

KCV

# Nutrition

Guide



Dear Kinship Carers,

The Board of GPV/KCV takes the opportunity to thank you for your service to your own family and to Victoria's families in general.

This guide has been developed by KCV in response to previous nutrition seminars with some financial support from Carer Kafe. The articles in this magazine have been selected to reflect the conversations that took place at those seminars.

Best wishes,



Anne McLeish, OAM  
Director  
Kinship Carers Victoria



## GPV/KCV Acknowledgment of Country

GPV/KCV acknowledges the peoples of the Kulin nation as the traditional owners of our land and offers respect to Elders, past and present.

GPV/KCV acknowledges that the Aboriginal culture existed in Australia before European settlement and consisted of many community groups. Further, we acknowledge the Indigenous peoples of this land as the oldest continuing cultures in human history.

GPV/KCV acknowledges that laws and policies of the past have inflicted grief and suffering on our fellow Australians and regrets the removal of Aboriginal and Torres Strait Islander children from their families.

GPV/KCV believes that a society that is inclusive of all is crucial to individual and community wellbeing and will behave with respect towards all, irrespective of their race, religion, sexuality, gender or socio-economic background.

GPV/KCV acknowledges the 13th of February as National Apology Day, the anniversary of then-Prime Minister Kevin Rudd delivering the National Apology to Australia's Indigenous Peoples in 2008.

GPV/KCV will take steps that promote a happier and healthier future for Indigenous Australians, particularly the children and young people.

Kinship Carers Victoria

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**Blue Zones food guidelines – p4**

**Common features of healthy life in Blue Zones – p12**



**Processed food 'may be driving us mad' – p14**

**Treat your food as if it's your medicine – p16**

**Nine ways to boost your body's natural immunity defences – p18**

**Best foods to eat for gut health – p24**

**Seven nutrients to eat for stress relief – p32**

**Nutritional strategies to ease anxiety – p33**


# In this issue

(Click on each title to go to the article)



<b>Blue Zones food guidelines</b>	<b>4</b>
<b>Common features of a healthy life in three of the Blue Zones</b>	<b>12</b>
<b>Processed food 'may be driving us mad'</b>	<b>14</b>
<b>Treat your food as if it's your medicine</b>	<b>16</b>
<b>Nine ways to boost your body's natural immunity defences</b>	<b>18</b>
<b>Best foods to eat for gut health</b>	<b>24</b>
<b>Seven nutrients to eat for stress relief</b>	<b>32</b>
<b>Nutritional strategies to ease anxiety</b>	<b>33</b>

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# Blue Zones food guidelines

Originally published on the [bluezones.com](https://www.bluezones.com) website

**T**he Blue Zones people have distilled more than 150 dietary surveys of the world's longest-lived people to discover the secrets of a longevity diet.

These 11 simple guidelines reflect how the world's longest-lived people ate for most of their lives. By adopting some of the healthy eating principles into your daily life, you too can live better, longer.

# FOOD GUIDELINES

MONTHLY

**Retreat from meat:** Blue zones centenarians eat about 56g or less about 5x per month

**Reduce dairy**

WEEKLY

**Slash sugar:** Consume only 7 teaspoons of added sugar daily

**Eliminate eggs:**  
No more than 3 per week

**Go easy on fish:**  
Fewer than 85g, up to 3 times weekly

DAILY

**Snack on nuts:**  
About 1–2 handfuls a day

**Drink mostly water:** About 7 glasses/day;  
coffee, tea and wine in moderation

**Daily dose of beans:** Half-cup to one cup/day

**Go wholly whole:** Single-ingredient, raw, cooked, ground or fermented, and not highly processed

**95–100% plant-based**



## SEE THAT YOUR DIET IS 95–100 PERCENT PLANT-BASED

People in the Blue Zones eat an impressive variety of garden vegetables when the vegetables are in season, and then they pickle or dry the surplus to enjoy during the off-season. The best-of-the-best longevity foods are leafy greens such as spinach, kale, beet and turnip tops, chard, and collards. Combinations of seasonal fruits and vegetables, whole grains, and beans dominate blue zones meals all year long.

Many oils derive from plants, and they are all preferable to animal-based fats. We cannot say that olive oil is the only healthy plant-based oil, but it is the one most often used in the blue zones. Evidence shows that olive oil consumption increases good cholesterol and lowers bad cholesterol. In Ikaria, we found that for middle-aged people, about six tablespoons of olive oil daily seemed to cut the risk of dying in half.

People in four of the five Blue Zones consume meat, but they do so sparingly, using it as a celebratory food, a small side, or a way to flavour dishes. Research suggests that 30-year-old vegetarian Adventists will likely outlive their meat-eating counterparts by as many as eight years. At the same time, increasing the amount of plant-based foods in your meals has many salutary effects. Beans, greens, yams and sweet potatoes, fruits, nuts, and seeds should all be favoured. Whole grains are okay too. Try a variety of fruits and vegetables; know which ones you like, and keep your kitchen stocked with them.



## RETREAT FROM MEAT

Averaging out consumption in Blue Zones, we found that people eat about 56g or less of meat about five times per month. And we don't know if they live longer despite eating meat.

The Adventist Health Study 2, which has been following 96,000 Americans since 2002, has found that the people who live the longest are vegans or pesco vegetarians, who eat a plant-based diet that includes a small amount of fish.

So, while you may want to celebrate from time to time with chicken, pork or beef, we don't recommend it as part of a blue zones diet. Okinawans probably offer the best meat substitute: extra-firm tofu, high in protein and cancer-fighting phytoestrogens.

## GO EASY ON FISH

If you must eat fish, do so in amounts less than 85g, up to three times weekly. In most Blue Zones, people eat some fish but less than you might think – up to three small servings a week. There are other ethical and health considerations involved in including fish in your diet. In the world's Blue Zones, in most cases, the fish being eaten are small, relatively inexpensive fish, such as sardines, anchovies, and cod – middle-of-the-food-chain species that are not exposed to the high levels of mercury or other chemicals like PCBs that pollute our gourmet fish supply today.

People in the Blue Zones don't overfish the waters like corporate fisheries that threaten to deplete entire species. Blue Zones fisherpeople cannot afford to wreak havoc on the ecosystems they depend on.

## REDUCE DAIRY

Arguments against milk often focus on its high fat and sugar content. The number of people who (often unknowingly) have some difficulty digesting lactose may be as high as 60 percent. Goat and sheep milk products figure into the Ikarian and Sardinian Blue Zones.

We don't know if it's the goats milk or sheeps milk that makes people healthier or if it's the fact that they climb up and down the same hilly terrain as the goats do. Although goats milk contains lactose, it also contains lactase, an enzyme that helps the body digest lactose.

## ELIMINATE EGGS

People in all of the Blue Zones eat eggs about two to four times per week. Usually they eat just one as a side dish with a whole-grain or plant-based dish. Nicoyans fry an egg to fold into a corn tortilla with a side of beans. Okinawans boil an egg in their soup. People in the Mediterranean Blue Zones fry an egg as a side dish with bread, almonds, and olives for breakfast. Blue Zones eggs come from chickens that range freely, eat a wide variety of natural foods, and don't receive hormones or antibiotics. Slowly matured eggs are naturally higher in omega-3 fatty acids.

People with diabetes should be cautious about eating egg yolks. Consumption of eggs has been correlated to higher rates of prostate cancer for men and exacerbated kidney problems for women. Some people with heart or circulatory problems choose to forgo eggs. Again, eggs aren't necessary for living a long life, but if you must eat them eat no more than three eggs per week.

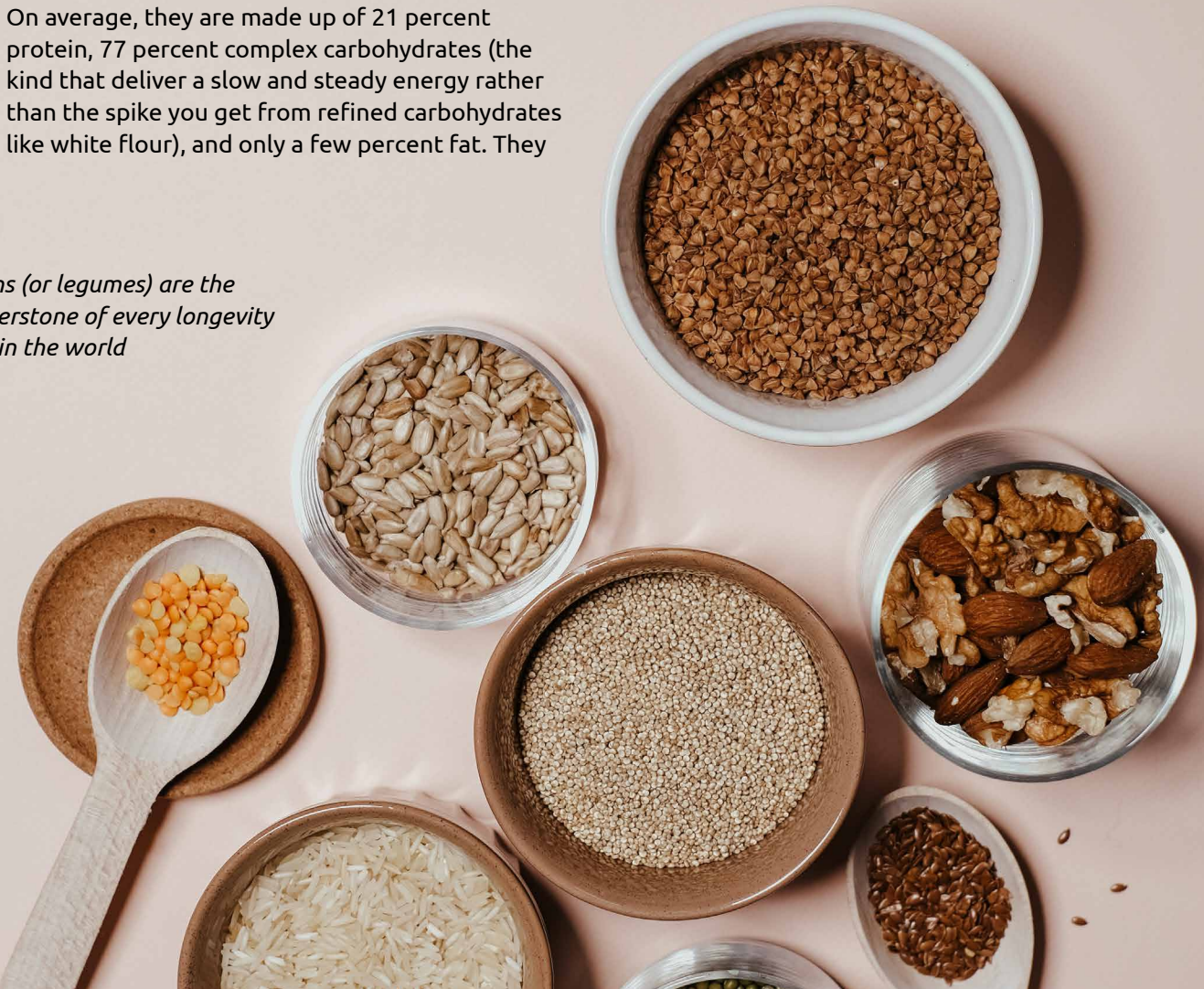
## DAILY DOSE OF BEANS

Eat at least a half cup of cooked beans daily. Beans reign supreme in Blue Zones. They're the cornerstone of every longevity diet in the world: black beans in Nicoya; lentils, garbanzo, and white beans in the Mediterranean; and soybeans in Okinawa. People in the Blue Zones eat at least four times as many beans as Americans do on average.

The fact is, beans are the consummate superfood. On average, they are made up of 21 percent protein, 77 percent complex carbohydrates (the kind that deliver a slow and steady energy rather than the spike you get from refined carbohydrates like white flour), and only a few percent fat. They

are also an excellent source of fibre. They're cheap and versatile, come in a variety of textures, and are packed with more nutrients per gram than any other food on Earth. Beans are a meal staple in all five of the Blue Zones – with a dietary average of at least a half-cup per day, which provides most of the vitamins and minerals you need. And because beans are so hearty and satisfying, they'll likely push less healthy foods out of your diet.

*Beans (or legumes) are the cornerstone of every longevity diet in the world*





## SLASH SUGAR

Consume only 35g (7 teaspoons) of added sugar daily. People in the Blue Zones eat sugar intentionally, not by habit or accident. They consume about the same amount of naturally occurring sugars as North Americans do, but only about a fifth as much added sugar – no more than seven teaspoons of sugar a day. It's hard to avoid sugar. It occurs naturally in fruits, vegetables, and even milk. But that's not the problem.

Between 1970 and 2000, the amount of added sugar in the American food supply rose by 25 percent. This adds up to about 22 teaspoons of added sugar each of us consumes daily – insidious, hidden sugars mixed into soda, yogurt, and sauces. Too much sugar in our diet has been shown to suppress the immune system. It also spikes insulin levels, which can lead to diabetes and lower fertility, make you fat, and even shorten your life.

Our advice: If you must eat sweets, save cookies, candy, and bakery items for special occasions, ideally as part of a meal. Limit sugar added to coffee, tea, or other foods to no more than four teaspoons per day. Skip any product that lists sugar among its first five ingredients.

*Pistachio nuts: a regular part of the diet for residents of Blue Zone Nicoya in Costa Rica*

## SNACK ON NUTS

Eat two handfuls of nuts per day. A handful of nuts weighs about 56g, the average amount that blue zones centenarians consume – almonds in Ikaria and Sardinia, pistachios in Nicoya, and all nuts with the Adventists. The Adventist Health Study 2 found that nut eaters outlive non-nut eaters by an average of two to three years.

The optimal mix of nuts: almonds (high in vitamin E and magnesium), peanuts (high in protein and folate, a B vitamin), Brazil nuts (high in selenium, a mineral found effective in protecting against prostate cancer), cashews (high in magnesium), and walnuts (high in alpha-linoleic acid, the only omega-3 fat found in a plant-based food). Walnuts, peanuts, and almonds are the nuts most likely to lower your cholesterol.



## SOUR ON BREAD

Eat only sourdough or 100 percent whole wheat. Blue Zones bread is unlike the bread most Americans buy. Most commercially available breads start with bleached white flour, which metabolises quickly into sugar and spikes insulin levels. But bread from the Blue Zones is either whole grain or sourdough, each with its own healthful characteristics. In Ikaria and Sardinia, breads are made from a variety of whole grains such as wheat, rye or barley, each of which offers a wide spectrum of nutrients, such as tryptophan, an amino acid, and the minerals selenium and magnesium.

Whole grains also have higher levels of fibre than most commonly used wheat flours. Some

traditional Blue Zones breads are made with naturally occurring bacteria called lactobacilli, which 'digest' the starches and glutes while making the bread rise. The process also creates an acid – the 'sour' in sourdough. The result is bread with less gluten even than breads labeled 'gluten free', with a longer shelf life and a pleasantly sour taste that most people like. Traditional sourdough breads actually lower the glycemic load of meals, making your entire meal healthier, slower burning, easier on your pancreas, and more likely to make calories available as energy than stored as fat.



## GO WHOLLY WHOLE

Choose foods that are recognisable. People in Blue Zones traditionally eat the whole food. They don't throw the yolk away to make an egg-white omelet, or spin the fat out of their yogurt, or juice the fibre-rich pulp out of their fruits. They also don't enrich or add extra ingredients to change the nutritional profile of their foods. Instead of taking vitamins or other supplements, they get everything they need from nutrient-dense, fibre-rich whole foods.

A good definition of a 'whole food' would be one that is made of a single ingredient, raw, cooked, ground, or fermented, and not highly processed. Tofu is minimally processed, for example, while cheese-flavored corn puffs are highly processed. Blue Zones dishes typically contain a half dozen or so ingredients, simply blended together. Almost all of the foods consumed by centenarians in the Blue Zones grow within a 16-kilometre radius of their homes. They eat raw fruits and vegetables; they grind whole grains themselves and then cook them slowly. They use fermentation – an ancient way to make nutrients bio-available – in the tofu, sourdough bread, wine, and pickled vegetables they eat. And they rarely ingest artificial preservatives.

## DRINK MOSTLY WATER

Never drink soft drinks (including diet soda). With very few exceptions, people in Blue Zones

drank coffee, tea, water, and wine. Period. (Soft drinks, which account for about half of Americans' sugar intake, were unknown to most Blue Zones centenarians.) There is a strong rationale for each.

**WATER** Adventists recommend seven glasses of water daily. They point to studies that show that being hydrated facilitates blood flow and lessens the chance of a blood clot.

**COFFEE** Sardinians, Ikarians, and Nicoyans all drink copious amounts of coffee.

Research associates coffee drinking with lower rates of dementia and Parkinson's disease.

**TEA** People in all the blue zones drink tea. Okinawans nurse green tea all day. Green tea has been shown to lower the risk of heart disease and several cancers. Ikarians drink brews of rosemary, wild sage, and dandelion – all herbs known to have anti-inflammatory properties.

**RED WINE** People who drink – in moderation – tend to outlive those who don't. (This doesn't mean you should start drinking if you don't drink now.) People in most Blue Zones drink one to three small glasses of red wine per day, often with a meal and with friends.

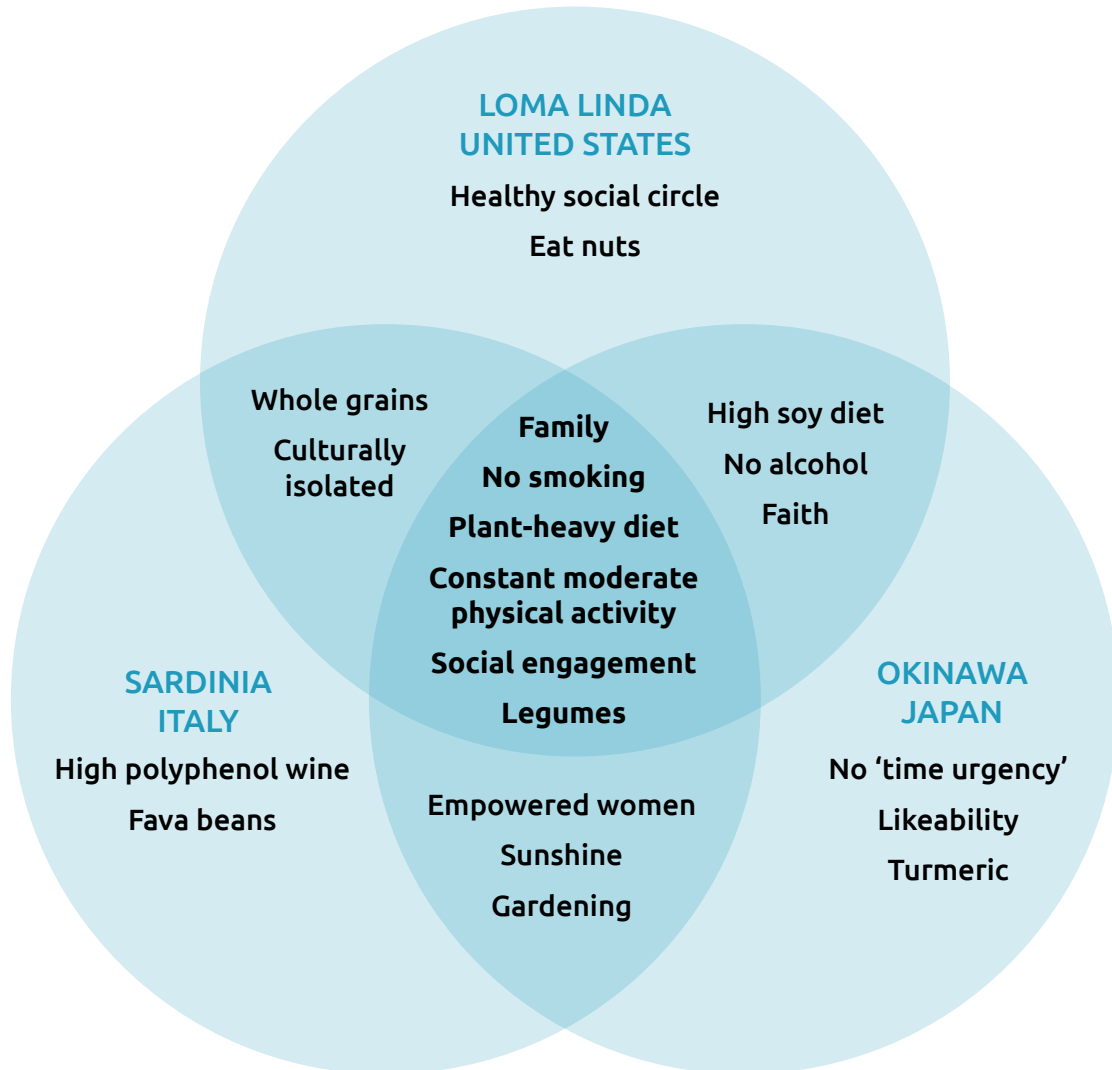
*Green tea has been shown to lower the risk of heart disease and several cancers*



Common features of a

# Healthy Life

in three of the world's Blue Zones



Most Common

**Family:** Strong family values and connections are linked to lower rates of ill mental health

**No smoking:** Prevent smoking-linked diseases

**Plant-heavy diet:** High in nutrients and low in calories

**Constant moderate physical activity:** Active daily routine; walking, gardening, working etc.

**Social engagement:** Sharing values and supporting habits is linked to increased wellbeing

More Common

**Whole grains:** Rich in fibre, reduce blood pressure

**Cultural isolation:** Fosters the longevity of this traditional and healthy lifestyle

**Empowered women:** Gender equality promotes greater autonomy and positive health outcomes for women

**Sunshine:** Enables the body to produce Vitamin D, promoting strong bones

**Gardening:** A source of daily physical activity and stress relief

**High soy diet:** Products such as tofu and miso soup may protect the heart and reduce cancer

**No alcohol:** Reduces the risk of cardiovascular disease, no alcohol is the healthiest amount

Common

**Healthy social circle:** Providing meaningful connections and support networks

**Eating nuts:** Great source of unsaturated fats and fibre

**High polyphenol wine:** 1-2 glasses per day provide a good source of antioxidants

**Fava beans:** Loaded with vitamins, minerals, fibre and proteins

**No 'time urgency':** Decreasing stress and improving psychological wellbeing

**Likeability:** Enhancing the quality of relationships and life satisfaction

**Turmeric:** Anti-cancer, anti-inflammatory and anti-ageing properties

# Processed food 'may be driving us mad'

**By Simon Collins.** Originally in *The New Zealand Herald National* – 27 August 2016

Eating processed foods with little nutritional value may be making us mad as well as sick, new research shows.

Canterbury University psychologist Julia Rucklidge says the decreasing nutritional value of our food may be contributing to an 'epidemic' of mental illness, with one in every eight NZ adults now on anti-depressants.

Research has shown that eating more fresh foods consistent with a Mediterranean-style diet, and eating less Western foods, could reverse spiralling rates of conditions such as attention deficit/hyperactivity disorder (ADHD), anxiety and depression.

Eleven years ago, when Rucklidge started using vitamins and minerals to treat mental illness, she says people were 'completely uninterested'.

'Many didn't believe there was a possibility that nutrition can influence your mental health,' she said.

But she was in Auckland for her second workshop for professionals at Massey University's Albany campus after a first workshop sold out, and she now gets so many inquiries about her work that she has had to set up a standard email reply.

'Suddenly there is an insatiable demand from people to get this type of information,' she said.

Community mental health nurse Olivia Sheehan said she had always encouraged her clients



to exercise and eat well rather than relying on medicines, but after attending Rucklidge's workshop she would put much more stress on nutrition.

'I actually hadn't considered that aspect before but I certainly will in the future,' she said.

Dietician Anna Sloan said Rucklidge's research was proving the link that dieticians had always understood between diet and mental wellbeing.

'The more people can move away from processed foods, getting back to those whole grains, fruit and vegetables, small amounts of nuts and healthy oils, the better,' she said.

Rucklidge has conducted a randomised controlled trial of adults with ADHD which found that 64 per cent of those who received extra vitamins and minerals showed significantly fewer ADHD symptoms after eight weeks, compared with 37 per cent of those who received an inactive placebo.

But her most remarkable study was done with 91 Christchurch people with high stress levels immediately after the February 2011 earthquake. Symptoms of post-traumatic stress disorder dropped from 65 per cent to 19 per cent among those who received extra vitamins and minerals, compared with a slight increase from 44 per cent to 48 per cent of a control group that did not get the supplements.

She believes governments should consider issuing nutritional supplements to everyone in any future area affected by an ongoing disaster like the Canterbury quakes – or at least make sure food handouts are nutritious.

'A lot of the food that may be given out is not food that is actually going to nourish the individual and sustain them in order to get through this,' she said.

She says our shift from natural wholefoods to packaged processed foods and takeaways has likely played a vital role in the increasing rates of mental illness that have coincided with an increase in patients on Pharmac-funded anti-depressants from 8.4 per cent of all adults in 2006 to 12.7 per cent this year.

'Our diet has changed so rapidly over 50 years that it's hard not to believe that it's having impact on our mental health,' she said.

'My work shows that, because we show an impact of using vitamins and minerals on mental health, it simply proves the point that the diet these people are eating is simply not adequately meeting their nutritional needs.'

### **FOODS TO REDUCE**

- Packaged processed food
- Refined sugar and sugary drinks
- Takeaways

### **NUTRIENTS THAT CAN HELP**

- People need enough of all vitamins and essential minerals
- Individual needs vary, so get advice before taking supplements

### **FOODS WITH GOOD NUTRIENTS**

- Fresh fruit and vegetables, especially leafy vegetables

# Treat your food as if it's your medicine

**Taimi Allan, CEO of Changing Minds,** used nutrition to beat depression.

Twelve years ago, when she was 30, Taimi Allan laid out all the psychiatric medications that she was taking and turned to her husband Stewart.

'I said to my husband: "I started on one pill when I was 15 and I'm on 10 at 30, what is this going to look like when I'm 60"?' she asked.

'And he said: "I'm not living with the person that I married any more; I'm living with this half-zombie person. Do you want to see who the real Taimi is underneath all this? Are you willing to take the risk"?''

It was a crucial turning point. The 'real Taimi' who met Stewart 15 years ago has acted on stage and screen since she was 15. Her credits include roles in *McLeod's Daughters*, *Step Dave* and *Shortland Street*, and today she and Stewart run their own production company Tigerstew Productions and performing arts school The Green Room as well as being chief executive of the mental health advocacy agency Changing Minds (Taimi) and music director at St Cuthbert's College (Stewart).

For 15 years before that turning point, Taimi's life was a psychological rollercoaster that 'sent me into these spirals of very, very deep depression, and then high levels of functioning and high working and not sleeping very much'.

'Every time you go into hospital you are put on

more drugs and given more treatment, and that sets up a real cycle of hopelessness, or it did for me anyway. I'm getting all this help, but actually I'm not getting any better, I'm getting worse.'

Desperate for a way out, at 23 she accepted a course of electric shock treatments. The shocks left her with awful migraines and permanently wiped some of her childhood memories – but had absolutely no effect on her mental illness. 'Those were my worst moments,' she said.

What finally worked was changing her diet. At 28, someone suggested that she should get her thyroid gland checked. She found that it had 'died'. In fact, it had probably sputtered out, producing spurts of hormones that may have explained her highs and lows.

She found a doctor, Titirangi 'anthroposophic physician' Dr Ulrich Doering, who was willing to support her in trying dietary and lifestyle changes enabling her to gradually reduce her medications over two years.

Dr Doering introduced her to amino acids, which she still takes to supplement her diet. And that reminded her of a book her father had given her, Patrick Holford's *Optimum Nutrition for the Mind*, which mentioned amino acids.

'So I went home and started reading it and it opened this amazing world to me,' she said. 'I started being really mindful about what I eat,



knowing that the things I was eating and drinking and what I was doing with my body had a direct effect on my mind.'

She found she was allergic to wheat and dairy products, and cut them out of her diet. She cut back on sugar and ate more fish and leafy green vegetables.

She endured intense pain which felt like electric shocks in the back of her neck as she came off her psychiatric medications. Her parents were worried, but Stewart supported her.

'I had my husband saying, "I don't want you to die either, honey, but you're not really living, so can we try and find a way where you are just enjoying more of life"?''

Now she feels that diet has put her back in control of her own life.

'You need to treat your food as if it's your medicine,' she said.

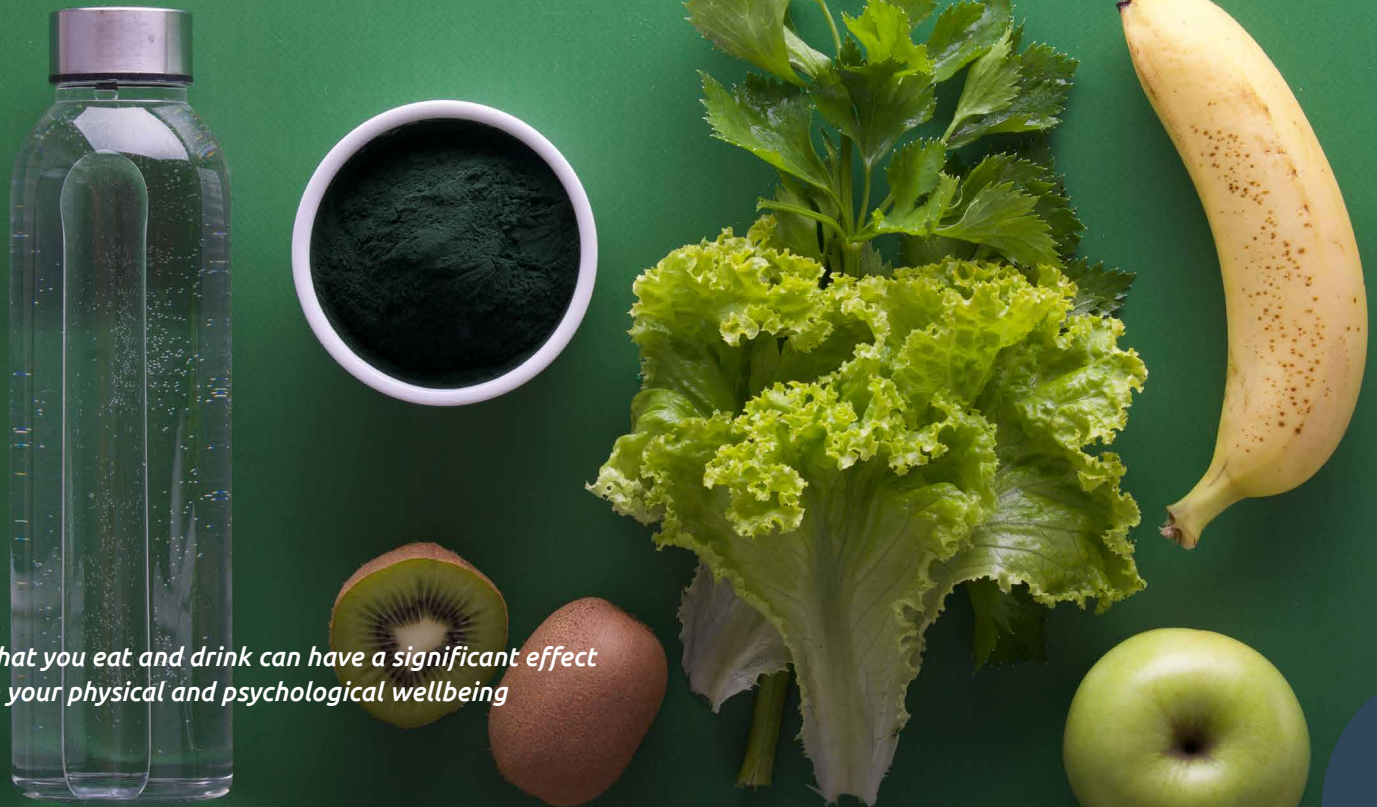
'I'm not saying it's the total answer, but I'm sure for most people it's a piece of the puzzle, and for me it was a huge part of the puzzle.'

#### SOURCES:

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*What you eat and drink can have a significant effect on your physical and psychological wellbeing*



# 9 ways to boost your body's natural immunity defences

**Written by SaVanna Shoemaker, MS, RDN, LD** on 1 April 2020 — Medically reviewed by Kathy W Warwick, RD, CDE, Nutrition

<https://www.healthline.com/nutrition/how-to-boost-immune-health>

If you want to boost your immune health, you may wonder how to help your body fight off illnesses.

While bolstering your immunity is easier said than done, several dietary and lifestyle changes may strengthen your body's natural defences and help you fight harmful pathogens, or disease-causing organisms.

Here are nine tips to strengthen your immunity naturally.

## **1. GET ENOUGH SLEEP**

Sleep and immunity are closely tied.

*Getting adequate rest may strengthen your natural immunity.*

In fact, inadequate or poor quality sleep is linked to a higher susceptibility to sickness.

In a study in 164 healthy adults, those who slept fewer than six hours each night were more likely to catch a cold than those who slept six hours or more each night.

Getting adequate rest may strengthen your natural immunity. Also, you may sleep more when sick to allow your immune system to better fight the illness.

Adults should aim to get seven or more hours of sleep each night, while teens need 8–10 hours and younger children and infants up to 14 hours.

If you're having trouble sleeping, try limiting screen time for an hour before bed, as the blue light emitted from your phone, television and computer may disrupt your circadian rhythm, or your body's natural wake-sleep cycle.

Other sleep hygiene tips include sleeping in a completely dark room or using a sleep mask, going to bed at the same time every night, and exercising regularly.

#### **SUMMARY**

**Inadequate sleep may increase your risk of getting sick. Most adults should get at least seven hours of sleep per night.**

## **2. EAT MORE WHOLE PLANT FOODS**

Whole plant foods like fruits, vegetables, nuts, seeds and legumes are rich in nutrients and antioxidants that may give you an upper hand against harmful pathogens.

The antioxidants in these foods help decrease

inflammation by combatting unstable compounds called free radicals, which can cause inflammation when they build up in your body in high levels.

Chronic inflammation is linked to numerous health conditions, including heart disease, Alzheimer's and certain cancers.

Meanwhile, the fibre in plant foods feeds your gut microbiome, or the community of healthy bacteria in your gut. A robust gut microbiome can improve your immunity and help keep harmful pathogens from entering your body via your digestive tract.

Furthermore, fruits and vegetables are rich in nutrients like vitamin C, which may reduce the duration of the common cold.

#### **SUMMARY**

**Several whole plant foods contain antioxidants, fibre and vitamin C, all of which may lower your susceptibility to illness.**

## **3. EAT MORE HEALTHY FATS**

Healthy fats, like those found in olive oil and salmon, may boost your body's immune response to pathogens by decreasing inflammation.

Although low-level inflammation is a normal response to stress or injury, chronic inflammation can suppress your immune system.

Olive oil, which is highly anti-inflammatory, is linked to a decreased risk of chronic diseases like heart disease and type-2 diabetes. Plus, its anti-inflammatory properties may help your body fight off harmful disease-causing bacteria and viruses.

Omega-3 fatty acids, such as those in salmon and chia seeds, fight inflammation as well.

## SUMMARY

**Healthy fats like olive oil and omega-3s are highly anti-inflammatory. Since chronic inflammation can suppress your immune system, these fats may naturally combat illnesses.**

## 4. EAT MORE FERMENTED FOODS OR TAKE A PROBIOTIC SUPPLEMENT

Fermented foods are rich in beneficial bacteria called probiotics, which populate your digestive tract.

These foods include yogurt, sauerkraut, kimchi, kefir and natto.

Research suggests that a flourishing network of gut bacteria can help your immune cells differentiate between normal, healthy cells and harmful invader organisms.

In a three-month study of 126 children, those who drank just 2.4 ounces (70 mL) of fermented milk daily had about 20% fewer childhood infectious diseases, compared with a control group.

If you don't regularly eat fermented foods, probiotic supplements are another option.



*Fermented foods such as yoghurt are rich in beneficial bacteria called probiotics*

In a 28-day study in 152 people infected with rhinovirus, those who supplemented with probiotic *Bifidobacterium animalis* had a stronger immune response and lower levels of the virus in their nasal mucus than a control group.

## SUMMARY

**Gut health and immunity are deeply interconnected. Fermented foods and probiotics may bolster your immune system by helping it identify and target harmful pathogens.**

## 5. LIMIT ADDED SUGARS

Emerging research suggests that added sugars and refined carbs may contribute disproportionately to overweight and obesity.

Obesity may likewise increase your risk of getting sick.

According to an observational study in around 1,000 people, people with obesity who were administered the flu vaccine were twice as likely to still get the flu than individuals without obesity who received the vaccine.

Curbing your sugar intake can decrease inflammation and aid weight loss, thus reducing your risk of chronic health conditions like type-2 diabetes and heart disease.

Given that obesity, type-2 diabetes and heart disease can all weaken your immune system, limiting added sugars is an important part of an immune-boosting diet.

You should strive to limit your sugar intake to less than 5% of your daily calories. This equals about two tablespoons (25 grams) of sugar for someone on a 2,000-calorie diet.

## SUMMARY

**Added sugars contribute significantly to obesity, type-2 diabetes and heart disease, all of which can suppress your immune system. Lowering your sugar intake may decrease inflammation and your risk of these conditions.**

## 6. ENGAGE IN MODERATE EXERCISE

Although prolonged intense exercise can suppress your immune system, moderate exercise can give it a boost.

Studies indicate that even a single session of moderate exercise can boost the effectiveness of vaccines in people with compromised immune systems.

What's more, regular, moderate exercise may reduce inflammation and help your immune cells regenerate regularly.

Examples of moderate exercise include brisk walking, steady bicycling, jogging, swimming and light hiking. Most people should aim for at least 150 minutes of moderate exercise per week.

## SUMMARY

**Moderate exercise can reduce inflammation and promote the healthy turnover of immune cells. Jogging, biking, walking, swimming and hiking are great options.**

## 7. STAY HYDRATED

Hydration doesn't necessarily protect you from germs and viruses, but preventing dehydration is important to your overall health.

Dehydration can cause headaches and hinder your physical performance, focus, mood, digestion and



*Dehydration can cause headaches and hinder your physical performance, focus, mood, digestion, and heart and kidney function.*

heart and kidney function. These complications can increase your susceptibility to illness.

To prevent dehydration, you should drink enough fluid daily to make your urine pale yellow. Water is recommended because it's free of calories, additives and sugar.

While tea and juice are also hydrating, it's best to limit your intake of fruit juice and sweetened tea because of their high sugar contents.

As a general guideline, you should drink when you're thirsty and stop when you're no longer thirsty. You may need more fluids if you exercise intensely, work outside or live in a hot climate.

It's important to note that older adults begin to lose the urge to drink, as their bodies do not signal thirst adequately. Older adults need to drink regularly even if they do not feel thirsty.

### **SUMMARY**

**Given that dehydration can make you more susceptible to illness, be sure you're drinking plenty of water each day.**

## **8. MANAGE YOUR STRESS LEVELS**

Relieving stress and anxiety is key to immune health.

Long-term stress promotes inflammation, as well as imbalances in immune cell function.

In particular, prolonged psychological stress can suppress the immune response in children.

Activities that may help you manage your stress include meditation, exercise, journaling, yoga and other mindfulness practices. You may also benefit from seeing a licensed counselor or therapist, whether virtually or in person.

### **SUMMARY**

**Lowering your stress levels through meditation, yoga, exercise and other practices can help keep your immune system functioning properly.**

## **9. SUPPLEMENT WISELY**

It's easy to turn to supplements if you hear claims about their ability to treat or prevent COVID-19.

However, these assertions are unfounded and untrue.

According to the National Institutes of Health (NIH), there's no evidence to support the use of any supplement to prevent or treat COVID-19.

*Vitamins and other supplements may strengthen your body's general immune response*



However, some studies indicate that the following supplements may strengthen your body's general immune response:

**Vitamin C.** According to a review in over 11,000 people, taking 1,000–2,000 mg of vitamin C per day reduced the duration of colds by 8% in adults and 14% in children. Yet supplementing did not prevent the cold to begin with.

**Vitamin D.** Vitamin D deficiency may increase your chances of getting sick, so supplementing may counteract this effect. Nonetheless, taking vitamin D when you already have adequate levels doesn't seem to provide extra benefits.

**Zinc.** In a review in 575 people with the common cold, supplementing with more than 75 mg of zinc per day reduced the duration of the cold by 33%.

**Elderberry.** One small review found that elderberry could reduce the symptoms of viral upper respiratory infections, but more research is needed.

**Echinacea.** A study in over 700 people found that those who took echinacea recovered from colds slightly more quickly than those who received a placebo or no treatment, but the difference was insignificant.

**Garlic.** A high-quality, 12-week study in 146 people found that supplementing with garlic reduced the incidence of the common cold by about 30%. However, more research is needed.

While these supplements demonstrated potential in the studies mentioned above, that doesn't mean they're effective against COVID-19.

Furthermore, supplements are prone to mislabeling because they aren't regulated by the Food and Drug Administration (FDA).

Thus, you should only purchase supplements that have been independently tested by third-party organisations like United States Pharmacopeia (USP), NSF International, and ConsumerLab.

### SUMMARY

**Though some supplements may fight viral infections, none have been proven to be effective against COVID-19. If you decide to supplement, make sure to purchase products that have been tested by a third party.**



*Garlic can help reduce the incidence of the common cold*

*Sauerkraut assists with digestion and adds good bacteria to your gut*



## Best foods to eat for **gut health**

**A healthy gut supports your immune system and helps prevent disease. Here are foods that feed and maintain your gut microbiome to improve your health from the inside out.**

Published on <https://www.eatingwell.com/> by **Lainey Younkin, M.S., RD, LDN.**

Updated on October 1, 2024. Reviewed by Dietitian Christa Brown, M.S., RDN, LD

Known as the microbiome, your gut is home to millions of bacteria and other microbes—both good and bad—and can influence your health in many ways. The key is to balance the ratio of good to bad bacteria within the gut microbiome.

According to a 2019 review in the journal *Microorganisms*, the ‘right balance’ is different for everyone, as each person has their own personal microbiome profile that is initially influenced by several factors, including how your mother gave



birth to you and whether you were fed infant formula or breast milk. According to a large 2019 review in the journal *Nutrients*, what you eat directly influences the makeup of bacteria in your gut. A healthy gut helps keep chronic diseases like heart disease and cancer at bay, reduces inflammation, keeps your brain healthy and helps you maintain a healthy weight. A 2019 study published in *Nature Microbiology* suggests that a healthy microbiome can even help with depression.

It's never too late to change your diet to support better gut bacteria. The same *Nutrients* review suggests that switching from a mostly animal-based diet to a mostly plant-based diet (and vice versa) can change the makeup of your microbiome in as little as 24 hours—for better or for worse.

### **So how do you improve your own microbiome?**

**Eat more:** Probiotics, prebiotics, fibre, polyphenols and fermented foods

**Eat less:** Artificial sweeteners, red meat, processed foods and alcohol.

Here, we break down each category and explain what each one means.

## **PROBIOTICS**

Probiotics are the beneficial bacteria that live in your gut and can be found in fermented foods like sauerkraut, kimchi, miso and yoghurt. Eating foods that are naturally rich in probiotics adds good bacteria to your gut. The most common types of good bacteria are *Lactobacillus* and *Bifidobacterium*, with each having its own specific strains. In addition to helping balance your gut bacteria and prevent chronic disease, probiotics

can help if you have diarrhoea, boost your immunity and keep your heart and skin healthy.

### **1. Sauerkraut**

Sauerkraut is made from cabbage and salt. During the fermentation process, microorganisms eat the sugar present in cabbage and produce carbon dioxide and acids. The probiotics created during fermentation assist with digestion and add good bacteria to your gut. Try to make your own sauerkraut. Most store-bought sauerkraut is pasteurised, which kills bad bacteria as well as the beneficial bacteria created through fermentation.

One cup of sauerkraut has 4 grams of fibre, per the USDA. Probiotics in the gut use fibre as fuel.

Enjoy sauerkraut with grilled chicken, substitute it for pickles on a sandwich or burger, add it to potato salad, or put it on a cheese plate and serve your friends something good for their guts.

### **2. Kimchi**

Kimchi, also fermented cabbage, is the spicy Korean cousin of sauerkraut. It can have scallions, radishes and shrimp added to give it more flavour. Look for it in the refrigerated section near sauerkraut, other Asian sauces and pickles, or better yet make your own to maximise probiotic content.

Kimchi is delicious added to a fried rice bowl with veggies and an egg.

### **3. Kefir**

Kefir is like drinkable yogurt. It's made when kefir grains, which are colonies of yeast and lactic acid bacteria, ferment the sugars in milk, giving it a slightly thicker consistency and tart flavour. Similar

to yoghurt, kefir is packed with probiotics, as long as the store-bought brand you buy uses milk that is pasteurised prior to the fermentation process. Pasteurisation before fermentation ensures kefir contains live and active probiotics when you consume it.

Buy plain kefir (instead of flavoured) to skip added sugars or make your own kefir. Due to fermentation, kefir has a slightly tart and acidic taste, which makes it a tasty addition to a breakfast smoothie in place of milk. Or try substituting kefir for milk in your morning bowl of oats for a healthy combo of probiotics and fibre.

#### **4. Kombucha**

Kombucha is a tart, fizzy tea made by adding a SCOBY (symbiotic colony of bacteria and yeast) and sugar to green or black tea. It's then fermented for a week or more. During fermentation, alcohol and gases are produced, giving the kombucha natural carbonation. The amount of alcohol is usually less than 0.5% alcohol by volume (ABV)—and commercially prepared kombucha is required to keep it no higher than this amount (US federal law states that any product with more than 0.5% ABV must be regulated and marketed as an alcoholic beverage). Pasteurisation

is used to limit alcohol content, which means commercial kombucha contains few if any probiotics. Some homemade kombuchas, however, have been found to have closer to 2%-3% ABV.

To keep the alcohol levels down on your homemade kombucha brew, make sure to keep it cold and refrigerated and shorten the fermentation time. You could also try using a different type of tea. One 2019 study in the journal *Nutrients* found that kombucha made with rooibos tea had lower ethanol (a type of alcohol) and acetic acid (aka vinegar acid) concentrations compared to kombucha made with black or green tea.

When fermenting tea, lactic acid bacteria are produced, which are known to function as a probiotic. When consuming kombucha made from green tea, you'll also get the antioxidant properties associated with tea. Keep in mind that some kombuchas, like those made from black tea, contain caffeine. Others have artificial sweeteners, which can negatively alter gut bacteria (and defeat the purpose of drinking it), so read labels—or make your own.

#### **5. Miso**

Miso is a fermented paste made from soybeans, barley or rice. Similar to other fermented foods, beneficial bacteria are produced in the fermentation process. You'll also get some protein if you eat miso made from soybeans. A little bit goes a long way, which is good since miso is also high in sodium.

Miso is great added to sauces, dressings and soup bases.



*Miso paste*

## 6. Tempeh

Tempeh is similar to tofu in that it's made from soybeans, but unlike tofu, tempeh is a fermented food, so it contains probiotics. Tempeh is made when soybeans are fermented and then pressed into a cake. It can then be grilled, sautéed or baked. Tempeh is high in protein, making it a good option for vegetarians and vegans. It's also packed with B vitamins, calcium, manganese, zinc and copper.

Try marinating then grilling tempeh and add it to a salad.

## 7. Yoghurt

Yoghurt is probably the most popular probiotic and for a good reason. It's made when good bacteria are added to milk, where they metabolise lactose to form lactic acid and other beneficial microbes. Look for yogurt labelled with the 'Live & Active Cultures' seal, which guarantees 100 million probiotic cultures per gram at the time it was manufactured. A quick look at the ingredients list will also show you if there are bacteria in the yoghurt. Do you have trouble digesting lactose? The probiotics in yoghurt help digest some of the lactose (milk sugar), so if you're lactose intolerant, you may be able to enjoy yoghurt (and kefir). If you don't eat dairy, many companies now make dairy-free and vegan yoghurts that contain probiotics.

## PREBIOTICS

When you're trying to establish more probiotic bacteria in your gut, you need to feed them with prebiotics so they can flourish and keep making more good bacteria. 'Prebiotics are fibers that feed the beneficial probiotics in your gut,'



*Yoghurt is probably the most popular probiotic and works well with sweet or savoury foods*

says Dianne Rishikof, M.S., RDN, LDN, IFNCP, a registered dietitian, integrative and functional medicine nutritionist and president and CEO of Health Takes Guts, a nutrition counselling private practice. 'Ingredients to look for include galactooligosaccharides, fructooligosaccharides, oligofructose, chicory fiber and inulin.' Fructans and cellulose are two other prebiotic fibres.

But don't get bogged down in the scientific names. In fact, you won't see most of these compounds listed on a label because they are present in foods that don't have labels—like fruits and vegetables.

Focus on a variety of whole foods. 'It's all about diversity, getting as much variety of plant-based foods as possible and hitting our recommended fibre intake of 30 g per day,' says Megan Rossi, Ph.D., B.H.Sc., RD, APD, founder of The Gut Health Doctor. Apricots, dried mango, artichokes, leeks, almonds, pistachios and legumes, as well as polyphenol-rich foods, such as blueberries, strawberries, prunes, apples, flaxseed, olives and extra-virgin olive oil, are extra-high in prebiotics, Rossi writes in her book, *Love Your Gut*.

## 8. Jerusalem Artichokes

Though commonly referred to as Jerusalem artichokes, this tuber isn't an artichoke at all but rather a part of the sunflower family. Also known as sunchoke, sunroot or wild sunflower, they look similar to gingerroot. One cup of Jerusalem artichokes delivers 2.4 g of fibre, per the USDA. According to a 2019 review article in *Annals of Agricultural and Environmental Medicine*, 80% or more of the carbohydrates in sunchokes is inulin, a prebiotic fibre that provides food for your gut critters. Thiamine (a B vitamin) supports healthy hair, skin and nails, and iron helps form red blood cells.

Try sunchokes roasted with olive oil and garlic or raw in salads (they have a texture similar to water chestnuts).

## 9. Leeks

Leeks are high in good-for-the-gut fructans. According to the USDA, 1 cup of leeks has 1.6 grams of fibre and just 54 calories.

Leeks can be added to almost any dish—try adding them to an omelette or sautéing them to mix with roasted potatoes. Alternatively, rub whole leeks with oil and grill briefly; then toss with your favourite vinaigrette.

## 10. Onions

Onions are chock-full of inulin, fructans and fructooligosaccharides (FOS). Not only are FOS prebiotics that help build up gut flora, but according to a 2022 review of the literature published in the *International Journal of Molecular*

*Sciences*, they also help to improve a plethora of conditions, including diarrhoea, osteoporosis, atherosclerosis, gastrointestinal disorders, cardiovascular disease and Type 2 diabetes.

Onions are highly versatile: Add to soup or salad, grill and put on top of a turkey burger, or roast with herbs and serve as a side.

## 11. Raspberries

According to the USDA, 1 cup of raspberries has a whopping 8 g of fibre, about one-third of your Daily Value (DV). Raspberries are a rich source of polyphenols, potent antioxidants that your gut microbes love to nosh. According to a 2018 review in the journal *Neural Regeneration Research*, polyphenols act as prebiotics by enhancing the growth of beneficial bacteria and inhibiting the growth of pathogens.

Raspberries are delicious when eaten fresh but are just as nutritious purchased frozen and thrown into a smoothie. Or add them to yogurt, oatmeal or high-fibre cereal.

## 12. Beans and Legumes

Many steer clear of beans for fear of having gas, but flatulence is actually a good sign that your gut bacteria are hard at work. When the fibre in beans and legumes, such as black beans, chickpeas,

*Raspberries are a rich source of fibre and prebiotics*





*Asparagus - loaded with antioxidants*

Asparagus is a powerful prebiotic for the gut, due to its level of fructans (inulin and FOS). And according to a 2020 study in the journal *Metabolites*, it is also loaded with antioxidants, natural chemicals that fight off free radicals and other inflammatory compounds in the body.

peas, lentils and white beans, reaches the large intestine (colon), it's still intact. It's there that gut bacteria feed on them. This process is called fermentation. And the byproduct may be some gas. So while it may be awkward, you can feel good about it because your microbes are doing what they're supposed to.

Canned beans are a favourite—pick three types, rinse and mix for a simple bean salad. Or throw black beans on top of tacos. Lentils are delicious in soup—even dried lentils take only 15-20 minutes to cook, so they make for a quick and easy add-in for your favourite soups and stews.

### **13. Asparagus**

Roasted asparagus can be made in just 15 minutes—simply toss the spears with olive oil, salt and pepper and oven-roast at 400°F for 10 to 15 minutes. Or shave raw asparagus over a green salad. Asparagus is also delicious when added to pasta or an omelette.

### **14. Garlic**

As part of a healthy diet, garlic may help reduce the risk of heart disease and is also anti-inflammatory in the body. Inulin and fructooligosaccharides are the two main fibres in garlic—a dynamic prebiotic duo. But that's not all garlic is good for. According to a 2020 review in the journal *Antioxidants*, garlic also has shown positive health effects regarding cancer, cardiovascular disease, metabolic disorders, blood pressure and diabetes, thanks to its antioxidant, anti-inflammatory and lipid-lowering properties. That's a whole lot of benefits in those little cloves!

If you don't like messing with peeling garlic cloves (and the smell it leaves on your hands), a good garlic press is invaluable. You can put the whole clove in there without having to peel it (yes, please!). Garlic can be used to season almost any dish. Sauté it with onions and mix it into a stir-fry or pasta.

### **15. Bananas**

Green bananas (the unripe ones) are best for the gut because they contain resistant starch, a type of indigestible fibre that produces more beneficial bacteria when your microbes feed on it, according to a 2019 review in the journal *Nutrients*. Resistant starch can also be created by cooking grains and then cooling them, due to a naturally occurring

process called retrogradation, per a 2022 study in the journal *Nutrition & Diabetes*. So go ahead and make barley and brown rice in bulk for the week. Bonus: Ripe bananas are full of fibre too, which helps keep you fuller longer.

Eat bananas with peanut or almond butter for protein, healthy fat and an extra dose of fibre. Add them to overnight oats, Greek yoghurt or a high-fibre cereal, or use them as a topping for whole-wheat toast.

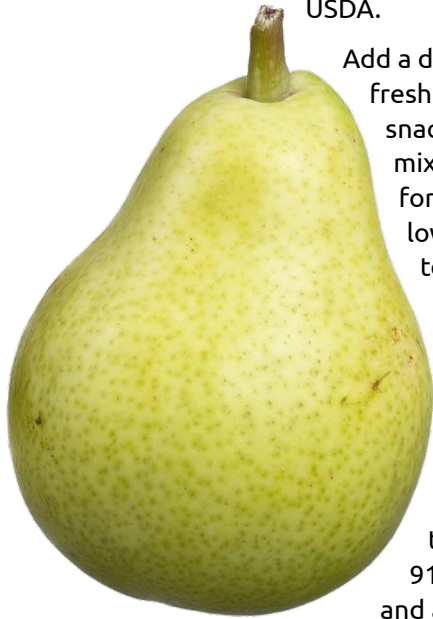
## 16. Pears

Pears are a prebiotic food for the gut and also contain pectin, a compound that helps lower cholesterol. One medium pear is just 100 calories but has 5.5 g of fibre, according to the USDA.

Add a dash of cinnamon to fresh pear slices for a tasty snack, bake a pear crisp or mix diced pear into oatmeal for additional cholesterol-lowering benefits, thanks to the fibre in oatmeal, known as beta-glucan.

## 17. Watermelon

Watermelon is naturally high in fructans. According to the USDA, 1 cup of this juicy fruit is also 91% water by weight and adequate fluid is necessary to help fibre prevent constipation and keep the gut functioning.



Watermelon is a summer staple that is tasty eaten plain. Find that boring? Combine it with feta and mint for a summery salad.

## POLYPHENOLS

'Polyphenols are a type of plant chemical that gut microbes love,' says Rossi. They are found in berries, apples, artichokes, red onions, tea, dark chocolate and other fruits and vegetables. Gut bacteria feed on polyphenols and produce beneficial substances, which in turn, have a positive influence on certain conditions, including cancer, diabetes, cardiovascular diseases and aging, according to a 2020 review article in the journal *Food Frontiers*.

## WORST FOODS FOR GUT HEALTH

### 1. Artificial Sweeteners

Artificial sweeteners, such as aspartame, saccharin and sucralose, have zero calories and no sugar. They pass through the body without being digested, yet they come into contact with the microflora in the gut, negatively changing the composition, according to 2021 research published in the *International Journal of Molecular Sciences*. However, it's unclear how artificial sweeteners actually affect your health.

For now, keep an eye out for aspartame, saccharin and sucralose on the label of processed foods and drinks like diet sodas and other zero-calorie beverages as well as some yoghurts, granola bars and protein bars. These foods and drinks often come with added sugar and salt anyway, so limiting them would be a positive change. Try kombucha in place of soda for a bubbly beverage with good-for-the-gut probiotics.

## 2. Red Meat

L-carnitine, a compound found in red meat, interacts with gut bacteria to produce trimethylamine-N-oxide (TMAO), according to a 2022 study from the Cleveland Clinic and Tufts University. The study, published in the American Heart Association's journal, *Arteriosclerosis, Thrombosis, & Vascular Biology*, shows how TMAO is associated with atherosclerosis—a buildup of plaque in the arteries. This goes to show that the link between red meat and heart disease is not just about saturated fat and sodium: How gut bacteria interact with red meat may play a role.

Eat red meat in moderation, and choose fatty fish, white fish, chicken or plant-based proteins like tofu and tempeh on the regular.

## 3. Processed and Refined Foods

'While I wouldn't go as far as to say you need to cut certain foods out of your diet forever—food is about enjoyment too, after all—limiting highly processed foods loaded with additives and salt will do you and your gut microbes good,' says Rossi. It's hard to study 'processed foods' as a whole because each food has different ingredients, but the biggest issue with processed and refined foods is that they lack diversity and fibre and are often filled with added sugars, salt, artificial sweeteners and/or additives and preservatives. Your microbiome thrives on the diverse fibres and polyphenols that come from eating a variety of colourful fruits, vegetables and whole grains.

## 4. Alcohol

Research studies, like the 2022 review published in *Frontiers in Cellular and Infection Microbiology*,

have found that alcoholism negatively impacts the intestinal microbiome. And while research is scant on the effects of moderate alcohol consumption on gut bacteria, one 2021 study published in *Frontiers in Cardiovascular Medicine* suggests that moderate alcohol intake might have a positive influence on both the gut microbiome and cardiovascular disease. If you enjoy drinking, be sure to do so in moderation, which is one drink per day for females and two for males.

## THE BOTTOM LINE

It all comes back to eating lots of fruits, vegetables, nuts, seeds and whole grains for prebiotics (food for the bacteria) and fermented foods like yoghurt and kombucha for probiotics (good bacteria).

If you do not normally include these foods in your diet, adding them all at once might cause some unwanted gas and bloat. Start with small amounts, and once a week, increase the amount a little bit, determining how much to add based on how you feel.

Eat processed foods in moderation and limit added sugars, salt, artificial sweeteners and alcohol to keep your gut critters happy and your risk of chronic diseases low.

# Seven nutrients to eat for stress relief

The following nutrients can be linked to the stress reactions in the body, and eating or avoiding certain foods can help to moderate those reactions.

**POTASSIUM** – When stressed, adrenaline levels spike, and potassium levels drop.

**Sources:** *potato, sweet potato, watermelon, spinach, beetroot, bananas*

**TRYPTOPHAN** – The sleepy feeling from over-indulging might be linked to the tryptophan found in food. Tryptophan is an amino acid that is converted in the body to serotonin, which regulates mood, appetite, and sleep.

**Sources:** *porridge, dates, eggs, fish, poultry, tofu, nuts, dark chocolate*

**B-GROUP VITAMINS** – B-group vitamins support the production of mood regulators. Serotonin and melatonin help control blood sugar, produce energy, and support the digestive system. A study by Swinburne University in Melbourne found that participants taking a vitamin B-complex supplement reported a 20% reduction in work-related stress.

**Sources:** *beef, spinach, asparagus, avocado, dried beans, peas, lentils, nuts, vegemite*

**OMEGA-3 FATTY ACIDS** – Omega-3 can help regulate the body's levels of cortisol, a hormone that is released during times of stress.

**Sources:** *oily fish, such as salmon and sardines, also krill oil, flax seeds, nuts, grass-fed beef*

**VITAMIN C** – A nutrient known to help regulate cortisol levels.

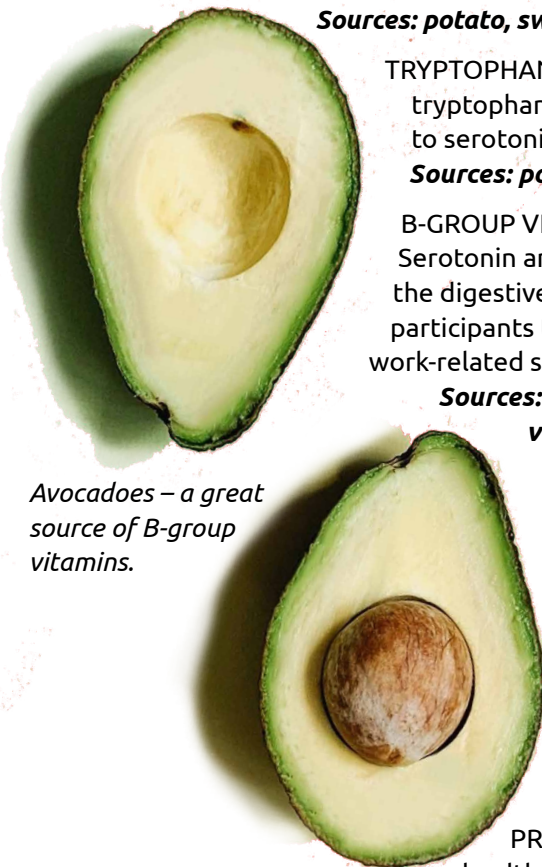
**Sources:** *citrus fruits, blueberries, cranberries, kiwifruit, pineapple*

**MAGNESIUM** – Magnesium aids muscle relaxation and regulates the nervous system. Lack of magnesium can amplify the stress response.

**Sources:** *green leafy vegetables, whole grains, beans, nuts and seeds*

**PROBIOTICS** – As well as helping to regulate cortisol, probiotics stimulate healthy gut bacteria. Studies show that there may be a link between changes to gut bacteria and anxiety levels.

**Sources:** *low-fat yoghurt and fermented foods*



*Avocados – a great source of B-group vitamins.*





# Nutritional strategies to ease anxiety

Posted 13 April 2016, **written by Uma Naidoo, MD**

**A**ccording to the National Institute of Mental Health, anxiety disorders are the most common mental illness in the United States. That's 40 million adults – 18% of the population – who struggle with anxiety. Anxiety and depression often go hand in hand, with about half of those with depression also experiencing anxiety.

Specific therapies and medications can help relieve the burden of anxiety, yet only about a third of people suffering from this condition seek treatment. In my practice, part of what I discuss when explaining treatment options is the important role of diet in helping to manage anxiety.

In addition to healthy guidelines such as eating a balanced diet, drinking enough water to

stay hydrated, and limiting or avoiding alcohol and caffeine, there are many other dietary considerations that can help relieve anxiety. For example, complex carbohydrates are metabolised more slowly and therefore help maintain a more even blood sugar level, which creates a calmer feeling.

A diet rich in whole grains, vegetables, and fruits is a healthier option than eating a lot of simple carbohydrates found in processed foods. When you eat is also important. Don't skip meals. Doing so may result in drops in blood sugar that cause you to feel jittery, which may worsen underlying anxiety.

The gut-brain axis is also very important, since a large percentage (about 95%) of serotonin receptors are found in the lining of the gut.

*'...fatty fish, like wild Alaskan salmon, contain omega-3 fatty acids. A study completed on medical students in 2011 was one of the first to show that omega-3s may help reduce anxiety.'*



Research is examining the potential of probiotics for treating anxiety and depression.

### **Some specific foods reduce anxiety**

- In mice, diets low in magnesium were found to increase anxiety-related behaviors. Foods naturally rich in magnesium may, therefore, help a person to feel calmer. Examples include leafy greens, such as spinach and Swiss chard. Other sources include legumes, nuts, seeds, and whole grains.
- Foods rich in zinc such as oysters, cashews, liver, beef, and egg yolks have been linked to lowered anxiety.
- Other foods, including fatty fish like wild Alaskan salmon, contain omega-3 fatty acids. A study completed on medical students in 2011 was one of the first to show that omega-3s may help reduce anxiety. (This study used supplements containing omega-3 fatty acids). Prior to the study,

omega-3 fatty acids had been linked to improving depression only.

- A study in the journal *Psychiatry Research* suggested a link between probiotic foods and a lowering of social anxiety. Eating probiotic-rich foods such as pickles, sauerkraut, and kefir was linked with fewer symptoms.
- Asparagus, known widely to be a healthy vegetable. Based on research, the Chinese government approved the use of an asparagus extract as a natural functional food and beverage ingredient due to its anti-anxiety properties.
- Foods rich in B vitamins, such as avocado and almonds.

These 'feel good' foods spur the release of neurotransmitters such as serotonin and dopamine. They are a safe and easy first step in managing anxiety.

## Should antioxidants be included in your anti-anxiety diet?

Anxiety is thought to be correlated with a lowered total antioxidant state. It stands to reason, therefore, that enhancing your diet with foods rich in antioxidants may help ease the symptoms of anxiety disorders. A 2010 study reviewed the antioxidant content of 3100 foods, spices, herbs, beverages, and supplements.

Foods designated as high in antioxidants by the USDA include:

Beans: Dried small red, Pinto, black, red kidney

Fruits: Apples (Gala, Granny Smith, Red Delicious), prunes, sweet cherries, plums, black plums

Berries: Blackberries, strawberries, cranberries, raspberries, blueberries

Nuts: Walnuts, pecans

Vegetables: Artichokes, kale, spinach, beets, broccoli

Spices: Turmeric (containing the active ingredient curcumin) and ginger.

## Achieving better mental health through diet

Be sure to talk to your doctor if your anxiety symptoms are severe or last more than two weeks. But even if your doctor recommends medication or therapy for anxiety, it is still worth asking whether you might also have some success by adjusting your diet. While nutritional psychiatry is not a substitute for other treatments, the relationship between food and anxiety is garnering more attention.

Harvard Health Publishing  
[www.health.harvard.edu](http://www.health.harvard.edu)



*Red kidney beans*



*Spinach*



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