



Gut Feeling

Mindful menus for the microbiome

As seen
on ABC's
**Ask the
Doctor**
Series



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The Gut is a key to our health

We've long known that eating vegetables and whole grains is good for our health.

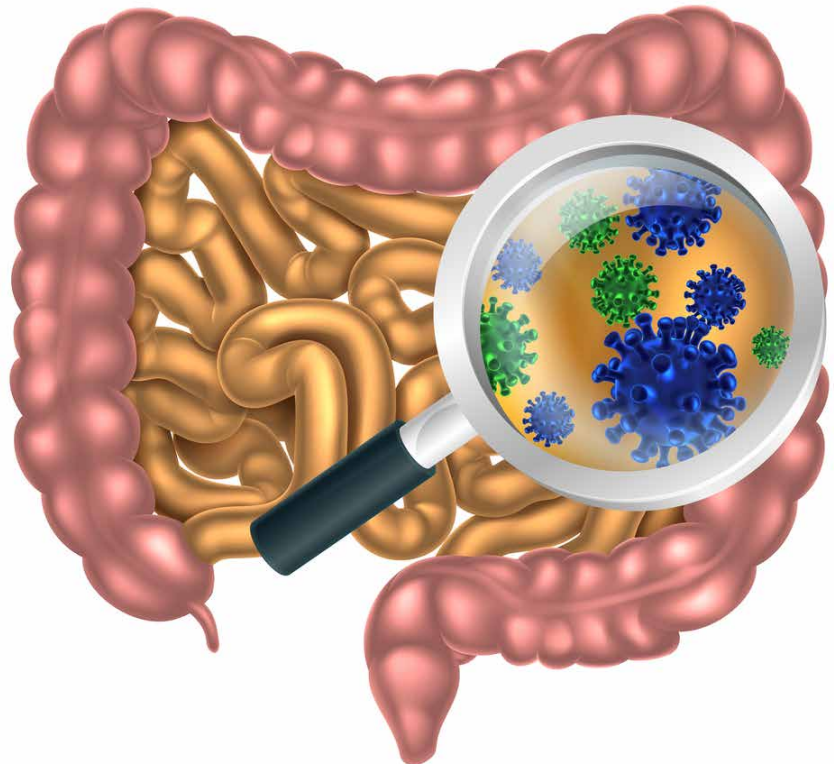
But now researchers are beginning to uncover at least part of the reason why these foods are so good for us – and the answer is the bacteria that live in our gut, or what is called the microbiome.

There is evidence that having a healthy microbiome can reduce the chances of developing obesity, non-alcoholic liver disease and even certain types of cancer.

That's why it's so important to look after our gut and feed our microbiome the foods that it needs to thrive and that's where this cookbook comes in.

What is resistant starch?

Resistant starch is a form of dietary fibre which has many of the same functional properties as dietary fibre. Resistant starch is naturally present in plant based foods, like cereals such as corn, wheat and rice, as well as beans, peas and legumes, fruit and vegetables. Resistant starch is defined as a starch which cannot be digested in the small intestines. This means it ends up in the large intestine where it is partly or wholly fermented by bacteria or what we now call the microbiome.



What is the gut microbiome?

The gut microbiome is a collection of trillions of microorganisms; bacteria, viruses, fungi, archaea and eukaryotic organisms living in the gastrointestinal tract. The majority live in the large intestine and their collective weight is around 1.5 kg in an average healthy adult.

Currently we know more about the bacteria than any of the other microorganism in the gut, that's why we often focus on the bacteria. The bacteria in the gut have been associated with many diseases and conditions, like inflammatory bowel disease, irritable bowel

syndrome, obesity, some cancers and non-alcoholic liver disease. Mood and mental health can also be affected by the bacteria in the gut via the gut-brain axis. Consequently, it is critical that we look after the gut microbiome and feed it appropriately.

How do you look after your gut microbiota?

One way to look after the gut microbiome is to increase the amount of resistant starch in your diet. When we eat this type of dietary fibre we are actually feeding the gut microbiome. Other forms of fibre (also found in plant foods) are also beneficial to us but are only partially fermented in the large intestine. These fibres help to keep the body regular, relieve constipation and improve feelings of fullness and weight management.

One of the benefits of these bacteria when they feed on resistant starch provided by the diet, is their ability to produce metabolites or small molecules which we can use. One such metabolite is butyrate which is the preferred energy source of the cells lining in the large intestine. In addition, butyrate has a beneficial effect on the immune system.

There is a mutual relationship between the individual and the gut microbiome.

How do you increase your intake of resistant starch?

Eat plenty of plant based foods every day and at every meal. This book can help you integrate many high resistant starch foods to your daily diet. Follow the daily plans to make a start.

Does cooking affect the amount of resistant starch in foods?

Tests have shown that cooking and cooling foods can increase the amount of resistant starch in many starchy foods, like potato, rice and pasta. The process of cooking changes the crystalline form of some of the components in the starch, amylose and amylopectin. When the food cools these components realign and form chains and bridges increasing the resistant starch component which ends up feeding the microbiome.

Some great examples of high resistant starch foods are:

- cold potato salad
- rice salad with the addition of corn
- chickpea and cous cous salad.



DAY 1 - WEEKENDER

10,000kJ

Breakfast bites

Poached egg	2 eggs
Rye or wholegrain bread	2 slices
Spinach	½ cup
Chutney	1 tb
Mushroom, sautéed	1 giant

Snack & go

Apple	120g
100% whole F&V smoothie	375 mL

Lite lunch

Lentil burger	2 serves
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Afternoon top-up

Pear	1 medium fruit
Cheddar cheese, reduced fat	40g or 1 slice

Mindful main meal

Lamb fillet baked	1 medium fillet
Microwaved potato	1 large potato
Carrots and peas, steamed	1 cup
Brussels sprouts, steamed	8 sprouts
Gravy, low salt, prepared with water	1/8 cup
Wholemeal bread roll	1 dinner roll
Margarine	1 tsp

8,000kJ

Breakfast bites

Poached egg	1 egg
Rye or wholegrain bread	1 slice
Spinach	½ cup
Chutney	1 tb
Mushroom, sautéed	1 giant

Snack & go

Apple	120g
100% whole F&V smoothie	250 mL

Lite lunch

Lentil burger	1 serve
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Afternoon top-up

Pear	1 medium fruit
Cheddar cheese, reduced fat	40g or 1 slice

Mindful main meal

Lamb fillet baked	1 small fillet
Microwaved potato	1 medium potato
Carrots and peas, steamed	1 cup
Brussels sprouts, steamed	8 sprouts
Gravy, low salt, prepared with water	1/8 cup
Wholemeal bread roll	1 dinner roll
Margarine	1 tsp

Recipes: *Lentil Burger (p.7).*



LENTIL BURGERS



SERVES

4



METHOD

Fry



TIME

20 mins

INGREDIENTS

Patties

400g can lentils, *drained*
2 medium potatoes, *cooked and mashed*
1 cup onion (1 small), *grated*
1 tb parsley, *freshly chopped*
2 tsp curry powder
½ cup carrot, *grated*
1 egg
½ cup cornflakes
1 tb olive oil

To serve

4 wholemeal bread roll
4 cos lettuce leaves
4 tomato slices
4 reduced fat cheddar cheese slices
4 tb chutney

METHOD

1. Combine all ingredients for patties in a large bowl, except oil and cornflakes.
2. Shape into patties.
3. Coat in crushed cornflakes.
4. Heat oil in a frying pan on moderate heat.
5. Fry the patties until golden brown.
6. Serve in a wholemeal bread roll with lettuce, tomato, slice of cheese and chutney.



BEVERAGES

Drink water, tea and coffee, and herbal teas over the day. Avoid sugar sweetened beverages.

PORRIDGE

Combine oats, milk, walnuts, LSA, cranberry and oat bran in a microwave proof bowl. Stir. Microwave on HIGH for 3 minutes. Allow to cool for 15 minutes or longer. Top with banana. Enjoy.

TIP: Slightly green bananas have more resistant starch than ripe ones.



DAY 2 - WORKDAY

10,000kJ

Breakfast bites

Rolled oats	½ cup
Low fat milk	¾ cup
Walnuts	20g
Cranberry, dried	1 tb
LSA	1 tb
Oat bran	2 tb
Banana	1

Snack & go

Orange	1
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Lite lunch

Bean burrito	1 Serve
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Afternoon top-up

Hummus dip	½ cup
Wholemeal flat bread	1 piece

Mindful main meal

Fish fillet	1 large fillet
Potato baked	1 large
Broccoli, steamed	1 cup
Carrots, steamed	½ cup
Peas, steamed	½ cup
Chutney	2 tb

8,000kJ

Breakfast bites

Rolled oats	½ cup
Low fat milk	¾ cup
Walnuts	20g
Cranberry, dried	1 tb
LSA	1 tb
Oat bran	2 tb
Banana	1

Snack & go

Orange	1
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Lite lunch

Bean burrito	1 Serve
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Afternoon top-up

Hummus dip	¼ cup
Wholemeal flat bread	½ piece

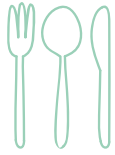
Mindful main meal

Fish fillet	1 medium fillet
Potato baked	1 medium
Broccoli, steamed	1 cup
Carrots, steamed	½ cup
Peas, steamed	½ cup
Chutney	2 tb

Recipes: Porridge (p.8); Bean burrito (p.11); Hummus dip (p.12)



BEAN BURRITOS



SERVES

4



METHOD

Fry

TIME

20 mins

INGREDIENTS

1 tb olive oil
 1 medium onion, *finely chopped*
 1 tsp dried cumin
 1 tsp dried coriander
 ½ tsp paprika
 1 tsp pepper
 2 tb tomato paste, *low salt*
 1 small zucchini, *grated*
 1 small red or green capsicum, *grated*
 2 medium carrots, *grated*
 140g sweetcorn kernels, *frozen or canned*
 400g can tomatoes
 400g can red kidney beans, *drained*
 8 regular tortillas
 1 cup reduced fat cheddar cheese, *grated*
 2 large tomatos, *sliced*
 8 large cos lettuce leaves
 4 spring onions, *chopped*

METHOD

1. Add oil to a non-stick saucepan and place on medium to high heat.
2. Cook chopped onion for 3 minutes, stirring occasionally.
3. Mix through cumin, coriander, paprika and season with pepper, cook for 1 minute until fragrant.
4. Add tomato paste, stir well to combine then add grated zucchini, capsicum, carrot, corn kernels, canned tomatoes and drained kidney beans.
5. Simmer uncovered for 20 minutes, stirring occasionally until thickened.
6. If desired; heat tortillas in the microwave for 1 minute on HIGH.
7. To serve, spoon bean mixture onto the tortilla with a slotted spoon. Top with cheese, tomatoes, lettuce and spring onions and roll to enclose filling.

