

In the third instalment of Love Your Gut Month, we're looking at probiotics and prebiotics.

Don't let their similar names fool you: probiotics and prebiotics play very different roles in your body. And both are important for maintaining a healthy gut!

So, what's the difference?

Probiotics

Bacteria are everywhere. Some of them are good while others – well, not so much.

Probiotics are the good kind. They are healthy gut flora of various species found in live-culture and fermented products like yoghurt and kombucha.

Prebiotics

Prebiotics are fibres from food that feed the probiotics in your gut. Think of them as fuel for the probiotics – bacteria gotta eat, too.

Prebiotics aren't advertised at us the way probiotics are, because, well, they're everywhere. Think onion. Think garlic. Think nuts.

Effects on your health

First up, probiotics fight bad bacteria. They're your inner-most allies, reducing inflammation, increasing immune function, helping you maintain a healthy weight and even improving your mood.

Good bacteria thrive in your gut. Having a balanced diet including both probiotics and prebiotics is essential to keeping them – and therefore you – healthy.

Glossary

Live culture: means the bacteria in fermented food is still living, and has not been destroyed in the production process.

Fermented: food preserved by a chemical reaction between the food's natural sugars and bacteria.

What about antibiotics?

Antibiotics are designed to kill bacteria, and, unfortunately, don't distinguish between good and bad.

Although it's hard to tell which bacteria are surviving (and which are dying off) while you're taking antibiotics, it's still a good idea to increase your intake of probiotics during a course of medication – or if you've recently finished a course.

This could mean adding more fermented and live-culture foods, such as yoghurt, into your diet or taking a probiotic supplement.

Am I eating enough?

There's no tell-tale sign that you're getting enough probiotics, beyond recognising the broader benefits. Every gut is different.

But while cottage cheese and pickles are everyday items,

Aussies tend to consume fewer fermented and live-culture
foods compared to other countries.

It's useful to keep track of what you're eating – and, of course, know what's going into your food.



Prebiotics 1 Lentils 2 Chickpeas 3 Onion 4 Garlic 5 Pistachios

How to tell 'good' from 'not so good'

Is it alive?

Essentially, you want a product that has an identified strain of good bacteria. They're usually easy to recognise, but there are some caveats.

Products made in more controlled environments – like yoghurt or kombucha – carry more predictable strains of bacteria that are likely to survive in your gut.

Less controlled products – like kimchi – carry a range of bacteria and have less predictable outcomes.

Storage is also key. Although bacteria thrive over time, they also die quickly in certain conditions. As a rule, if a probiotic item is stored and sold at room temperature, it's less likely to be alive. If it's refrigerated, you're probably looking at a live-culture food.

Some products hold up better than others. Kombucha is more shelf-stable than, for instance, unrefrigerated store-bought pickles. (Better to make them yourself!)

Supplements

Do you need them?

You can get most of your probiotic and prebiotic requirements from food, so taking a supplement is usually not necessary.

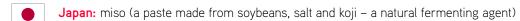
However, probiotic supplementation can be helpful in certain cases.

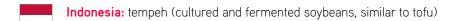
Rather than just going for a general probiotic pill, it's better to buy supplements that promote specific strains. People suffering from irritable bowel syndrome, for instance, might be advised to take supplements with the *bifidobacterium infantis* bacteria.

If you're considering taking a probiotic supplement, best talk to a healthcare professional first.

Good bacteria are part of a daily diet for billions of people around the world.

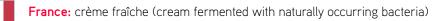












Kefir



Add live kefir grains (available from specialist stores) to milk and leave to ferment for around 24 hours, until mixture is slightly thickened with a pleasant aroma. Drink as a beverage or use in baking, dips or salad dressings.

Kombucha



You'll need to get your hands on a SCOBY – a 'symbiotic culture of bacteria and yeast' – which starts the fermentation process. Find one at your local health food store, or from friends who ferment. Add tea and sugar and leave to ferment for a week to 10 days.

Kimchi



Mix cabbage together with ingredients like carrot, garlic, ginger, shrimp paste, rice flour and coarse Korean red pepper flakes. Pack it all into a sterilised mason jar and let it ferment for around three days.

Pickles



Aussies tend to only think of pickles as the cucumber variety. But in places like Russia, everything from tomato to garlic is added to a brine (made from vinegar, sugar, salt and various flavourings) and left to pickle for a week or more. Why not experiment with your favourite veg?

Reminder: make sure all the equipment used to make your fermented foods is clean as can be, and follow recipes from a trusted source.

Breakfast: Mixed muesli (serves 1)

Ingredients:

- 170g natural Greek yoghurt
- 1 cup chopped fresh fruit,
 any kind you prefer
- 15g chopped pistachios
- 2 tbsp natural muesli

Directions:

1 Place all ingredients in a bowl and serve.

Lunch: Gut-friendly Mexican beans (serves 8)

Ingredients:

- 1 onion, finely diced
- 1 clove garlic, crushed
- 1 tbsp extra virgin olive oil
- 1 medium yellow capsicum, diced
- 1 jar roasted red peppers
- 1 tsp cinnamon
- 1 tsp dried oregano
- 1 tsp chili flakes (to taste)
- 1 tbsp cocoa powder
- 2 tsp ground cumin
- 1 tbsp paprika
- 1 400g tin black beans,
 drained and rinsed
- 1 400g tin kidney beans,
 drained and rinsed
- 2 400g tin crushed tomatoes
- 1 400g can refried beans
- Salt and pepper to taste
- Basmati rice and coriander to serve

Directions:

- 1 Place olive oil in a large pan on medium heat. Add onion and capsicum and cook until just softened. Add garlic and cook for a further minute.
- 2 Meanwhile, place red peppers into a food processor and blend until they form a smooth paste.
- 3 Add red peppers, spices and cocoa to the saucepan and cook for three minutes, or until fragrant.
- 4 Add kidney and black beans to the pan with crushed tomatoes and cook further two minutes. Or until heated through.
- 5 Spoon the refried beans into the pan and stir to mix through. It may take a few minutes for the beans to heat.
- 6 Turn heat to low and simmer for 10 minutes, season with salt and pepper.
- **7** Serve with steamed basmati rice and coriander.
- 8 Leftovers can be frozen for up to three months, they're great on top of nachos, too!

Dinner: Marika's lively garlic tempeh stir fry (serves 8)

Ingredients:

- 1 tbsp soy sauce
- 2 tbsp oyster sauce
- 1 tbsp honey
- 1/2 cup water
- 2 tsp corn flour
- 1 tbsp extra virgin olive oil
- 300g tempeh, sliced
- 1/2 medium brown onion, sliced
- 2 cloves garlic, crushed
- 1 bunch bok choy, chopped
- 1 bunch broccolini, chopped
- Brown rice, to serve
- Greek yoghurt, to serve

Directions:

- 1 To make stir fry sauce, combine soy sauce, oyster sauce, honey, water and corn flour.
- 2 Heat oil in a large pan or wok over medium-high heat before adding tempeh. Cook for four minutes or until it begins to brown. Remove and set aside.
- **3** Add garlic and onion to pan and toss for two minutes. Add broccolini and bok choy and continue to toss for another three minutes.
- 4 Return tempeh to pan and add the sauce, stirring constantly for two minutes until it has thickened and tempeh and greens are coated evenly.
- 5 Serve with brown rice.
- 6 Stir through remaining coconut milk and serve with rice, green beans, coriander and a dollop of yoghurt.

Marika's high culture comfort food nachos

Ingredients:

Nachos

- 2 eggs
- 1 230g bag toasted tortilla chips
- 1 400g can kidney beans,
 drained and rinsed
- 1/2 red onion, finely chopped
- 1-2 cloves garlic, minced
- 1-2 cups mozzarella, shredded
- 1 cup lacto-fermented salsa
- 1/2 cup cultured sour cream
- 1 red chili, sliced
- 1 tbsp hemp seeds
- 1/4 cup fresh coriander,
 torn from stems

Lacto-fermented salsa

- 1 red onion, roughly chopped
- 2 tomatoes, diced
- 1 green capsicum, diced
- 1-2 jalapeños, diced
- 1 clove garlic, minced
- 1 cup fresh coriander, chopped
- 1 tbsp fresh lemon or lime juice
- 2 tsp salt



Directions:

- 1 To make lacto-fermented salsa in advance, combine ingredients in a bowl then leave in a container or jar at room temperature for 2+ days.
- 2 In a bowl, combine kidney beans, red onion, and garlic.
- 3 Evenly spread tortilla chips onto a baking tray and top with bean mix and mozzarella.
- 4 Bake nachos in a pre-heated oven for 10 minutes at 200 degrees, or until cheese is nicely melted.
- 5 Evenly garnish nachos with salsa, sour cream, chili, hemp seeds, and coriander.

Pro	phiotics
	Kimchi eat as a snack, as a side, or add to a cheese toastie
	Sauerkraut pile high over lightly toasted rye bread, or serve with sausages
	Kombucha pair with salads, green veg, shellfish or fruit
	Good quality yoghurt dollop onto savoury dishes like chilli and stews
Pre	ebiotics
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Pre	Kidney beans mix in with stews and Mexican dishes or eat cold in a salad Lentils sprinkle on salads, serve as a tasty side dish or go all in on a dhal Watermelon a surprising source of prebiotics – slice and enjoy