

IMMUNITY boost

Winter is upon us and we are spending more time indoors. This is the time when cold and flu viruses circulate and attempt to invade unsuspecting victims. What we eat – or don't eat – can have a profound effect on our immune systems. Here's how to build yours so it's your best defence.

Words: Emma Strutt



If you become deficient in certain micronutrients, including vitamins A, C and E as well as iron, zinc and selenium, your immune function can be impaired, increasing the likelihood of getting sick. When you eat a good variety from each of the core food groups – vegetables, fruits, whole grains and legumes, with the occasional brazil nut thrown into the mix – you should be covered on the nutrient front. While no diet should be seen as a panacea, healthy eating centred around whole plant foods can certainly help boost your immune system. My top five tips will help you further build your best immune system.

LOOK AFTER YOUR GUT AND IT WILL LOOK AFTER YOU

The human microbiome is certainly a hot topic at the moment, and with good reason. Your gut microbiota is made up of trillions of microbial organisms. In fact, we have more bacteria cells in and on us than we do human cells! We now know that our gut bugs have a profound effect on overall health and immunity, and about two thirds of our immune system is distributed around our gut. To keep your microbiota happy and diverse you need to feed it the right stuff, and your gut loves fibre. Aim to eat at least 30g of fibre each day, ideally more. Research suggests that

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people who have the highest intake of fruits, vegetables, whole grains and legumes also have higher bacterial gene counts, which has been associated with improved immune function as well as lower body weight, less inflammation and reduced risk for certain chronic diseases. Certain types of fibre – known as prebiotics – enhance the growth of beneficial bacteria. Prebiotic foods include legumes, onion, garlic, leek, asparagus, artichoke and oats as well as cooked and cooled starches like potatoes, wholegrain pasta and rice. So pasta and potato salads are a great option, especially when paired with dressings made with whole ingredients rather than refined oils. Adding small amounts of fermented foods to your diet, such as tempeh, miso or water kefir may also help the growth of good gut bacteria, as many fermented foods naturally contain beneficial bacteria called probiotics.

EAT A RAINBOW EVERY DAY

To really optimise your diet and enhance immunity, focus on eating a variety of foods of all colours. This helps to maximise your intake of phytochemicals, antioxidants, vitamins and minerals. The pigments that give food its beautiful, bright colours also provide us with protective components. The benefits of each colour group are all slightly different too. For example, orange vegetables such as sweet potato and carrot contain beta-carotene, which is a precursor to vitamin A that supports the immune system. Red foods like tomatoes and watermelons contain lycopene, an antioxidant that protects against cell damage. Dark green



leafy vegetables, including kale, spinach and rocket are packed with folate and vitamin C, which maintain healthy cells and protect against infection. Blue and purple plants such as berries and grapes are bursting with anthocyanins, a group of antioxidants that have mild antibacterial effects. And I have to give a special mention to kiwi fruit! Gold kiwi fruit has been shown to reduce the incidence, severity and even duration of upper respiratory tract infections, sore throats and head congestion.

KEEP YOUR DIET LOW IN FAT

If you eat a plant-based diet centred around whole foods, your fat intake will generally be lower than that of the average person. And that's a good thing! Intervention studies have shown lower fat diets, or

those where fat is less than 30% of total calories, can increase the activity of a type of white blood cell that plays a major role in ridding the body of virally infected cells, and even tumour cells. Some fat in the diet is important. However, if you are adding fats to your meal, opt for whole foods such as olives, avocados, nuts and seeds in place of processed oils and spreads.

INCLUDE MUSHROOMS AND NUTRITIONAL YEAST

Mushrooms and nutritional yeast are as delicious as they are nutritious. Both fungi and yeasts contain compounds called beta glucans, which show great promise for keeping the immune system healthy. Although more robust research is needed, numerous studies have suggested





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that certain mushroom compounds have immuno-modulatory effects and can enhance natural killer cell activity (cells that fight infected cells). Nutritional yeast, also known as savoury yeast, can also help maintain the body's defenses against pathogens. It is similar to bakers yeast but undergoes a heating and drying process that deactivates it. Just one spoonful a day can reduce the occurrence of the common cold by about 25%. It also boosts the immune system, has an anti-inflammatory effect, helps counter the negative impact of stress on the body, and provides good amounts of B vitamins and protein. You'll find the cheesy, nutty flavour perfect for dairy-free cooking.

STRESS LESS

The body's stress response – commonly referred to as 'fight or flight' – is a natural process we undergo when our body is preparing to either confront or avoid a

threat, whether perceived or real. Problems arise when this response is continually evoked by less critical, day-to-day stressors such as job, money or relationship challenges. Chronic stress can have a number of detrimental effects on your health and wellbeing, including suppression of your immune system and an increased susceptibility to colds and flu. While we can't avoid all stress in our lives, or should we aim to, developing healthy ways to mitigate stress is important. Relaxation techniques such as meditation and yoga can help lessen your body's stress response, as can moderate amounts of physical activity. A healthy diet can also be of benefit by boosting our mood and thereby decreasing stress. A study involving over 12,000 Australians found a direct relationship between happiness and the amount of fruit and vegetables consumed. According to this study, to achieve optimal mood lift,

the magic number of fruits and vegetable appeared to be eight or more serves per day.

I am often asked what plant foods are the absolute best for warding off colds and flu. And the simple answer is: the foods you are actually going to eat and enjoy! So you don't like Brussels sprouts? You gag at the thought of grapefruit? Well, you don't have to eat them. Just keep your diet varied and centered around whole plant foods and you're well on your way to building a healthy immune system. Whole foods have thousands of active compounds that help your immune system protect you against infection. Focus on fuelling your body with what it needs and this will give you the best shot at keeping all your systems healthy and happy.



Doctors For Nutrition is an Australian not-for-profit health promotion charity led by medical and dietetic professionals dedicated to putting evidence-based nutrition at the heart of healthcare.

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GO WITH *the FLOW*

Have you ever had the desire to begin a yoga practice but find yourself stumbling at the first hurdle? Perhaps a lack of time or confidence? Fortunately, you have everything you need to get stretch-happy, and you don't even need to leave your home.



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OUR PICK

With more than 4,000 online yoga classes at your fingertips, Yogaglo is the net's most extensive online resource for at home yoga. For a small fee, you can enjoy the teachings from a variety of accredited international yoga instructors. yogaglo.com

With its extensive and respected lineage in original Vedic texts dating back 5,000 years, yoga is much more than a fitness industry buzzword or fad. Somewhere in the last 2,000 years, the Sanskrit term *asana*, which originally translated to 'seat', transpired to 'posture' and we began to understand yoga as a means of physical exercise, particularly in the western world.

Linked to decreased inflammation, greater immune function and alleviation of symptoms relating to chronic health conditions, yoga also increases circulation, flexibility, strength, and coordination, and reduces symptoms of insomnia, menopause, and many other ailments. Yoga is renowned for bringing balance and equanimity to every aspect of its practitioner's life, meaning it's not only beneficial for your physical body but also your mind, reducing depression, stress and anxiety.

But chances are you've seen the images and the videoclips that fill your Facebook feed; lithe gazelles in pretzel-like shapes bending and twisting ala Cirque du Soleil. So understandably, beginning a yoga practice can be daunting...

Whether you're aiming to hold an arm balance or would like to calm the fluctuations of your mind, yoga has innumerable benefits. Thanks to the following tips, you too can be privy to the ancient teachings of yoga – without leaving home!

COLLECT YOUR RESOURCES

There are a plethora of online aides to help you become acquainted with your mat, and inevitably yourself. Australia's most trusted yoga studio Power Living has created Yogaholics, an app for your smartphone with many yoga, meditation

and pranayama classes. For a small weekly fee, you can carry around your own bespoke yoga program with informative instructions and video guides. It's crucial you know what you are looking for amidst the saturated world wide web.

Ask yourself what it is you want from your yoga practice: Increased flexibility/strength? Rehabilitation from your back injury? Alleviated symptoms of stress to get a better night's sleep? The more specific you are with your intention, the easier you'll find it to locate resources suitable for you.

CREATE YOUR SPACE

It doesn't have to be large and mirrored, tranquil and incense infused, or even remotely reminiscent of that yoga studio you visited in Ubud with your girlfriends. Survey your home or backyard and choose a space that is large enough to comfortably accommodate your mat, some yoga props like a block, bolster or strap, and anything you may require for *savasana* (eye mask, blanket and a pillow). Ensure your space is quiet and free from visual distractions. Relaxation and calm tends to fall to the wayside when you're upside down, staring at your pile of dishes and mentally collating your to-do list.

MAKE TIME

Just as you would take an hour out of your day to attend a yoga class, give yourself permission to commit to your home practice, even if only for 15 minutes daily. Determine the best time to fit in your home practice, and stick to it. Paradoxically, small, consistent efforts of less than 20 minutes are more beneficial than a 90 minute practice once a week. Commit to five rounds of Sun Salutations in the morning and finish with a light stretch in the evening, it's all you need.

SOME IS BETTER THAN NONE!

Close your eyes, inhale and exhale deeply through your nostrils, repeat this for several mindful cycles of breath and notice how relaxed you feel; congratulations, you've just practised yoga! Even if you only have five minutes to spare – jump on your mat. You'll feel infinitely better for practising and for giving yourself the time to achieve something for you.

Check out doyogawithme.com for hundreds of streaming yoga videos of all lengths. The best part is, they're absolutely free!





KEEP IT SIMPLE BUT CHALLENGE YOURSELF

The late BKS Iyengar, founding father of Iyengar yoga proclaimed that by regulating your breathing, you will be able to control your mind. If all your practice consists of is a five-minute child's pose concentrating on your breath, then your practice is more advanced than you think.

But also bear in mind that those challenging poses – the ones you shy away from in favour of a familiar triangle pose – are teaching you valuable tools on how to acknowledge and adapt to what is unpleasant, on and off the mat; so, get uncomfortable!

- Invest in a good quality yoga mat. Yoga is difficult without slip-sliding all over a piece of slippery (and often sweaty) rubber. Our personal favourite is Jade Yoga, visit empind.com.au
- Always cultivate an intention based on your secondary emotion. Beginning a home yoga practice because you want to be toned is a fine goal, but ask yourself how 'being toned' makes you feel? Happy, accepted, comfortable in your own skin? Striving for a goal that isn't based on aesthetics alone will mean your motivation to practise will be less likely to dwindle.
- For the days your energy is lacking, listen to your intuition. Choose a gentle practice with some alternate nostril breathing (nadi shodhana) or humming bee pranayama. Restore and rejuvenate today, your body will thank you for it.
- Strive for the hard stuff, but practise santosha (contentment) with where you are. Those images you see of malleable yoga practitioners in majestic poses are a product of years of committed practice (and in some cases, largely attributed to genetics). A great mantra to work with: "I am right where I need to be."



EAT TO *thrive*

Regardless of what diet you follow, it's good to be aware of these macronutrients, vitamins and minerals to be sure you're getting everything you need from the foods you eat. These are the key nutrients to know about on a plant-based diet.



Image: unsplash.com

MACRONUTRIENTS



You can get all the nutrients your body needs on a plant-based diet. And this guide will help you get them in abundance. Spoiler alert! If you eat a variety of vegetables, fruit, wholegrains, legumes, nuts and seeds you won't have much to worry about.

If you're concerned you're not getting all the nutrients from the foods you are eating, you can always find a good plant-based supplement to be sure.

REMEMBER!

This information is for the purpose of providing general information only. Seek professional advice as appropriate from a qualified dietitian or nutritionist for your specific needs.

PROTEIN

It's true, protein forms the building blocks of body tissue and you need it for growth and maintenance. But did you know it's in just about everything? Plant-based protein can be superior to animal-based protein in that it comes without the saturated fat, hormones, and antibiotics and instead delivers an abundance of vitamins, minerals, antioxidants.

legumes – lentils, peas, black beans, chickpeas, kidney beans

wholegrains – quinoa, buckwheat, oats, rice, wheat

almonds, cashews, walnuts, brazil nuts, pistachios, pecans, pumpkin seeds, sunflower seeds, hemp seeds, sesame seeds, chia seeds

tempeh, tofu, seitan

CARBOHYDRATES

Don't be afraid of carbs! You need them for energy. What you want to do is choose complex carbohydrates like wholegrains and starchy vegetables while avoiding simple carbohydrates such as sugar and refined foods. If you don't fuel up with enough carbs, you'll fall victim to cravings and that usually leads to bad food choices.

wholegrains – rice, quinoa, oats, barley, buckwheat

starchy vegetables – sweet potatoes, potatoes, pumpkin

wholemeal bread and pasta

beans, lentils, peas

HEALTHY FATS

You need healthy fats for brain and nerve function, and your immune system. It's also important for healthy skin and hair. In particular, you need to make sure you're getting the right balance of omega-3 fatty acids and omega-6 fatty acids. Keep omega-6 fatty acids in check by cutting out seed oils, margarine and processed foods. Instead, you want to stack up on omega-3 fats because it's vital you get enough of these.

chia seeds, flax seeds, hemp seeds, walnuts

avocados, Brussels sprouts, leafy greens

VITAMINS



VITAMIN B12

B12 is required for your nervous system and cell production. It is produced by bacteria in soil and water, and prior to modern food production where everything is sanitised, we used to get it by eating foods from the ground. Animal foods contain B12 because the animals are fed it in their feed. Plant-based eaters have cut out the middleman and need to take their own. This is a good nutrient to supplement to be on the safe side.

B12-fortified foods – plant milks and yoghurts, breakfast cereals, yeast extracts and nutritional yeast flakes



VITAMIN C

Vitamin C is a powerful antioxidant that helps you fight infections and heal wounds. It's also essential for growth and repair of tissues in your body and in the production of collagen. Critically, it can also help you absorb iron from the food you eat. So, it's important to try and consume sources of vitamin C and iron together, for example, fresh fruit with cereal or capsicums with beans.

vegetables – capsicums of all colours, kale, spinach, broccoli, Brussels sprouts, leafy greens, parsley, peas

fruits – oranges, strawberries, kiwi fruit, mango, lemons, pineapple, tomatoes, rockmelon, papaya



VITAMIN D

We need vitamin D for healthy bones and teeth, and for the absorption of calcium. This should be a pretty easy one for Australians because you can get what you need from simple sunshine! However, due to indoor lifestyles and the need for sun protection, most people need to also consume it in foods. If you do supplement, be aware that vitamin D2 is derived from plant sources and vitamin D3 can be from animal sources – so look for one derived from algae.

sunshine

mushrooms

fortified plant milks, tofu, fortified cereals

MINERALS



IRON

Iron is used for energy and red cell production as well as moving oxygen around your body. Iron deficiency is common in women, but rest assured, plant-based eaters do not have a higher incidence than meat eaters. What is important for everyone is to consume vitamin C at the same time as iron to help with absorption. Also if you are supplementing, avoid taking iron and calcium at the same time as this can inhibit absorption.

spinach, kale, leafy green vegetables, pumpkin, sea vegetables, mushrooms, potatoes (skin on)

all legumes including tofu, tempeh, lentils, beans, peas

quinoa, chia seeds, sunflower seeds, dried fruit, spirulina blackstrap molasses, tahini

TIP: Cook foods in cast iron pans for an iron boost



CALCIUM

It's true, you don't need to eat dairy to get your calcium. In fact, we absorb the calcium in greens better than we do in cow's milk. But you do need to get enough calcium for strong bones and muscles. And, it's difficult to meet your daily requirements with leafy greens alone – so you'll need to also consume a fortified product or another plant source.

dark leafy green vegetables—kale, bok choy, broccoli, Chinese cabbage, seaweed, and cruciferous vegetables

fortified plant milks, cereals and orange juice

firm tofu, tempeh, chia seeds, tahini, beans, oats, almonds, figs, blackstrap molasses



ZINC

Zinc helps your cells grow and repair, and plays a role in thyroid health, skin health, protein metabolism, and a healthy immune system. So basically, you need it for everyday function. Like iron, the body can have trouble absorbing zinc, and some legumes and whole grains contain phytates that block absorption. However, by soaking or sprouting grains, legumes and beans before cooking, the phytic acid is reduced. Eating enough protein and consuming fermented foods can also boost absorption.

beans, lentils, peas, sprouts

oatmeal

cashews, peanuts, walnuts, pecans, pistachios

sunflower seeds, chia seeds, hemp seeds

tofu, tempeh



IODINE

Iodine is important for your metabolism and healthy functioning of your thyroid gland. We only need a small amount, but that small amount is vital, particularly for pregnant women. Be aware that iodine deficiency can lead to an underactive thyroid gland and an excessive amount can lead to thyroid disorders. Iodine in fruits and vegetables is inconsistent and depends on the iodine content of the soil it's grown in.

sea vegetables, nori sheets, dulse flakes, wakame

plant milks fortified with iodine, iodised salt (in moderation)

depending on the soil – wholegrains, green beans, zucchini, kale, leafy greens, asparagus, potatoes (skin on) strawberries, cranberries



SELENIUM

Selenium is an important antioxidant that helps you fight disease. The best source of selenium is brazil nuts, so this is the easiest way to meet your nutritional needs. Other foods contain selenium in smaller amounts, so if you're allergic to nuts, this might be a good mineral to supplement.

brazil nuts (just 2 a day will meet your needs)

wholegrains – wholewheat bread, oatmeal, barley

rice, beans, sunflower seeds, mushrooms

Red lentil dhal with brown rice and lime pickle

Serves 4

INGREDIENTS

- 1 Medium onion, finely diced
- 2 Cloves garlic, crushed
- 1 tsp Ground cumin
- 1 tsp Ground coriander
- 1 tsp Turmeric
- 2-3 Bay leaves, to taste
- 1 Cinnamon stick
- 2 Tomatoes, grated
- 2 cups Red lentils
- 4 cups Water
- 1 tsp Garam masala
- 1 Lemon, juiced
- Salt, to taste

TO SERVE

- 1 Handful fresh coriander leaves, chopped
- ½ cup Lime pickle
- ½ cup Mango chutney
- 4 cups Cooked brown rice

- 1** Heat a saucepan, add the onion and garlic and sauté for 1 minute.
- 2** Add spices, bay leaves, cinnamon stick, tomatoes, red lentils and 4 cups of water. Bring to boil and then simmer, covered for 15 minutes, stirring regularly.
- 3** Add the garam masala and the lemon juice and season with salt to taste.
- 4** Top with chopped coriander and serve with brown rice, lime pickle and mango chutney.





Freekeh porridge

Serves 4

INGREDIENTS

- 3 cups Cooked freekeh
- 2 cups Soy milk
- 3 tbsp Maple syrup
- ½ tsp Cinnamon powder
- ⅓ cup Raw pumpkin seeds
- ⅓ cup Raw sunflower seeds
- 1 tsp Ground flaxseeds
- ½ tsp Natural vanilla extract
- ¼ cup Raw almonds, chopped
- ⅓ cup Dried goji berries

CASHEW SOUR CREAM

- 2 cups Cashew nuts (soaked overnight and drained)
- 1 cup Water
- 1 Lemon, juiced
- 1 tsp Salt

TO SERVE

- 125g Fresh blueberries
- 1 cup Soy milk
- ¼ cup Pistachio nuts, sliced

- 1** Cook 1 cup of freekeh as per packet instructions, prior to preparing this recipe (this usually takes 45min).
- 2** To make the cashew sour cream, place the soaked and drained cashews in a blender with the fresh water, lemon juice and salt. Blend until smooth and creamy (add more water if needed until it is the consistency of sour cream).
- 3** Combine the cooked freekeh, soy milk, maple syrup, cinnamon, pumpkin seeds, sunflower seeds, flaxseeds, vanilla extract, half the chopped almonds and goji berries in a saucepan. Bring to a boil, reduce heat to low, cover and cook for about 20 minutes, until the milk is absorbed and all the ingredients resemble a pudding.
- 4** Serve hot or cold topped with fresh blueberries, pistachios, a little soy milk and a dollop of cashew sour cream.



Pear and berry crumble with turmeric custard

Serves 4

INGREDIENTS

- 4 William pears, core removed, thickly sliced lengthways
- 500g Frozen mixed berries

CRUMBLE

- 1 cup Rolled oats
- ½ cup Shredded coconut
- 120g Pureed apple
- 3 tbsp Maple syrup
- 1 tsp Cinnamon
- 1 tsp Vanilla extract

TURMERIC CUSTARD

- 4 cups Soy milk (I use Bonsoy)
- 1 tsp Vanilla paste
- ¼ cup Maple syrup
- ⅓ tsp Turmeric powder
- 2 tbsp Cornflour

- 1** Preheat oven to 180°C. Place pears and mixed berries into the baking dish.
- 2** To make the crumble, place the ingredients in a medium bowl. Stir well to combine all ingredients.
- 3** Place crumble mixture on top of the fruit and bake for 45 minutes until the crumble is golden brown.
- 4** To make the turmeric custard, mix the cornflour and ½ cup of soy milk in a glass jug. Heat a saucepan on high heat and add the remaining soy milk, vanilla, maple syrup and the turmeric and bring to a simmer.
- 5** Add the cornflour mixture and stir continuously until the milk boils and thickens. Serve drizzled over a piece of the crumble.



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Super green vegan curry

This recipe is perfect for those days when not a whole lot remains in the fridge. Make a big batch so you can eat some and freeze some for lunches and dinners. This super green curry delivers protein, carbohydrates, fats and fibre in every mouthful.

By Jacqueline Alwill (www.thebrownpaperbag.com.au) | Serves 4

INGREDIENTS

- 3 tbsp** Coconut oil
- 4** Cloves garlic, roughly chopped
- 1** Small brown onion, roughly chopped
- 2 ½ tsp** Ground cumin
- 1 tsp** Ground coriander
- 1 tsp** Ground turmeric
- 2 tsp** Curry powder
- Pinch ground cinnamon
- Pinch chilli flakes
- 200g** Cooked mung beans (100g dry) or you can use cooked/tinned lentils
- 400ml** Coconut cream
- 400ml** Water
- Pinch salt
- 400g** Frozen peas
- 250g** Frozen spinach

TO SERVE

- ½** Bunch coriander, leaves and stalks finely chopped
- 1** Bunch broccolini, trimmed and blanched
- Brown rice
- Coconut flakes (optional)

1 Heat a large saucepan on medium heat then add coconut oil, garlic and onion. Cover and cook for 4 minutes. Add spices and cook for a further minute while stirring.

2 Add cooked mung beans or lentils, coconut cream, water and a good pinch of salt. Bring to the boil with lid on, then remove lid and lower heat to simmer for 10 minutes.

3 Add frozen peas and frozen spinach and cook a further 6-10 minutes until both have completely defrosted and curry is hot enough to eat. The curry sauce should be lovely and thick at this stage.

4 Serve with chopped coriander, blanched broccolini, brown rice, and coconut flakes, if using.