

Dietary Fiber & Regularity

How Fiber Helps to Form Stools



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The colon uses both soluble and insoluble fiber to produce stools. Without both types of fiber, stools are not formed properly and the health of the colon is compromised.

Insoluble fiber and water make up the bulky volume and weight of a stool. This is important because a stool of insufficient volume and weight moves slowly through the colon. Stools that move too slowly become dried out from the water extracting action of the colon. The result? Stools that are difficult to pass...constipation.

Soluble fiber is converted by bacteria into a lubricating gel that makes stools soft, flexible and easy to pass. This gel also lubricates and protects the colon lining.

How is dietary fiber digested?

Fiber is sometimes referred to as the non-carbohydrate carbohydrate because fiber passes through the body mostly undigested. Instead, fiber is passed to the colon where it is put to work helping the body to produce stools. Without dietary fiber, stools are not formed properly.

Insoluble fiber comes from the structural material of the cell walls of plants. Humans do not produce the enzymes that would permit us to breakdown these plant fibers. So, insoluble fibers are passed to the colon where they create bulk in the stool.

Soluble fiber is found inside and around plant cells. For the human digestive system, this is where the plant's nutritional value is stored. Once soluble fiber finally reaches the colon, bacteria ferments soluble fiber into a gel that helps to soften stools, lubricate the colon lining and promote the growth of healthy bacteria.

How does insoluble fiber create Bulk and make stools easier to pass?

In the colon, insoluble fibers swell up with water expanding to about twenty times their original size. These water logged fibers create volume and weight in the stool as it is formed.

Stools with good volume and weight stimulate muscle contractions in the colon. These muscle contractions move the stool through the colon. With regular stimulation, the tone of these muscles is maintained. Why is this important? Good intestinal tone means that the stools move along quickly

through the colon. This is called "speedy stool transit time". Speedy stool transit time helps to prevent stools from becoming squeezed dry as a result of moving too slowly through the colon.

Additionally, the moisture retaining quality of the swollen insoluble fibers in the stool work to counter the water extracting action of the colon which also helps to prevent stool from becoming dried out. This makes stools easier to pass.

How does soluble fiber help to soften stools and make them easier to pass?

In the colon, healthy intestinal bacteria ferment soluble fiber into a fatty acid gel that becomes incorporated into the stool mass as it is formed. This gel helps to moisturize the stool making it soft, flexible and easy to pass.

Gel that is not incorporated into the stool mass nourishes and protects the colon lining by forming a lubricating coating on the surface of the lining. This prevents the lining of the colon from becoming dried out. When the lining becomes dried out it is at greater risk of being damaged by hard fibrous bits like popcorn hulls or seeds.

The gel coating on the lining also helps to protect the delicate nerve endings that extend down into the colon wall. These nerve endings can also become damaged from being scraped by these hard fibrous bits. Nerves that become damaged will recoil from the surface of the colon. Neural stimulation will not occur in these areas where the nerves have recoiled. Signals...

How does soluble fiber help to soften stools and make them easier to pass? (continued)...

...between the brain and the colon become interrupted which delays the rhythmic action of the colon muscles. Stool transit time becomes slowed. Stools become dried out from moving too slowly through the colon. The result? Constipation and/or irregularity.

The gel coating the lining also acts as a natural laxative lubricating the passage of stool through the colon. This helps to... speed stool transit time and makes stools easier to pass.

And finally, the gel coating the colon lining helps to create a nourishing environment that promotes healthy bacterial growth.

Why does this matter? Because healthy intestinal bacteria help to further breakdown

waste and protect the colon from infection. Bacteria does this by grooming the lining of the colon and fighting the growth of infectious bacteria.

Summary

The very health of the colon organ itself, *and* the quality of stools it can produce, are affected by the *presence or the lack of* fiber in the diet.

*Article by Carole Engel
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Fruit-Eze™ pure fruit regularity blend contains the right blend of soluble and insoluble fibers needed to restore colon health & improve stool quality.

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