

## SOLUBLE FIBER



## INSOLUBLE FIBER



# DIETARY FIBER AND WHY WE NEED IT

Most adults eat around 18g of fiber a day, but the government recommend 30g a day. So, what is fiber and why should we try to meet the government recommendations?

## WHAT IS FIBER?

Dietary fiber is the term used for plant constituents that are not digested in the small intestine. (NSP) They reach the large intestine or colon where they are partially or completely broken down by the gut bacteria.

## TYPES OF FIBER

There are four main types of fiber, each exhibiting its own beneficial affects on the body

- Soluble
- Insoluble
- Psyllium/ Ispaghula
- Prebiotic and resistant starch

Soluble fiber dissolves in water and is readily fermented by the gut bacteria in the colon. It slows down the rate at which food empties for the stomach which can help with weight management by helping people feeling fuller for longer. By slowing the rate at which nutrients are absorbed, it can also have a positive impact on blood sugars. The net effect being to improve insulin resistance ad diabetic control in people with type 2 diabetes.

Soluble fiber also binds to fats such as saturated fat, thus having an impact on blood cholesterol and therefore risk of heart disease.

**Soluble fiber** is found in fruits, vegetables, legumes and oats.

**Insoluble fiber** is found predominantly in whole grains and nuts. It doesn't dissolve in water and acts as a bulking agent, slows transit time through the gut, where it also absorbs water, helping with stool formation. It is fermented in the colon to produce short chain fatty acids. These have several health promoting affects and are associated with reduced risk of colon cancer

Found in cereals such as Branflakes and whole grains such as brown rice and granary bread as well as fruits and vegetables.

Psyllium and Ispaghula produce seeds which are used commercially to aid constipation. Pyllium has been shown to lower both blood cholesterol and blood glucose levels.

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Prebiotics act as food for the bacteria in the gut, ie. probiotics and can alter the gut bacteria in a favourable manner, increasing the numbers of bifido bacteria and lacto bacillus. Chicory root, Jerusalem artichokes, garlic, asparagus and onion are rich in prebiotics, which are fermented in the colon to produce short chain fatty acids which are beneficial to gut health. Resistant starch is found naturally in some foods such as bananas, legumes and seeds. It is added to commercially produced products to aid texture and flavour, but also created when a food is cooked and allowed to cool, such as potato salad, pasta or rice. Again, resistant starch is broken down in short chain fatty acids.

## HOW TO ACHIEVE 30G OF DIETARY FIBER IN A DAY

Foods which contain 6g of fiber or more per 100g of product are considered a high fiber choice. 3g of fibre/100g food is considered a source of fiber.

Check out the fiber table to see how much you are eating!