



Are you eating right for your digestive health?

Many people are troubled by digestive and bowel health problems like constipation, tummy bloating, flatulence and diarrhoea. Our digestive system is like the engine room of our body – if it's clogged up, we won't absorb nutrients well and can end up feeling sluggish and low in vitality. There is low awareness that bowel cancer is the most common internal cancer in Australia, with diet playing an important preventive role. Sometimes diet advice can be really confusing! This brochure, based on the latest research, will help clear up misunderstandings with simple dietary changes and advice on appetizing foods you should be eating more of to help keep your digestive and bowel system healthy. Most people know that bowel health is linked to fibre but few realise that the right combination of fibres is equally important.

So, what's normal?

One to two movements a day to one every three to four days is considered normal. Size matters – it indicates the level of fibre in your diet. Check out the Bristol Stool Chart (www.burgen.com.au/healthcareprofessional) and see if you're a '4' or a '5'.

If you're less than 4, you need to increase your fibre intake to improve digestive and bowel health.

Why a mix of fibres?

- 1. Insoluble fibre** keeps you regular and helps to eliminate toxins which help to maintain a healthy digestive system.
- 2. Soluble fibre** slows down digestion allowing for a more gradual release of glucose from foods into the bloodstream. It also helps to create a feeling of fullness which helps delay hunger.
- 3. Resistant starch** encourages the growth of beneficial bacteria in the bowel and helps keep the cells in the wall of the large bowel healthy for good digestive health.

Groups at highest risk of low fibre intakes are:

- 'Low-carb' or 'high protein' dieters
- People on restrictive diets e.g. 'gluten-free' or 'wheat free' diets
- Breakfast skippers
- Older Australians (over 65 years)

Did you know:

6 out of 10 Australian adults aren't getting enough fibre and most aren't getting the right combination of fibres! With many people cutting back on grain foods like bread and pasta and gluten-free diets becoming more popular, fibre intakes may be at risk, which in turn, affects digestive and bowel health.





Are you getting the right types of fibre?

Take this short quiz below to find out if you need to increase your fibre or type of fibre intake.

1. Are you following a specific type of diet?
Low carb, wheat-free, or gluten-free?
2. How often do you eat a serve of wholegrain bread (2 slices) such as wholegrain, wholemeal or rye and a serve (1 cup) of brown rice or pasta?
 - a. Never
 - b. 3-4 times a week
 - c. 2 or more serves a day
3. How often do you eat a serve of high fibre breakfast cereal e.g. wholegrain flake biscuits, muesli, bran flakes etc?
 - a. Never
 - b. 3-4 times a week
 - c. 1 or more serves a day
4. Do you have at least 2 serves of fresh fruit (unpeeled) and at least 5 serves (2 ½ cups) of vegetables a day?
 - a. Never
 - b. 3-4 times a week
 - c. Everyday
5. Do you include 1 serve (½ cup) legumes (e.g. baked beans, lentils, chickpeas), barley, rye bread or potato salad in your diet?
 - a. Never
 - b. 3-4 times a week
 - c. Everyday

Answered 'yes' to

question 1? Your total fibre intake is probably low. Read on for more advice on how to increase it and get the right balance of fibres in your diet.

Mainly a's? Your total intake and mix of fibres is likely to be low. Check the advice here and aim to gradually increase your fibre intake from a variety of sources.

Mainly b's? You're on the right track to eating enough total and types of fibre. Check out different sources of fibre and aim for a variety of these foods every week.

Mainly c's? You're a 'fibre star'! You should be getting enough total fibre and mix of fibres in your diet.



Getting the right combination

There's more to fibre than just eating enough. It's essential to consume a range of fibres from a variety of foods as they have different roles in maintaining digestive and bowel health. Fibre-rich grain foods like wholegrain rye are really important as they contain a diverse range of fibres including resistant starch.

A CSIRO study initiated by Bùrgen® established the positive effects of eating wholegrain Bùrgen® Rye bread on measures of good bowel health². These results highlight the importance of consuming a good balance of fibres and support the growing evidence of a wholegrain rich diet and its beneficial effects on bowel function and digestive balance.





The power of '3'

There are three types of dietary fibre that are beneficial for digestive and bowel health:

Getting the Right Combination of Fibres			
	<i>Soluble fibre</i>	<i>Insoluble fibre</i>	<i>Resistant starch</i>
Effect on digestive and bowel health	Slows the time it takes for food to pass through the stomach and small intestine resulting in slower absorption of nutrients and lower cholesterol levels.	Exerts its greatest influence on the large bowel where it helps to normalize bowel function. That is, it helps produce larger and softer stools and increases the stool frequency.	Fibres that resist small intestinal breakdown and are broken down by 'friendly' bowel bacteria to produce butyrate are important for large bowel health and may play a role in protecting against cancer development.
How to get your daily balance of fibre	Oats, muesli, barley, vegetables, lentils, canned or dried beans, fruit (especially unpeeled), nuts, seeds, Bürgen® Rye bread.	High fibre wheat-based cereals, crackers, brown rice and pasta, millet, quinoa, bulgar wheat, wholemeal and rye breads, Bürgen® Rye bread.	Legumes (e.g. chickpeas, lentils), wholegrains (e.g. rye), Bürgen® Rye bread, firm bananas and cold cooked potatoes, rice and pasta.



Do you suffer from 'FOF' (Fear of Fibre)?

Many people cut down on high-fibre foods because of fear of bloating or excess gas. Fermentation of fibre and resistant starch by beneficial bacteria in our bowel does produce gases, but unless this is excessive, it's a normal process and there is nothing to worry about. The average number of emissions per day is 12 for men and 7 for women, but can vary between 2 to 30³. That's why it's important to increase your fibre intake gradually over weeks, not days!

Research over many years by CSIRO found that high intakes of fibre (over 35 g per day) is well tolerated. No significant differences in bowel discomfort (e.g. bloating, gas production), was found between people on high fibre and low fibre diets¹.

Practical Tips

Increase your fibre intake gradually. For example, Week one, change to a high fibre breakfast cereal. Week 2, swap to high fibre breads like wholegrain bread and Bürgen® Rye bread.

Drink enough water – most people need 6-8 glasses of water a day. As fibre absorbs water, this is important to reap the maximum benefit.



How to get the Fibre Threesome – A Three Day Eating Plan

Day One	Fibre (g)	Day Two	Fibre (g)	Day Three	Fibre (g)
Breakfast					
High fibre bran flakes, 1 cup with low fat milk	7.6	Natural muesli (contains nuts, seeds, dried fruit), ½ cup with milk or yoghurt	3.8	Banana, Almond & Yoghurt Toast on Bürgen® Rye Bread*	13.1
Top with fresh raspberries, ½ cup	4.0	Top with canned pears, ¼ cup	1.9		
Morning Tea					
One pear	3.9	Rye crispbreads (4) topped with sliced tomato	8.6	One orange	3.1
Lunch					
Chicken & Sweet Potato sandwich with Bürgen® Rye*	11.0	Vegetable & Lentil Soup (1 cup), 1 medium bread roll, wholemeal with margarine	8.7	Wholemeal pita bread with Greek salad and hummus (3 Tbsp)	11.8
Afternoon Tea					
Wholegrain crispbreads (4) with margarine and thin slice cheese	3.0	Bürgen® Rye Bread (2 slices), toasted with margarine	6.7	Rice cakes (2) with ricotta cheese	1.5
Dinner					
Lean beef stir-fry with 1 cup of cooked brown rice, 2 cups of mixed vegetables, snow peas and sesame seeds	9.7	Atlantic salmon topped with slivered almonds (1 Tbsp), potato salad (½ cup) and steamed broccoli	8.6	Grilled pork loin with cooked wholegrain pasta (1 cup) and three bean salad (1/4 cup) mixed with cos lettuce and cherry tomatoes	12.8
Fresh apricots (2) with low fat yoghurt, sprinkle with flaked almonds (1 tsp)	1.4	Stewed apples and mixed berries (½ cup) with reduced fat vanilla custard	4.5	Fresh strawberries (1/2 cup) with a scoop of ice cream	1.2
Total Fibre	40.6	Total Fibre	42.8	Total Fibre	43.5

*For recipes ideas, go to www.burgen.com.au/recipes



Australia's leading independent voice for grains and legumes in health and nutrition

It is important to remember that this is general information only. It is not medical advice, and you shouldn't make any health decisions based on this information without first consulting your doctor or accredited practicing dietitian for individual dietary advice.

1 Diet and Bowel Health. Bürgen® Expert Roundtable Report. November 2011 (www.burgen.com.au/healthcareprofessional)

2 Conlon M & Bird AR. Study on the Prebiotic Potential of Bürgen® Rye. 2011: CSIRO Report.

3 Gut Foundation <http://www.gutfoundation.com/Symptoms>

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