Blood Sugar Control Insulin Resistance and Diabetes

Has your doctor told you that you need to control your blood sugar levels?

If the answer is yes, you are not alone. Many Australians have to keep an eye on their blood sugar levels because they are at risk of, or have been diagnosed with, diabetes. Together with the dietary advice given by your doctor or dietitian, why not give fibre a try... it's easier than you think.

What's fibre got to do with blood sugar?

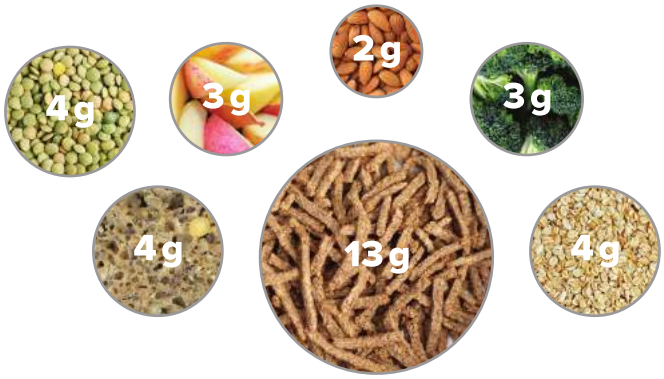
There are some types of fibre that help to trap sugars in the digestive system, which means they enter the blood slowly, helping to control blood sugar levels – think of turning on the tap so that the water drips out slowly rather than flooding the bucket. Science also tells us that fibre helps to reduce the risk of developing diabetes,[1-3] so it's a good idea to start now.

How much fibre do I need?

25–30 grams per day

How much fibre is in common foods?

1 medium apple	3 g
1 cup broccoli	3 g
½ cup high fibre bran cereal	13 g
2 slices wholemeal bread	4 g
1 bowl oats	4 g
½ cup lentils	4 g
Handful of almonds	2 g



30 grams sounds like a lot, how can I do it?

It's actually easy. Fibre comes from plant foods, so having a few more of these will do the trick.

Getting a balance of fibres from vegetables, fruit, grains, nuts, seeds and legumes (that's beans and chickpeas) or pulses (lentils) is the perfect way to get all the benefits.

Why do I need a balance of fibres? Can't I just focus on one?

All plant foods contain a combination of different fibres and there are three main types:

Soluble fibre: helps to control cholesterol and blood sugar levels. You find this type in fruit, vegetables and grains such as oats and barley. It can also be found in psyllium, legumes and seeds.

Insoluble fibre: these fibres move all the way down to the colon where they help to make your stool heavier and easier to pass. In other words, they help you go to the toilet. You find this type in the bran of grains and in fruit and vegetable skins.

Fermentable fibre: these fibres feed all the little bugs in the intestine, which helps to keep a balanced digestive system and produce compounds that protect your bowel. You find this type of fibre in legumes (beans and chickpeas), cooked cold potatoes, rice, cereal grains and onions.

How do I achieve good fibre balance?

Try to have these every day and you will have the balance just right.

- **2** serves of whole fruit, preferably with skin
- **5** serves of vegetables
- **4-6** serves of grains, preferably high fibre or whole grain
- **1** serve of nuts or legumes

Eat the above, together with a diet containing lean protein, some dairy and healthy fats.

1 serve = 1 medium banana, ½ cup berries, 1 medium apple

1 serve = ½ cup of cooked vegetables, 1 cup of salad greens, 1 medium carrot

1 serve = ½ cup cooked porridge, ⅔ cup of breakfast cereal, ½ cup brown rice, 1 slice wholemeal bread

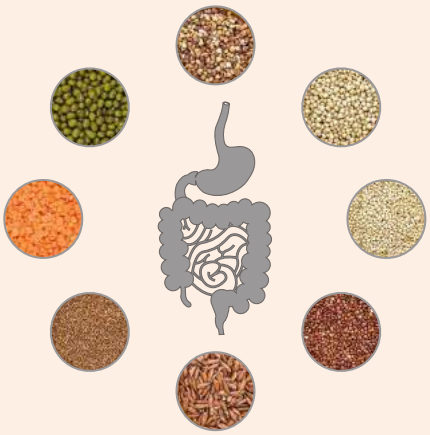
1 serve = ½ cup cooked legumes, small handful of nuts

Did you know that grain fibre helps with blood sugar control?

Grains contain soluble fibres that form a gel in the digestive system, trapping sugars and releasing them slowly over time. This helps to control the rate at which sugars move into your blood, keeping blood sugar levels steady.

What's more, fibre from grains, particularly whole grains, is also the most effective type of fibre for reducing your risk of developing type 2 diabetes.[1-3]

So go with the grain every day.



Which grain foods contain soluble fibre to help with blood sugar control?

- Breakfast cereals containing whole grains such as oats and barley
- Breakfast cereals containing psyllium
- Oat porridge
- Muesli
- Cluster and granola products
- Whole grain crackers
- Wild rice
- Barley
- Millet

Other sources of soluble fibre are...

Beans, lentils | Soybeans (edamame) | Vegetables such as sweet potatoes, broccoli, carrots | Fruits such as apple, pear, banana | Almonds and flax seeds

1 Fardet A, Boirie Y. Nutr Reviews 2014; 72(12): 741-762.
2 The InterAct Consortium. Diabetologia. 2015; 58(7): 1394–1408.
3 Johnsen et al. Br J Nutr 2015; 114(4): 608-23.