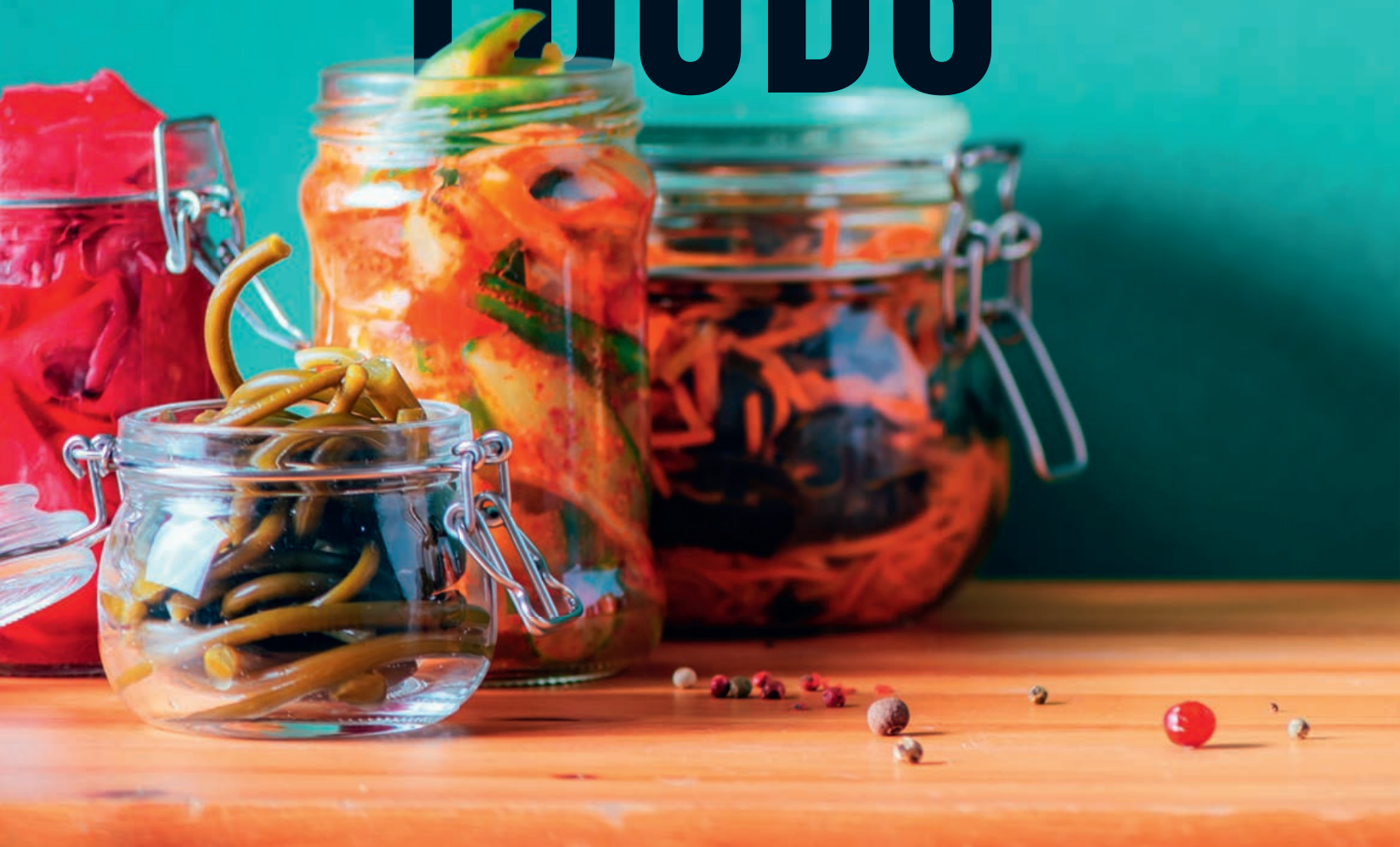


ONE SMALL CHANGE

# EAT MORE FERMENTED FOODS



Kimchi, kefir and kombucha are hot topics in wellbeing circles – but do fermented foods really make you healthier? *Anita Bean* investigates

**F**ermented foods have gone from being a niche interest to resolutely mainstream. Who'd have thought a decade ago that kefir and kimchi would become common topics of conversation, not to mention general discussion of gut health and the microbiome?

They're nothing new, of course – fermented foods have been dietary staples in many parts of the world for thousands of years. Originally used as a way to help food last longer and keep it from spoiling, fermentation also enhances the taste and texture of some ingredients. It's only recently, however, that we have become

so aware of the potential health benefits that fermented foods can offer.

Some fermented products – such as sourdough bread, yogurt, cheese, coffee, wine, beer and chocolate – are well-established staples. Others, including kimchi (spiced fermented vegetables), kombucha (fermented tea), sauerkraut (fermented cabbage), tempeh (fermented soya beans), miso (a paste made from fermented soya beans) and kefir (a fermented milk drink), are gaining a wider audience.

But what exactly are they? “Any food that has undergone fermentation by microbes to convert simple ingredients into a final product can be defined as a fermented food,” explains Emma Ellice-Flint, clinical nutritionist and chef. “Put simply, fermentation occurs when microbes, such as bacteria and yeast, convert carbohydrates in the food into alcohol, lactic acid, carbon dioxide »

## PROBIOTICS, PREBIOTICS, POSTBIOTICS... WHAT'S THE DIFFERENCE?

**PROBIOTICS** are live microbes, including bacteria and fungi, that live inside your gut and have beneficial effects on your health. Fermented foods, such as yogurt, kefir and kimchi, are naturally rich in probiotics.

**PREBIOTICS** are indigestible carbohydrates and fibres found in plant foods that serve as ‘food’ for probiotics in your gut. Examples include onions, garlic, leeks, apples, beans, chickpeas, lentils, bananas, nuts and asparagus.

**POSTBIOTICS** are compounds produced by probiotic bacteria when they consume prebiotics or fibre. They include lactic acid, B vitamins, vitamin K and short-chain fatty acids.

PHOTOGRAPH ADOBE STOCK



# ‘FERMENTED FOODS HAVE BEEN DIETARY STAPLES IN MANY PARTS OF THE WORLD FOR THOUSANDS OF YEARS’

and other compounds. These act as natural preservatives and create that distinctive tangy taste.”

There are two main methods to achieve fermentation. The first is ‘spontaneous’ fermentation (also called ‘wild fermentation’) whereby microbes that are present naturally in the food or environment bring about the process – as with sauerkraut or kimchi. The second method requires human intervention, such as by adding a starter culture – as with yogurt or kefir.

The results, from kimchi to red wine, are foods (or drinks) that are packed with live microbes known as probiotics, and it’s these that are linked with a range of health benefits. “When you eat fermented foods, the live bacteria can survive the passage through your digestive system to reach your gut microbiome in the lower intestines,” says Emma. “They can then enhance the health and diversity of the beneficial microbes in your gut. It’s like a big party, where getting together with our friends makes us happier. In the same way, when fermented food microbes interact with our native gut microbes, this makes them happier, helping them to thrive.”

Higher levels of microbiome diversity are associated with better health, according to recent research. In a study published in the journal *Cell* in 2021, researchers found that people who ate fermented foods every day for several weeks increased their gut microbiome diversity. And the more fermented foods they ate, the greater the number of microbial species in their guts. What’s more, they showed lower levels of inflammatory markers, which are linked

to heart disease, type 2 diabetes and certain cancers.

Many fermented plant foods, such as sauerkraut and kimchi, also contain prebiotics – a type of fibre that acts as food for our gut microbes. During fermentation, compounds such as lactic acid are released, which also have potential health benefits. As a result, fermented foods containing live bacteria (probiotics), fibre for them to eat (prebiotics) and the compounds they produce (postbiotics) can provide a triple whammy of benefits for your gut microbiome and overall health.

Tempted to try a probiotic supplement instead? They won’t give you the same benefits as eating fermented ingredients. “Fermented foods provide much more in the way of diversity than supplements can,” says Emma. “When you eat sauerkraut, for example, you’re getting fibre, vitamins, minerals, antioxidants and lactic acid to name a few.”

A note of caution: foods such as kimchi and miso can be high in salt, and not all fermented food contains live bacteria.



When foods are pasteurised or cooked after fermentation (sourdough bread, for example), the microbes may be killed by the heat. For fresh products such as kimchi, yogurt and kefir, Emma advises checking the label for the words ‘contains live cultures’ to ensure the foods you are buying actually contain probiotics. You will typically find these ‘live’ fermented foods in the chilled section.

Regularly eating fermented probiotic foods can support your gut health and benefit your health in a multitude of ways. Variety is key, but make sure you introduce food that you are unfamiliar with gradually to avoid any unwanted side effects. Health benefits aside, fermented foods are delicious, which means that this is one health hack you may find easy to commit to.

\*AVAILABLE IN SELECTED STORES PHOTOGRAPH ROB WHITE

## GUT INSTINCT



Cocos Organic Natural Coconut Milk Kefir (£3.75/500ml)



Hurly Burly Original Organic Raw Sauerkraut\* (£2.55/300g)



Equinox Organic Sicilian Lemon Kombucha (£2.20/275ml)



Yeo Valley Organic Frozen Strawberry Kefir (£4/480ml)



The Tofoo Co Original Tempeh (£2.95/200g)

# Better health

The latest tips, trends and updates, plus your diet and wellbeing questions answered

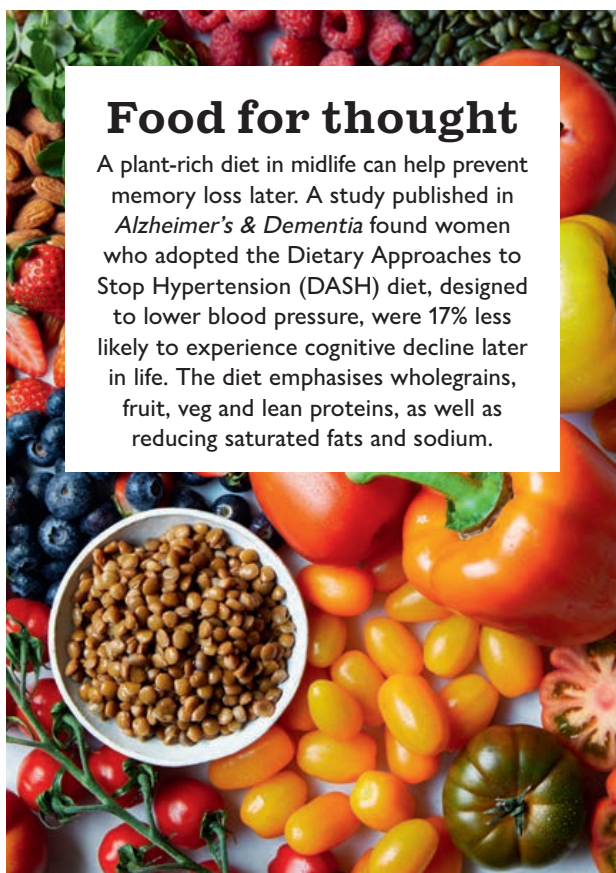
## IT'S ABOUT TIME

Eating in a restricted timeframe each day could improve energy and mood, say scientists at King's College London. They monitored 37,545 people for three weeks and found those who limited daily eating to a 10-hour window (for example, between 9am and 7pm) reported benefits.



## Food for thought

A plant-rich diet in midlife can help prevent memory loss later. A study published in *Alzheimer's & Dementia* found women who adopted the Dietary Approaches to Stop Hypertension (DASH) diet, designed to lower blood pressure, were 17% less likely to experience cognitive decline later in life. The diet emphasises wholegrains, fruit, veg and lean proteins, as well as reducing saturated fats and sodium.



WORDS ANITA BEAN INTERVIEW FAYE HARDY PHOTOGRAPHS HELEN CATHCART, ADORÉ STOCK

## SEED CAPITAL

Just 1 tablespoon of chia seeds or ground flaxseeds, 2 tablespoons of hemp seeds or 6 walnut halves supply enough omega-3s to meet your daily requirement. Omega-3 fats are important for eye and skin health, support the immune system, and aid brain and nerve development.



## ASK THE NUTRITIONIST

Joanne Lunn has an MSc and a PhD in nutrition and has been a Partner for 14 years

**Q** What are the best changes I could make to my diet to improve sleep?

Fiona, Salisbury

**A** Getting a good night's sleep is fundamental to physical and mental health. Poor sleeping habits negatively affect mood, behaviour and performance. Evidence also suggests that poor-quality sleep or a lack of it may be linked to an increased risk of heart disease, stroke and hypertension, as well as obesity and type 2 diabetes.

As a rule of thumb, try not to eat too late. Instead, have a light evening meal about three hours before going to bed. Don't go to bed hungry, however – low blood sugar levels can also keep you awake. If you need to, try having a small snack to stave off late-night hunger.

Some studies show consuming foods that contain tryptophan in the evening can reduce the amount of time it takes to fall asleep – though more research is needed before conclusions can be made. An essential amino acid that you can get only from your diet, tryptophan is used by the body to make the neurotransmitter serotonin, which has a role in mood regulation and wakefulness. At night, serotonin is used to make the sleep hormone melatonin.

Tryptophan is found in many protein-rich animal products such as chicken and turkey; milk, cheese and yogurt; and some fish, like tuna. Vegetarian sources include nuts, seeds, oats and bananas. You could try drinking a cup of milk before bedtime or having a slice of cheese on an oatcake – there's no truth in the myth that eating cheese at night will give you nightmares!

*Do you have a question for Joanne? Email [waitrose.food@dentsu.com](mailto:waitrose.food@dentsu.com), putting 'Ask the nutritionist' in the subject line.*