 35 percent dietary fiber in our diets. What are we to do? We need fiber for good digestive health, but too much may cause nutritional problems. The perfect solution to this problem is not to reduce fiber consumption, but to replace some of the fiber we get from grains and legumes with fiber that does not pull minerals out of the body. Coconut flour fits that description. Coconut does not contain phytic acid and does not remove minerals from the body. You can eat all the coconut you want without worrying about it negatively affecting your mineral status.

If anything, coconut fiber improves mineral status. Fiber slows down the emptying of the stomach, allowing foods to be bathed in gastric juices for a longer amount of time. This allows more minerals to be released from the food we eat; so more are available for absorption. ■

Coconut flour is available at your local health food store or you can order it online at www.simplycoconut.com.