



From a taboo topic to a celebrity-endorsed, billion-dollar, global movement. Your gut just pulled off the ultimate rebrand

When Tiffiny Hall posted a photo of herself on Instagram last year, singlet raised to reveal a bloated belly and with a caption about her gut problems, she knew it'd get a reaction. Which it did: more than 12.000 likes and 800 comments, the majority from women relating to her sitch and thanking the fitness trainer for her honesty. "I put it up there to help the thousands of my [program] members struggling with bloating," says the founder of tiffxo.com. "To connect to them and say, 'Hey, I struggle with [gut issues] myself'."

The reaction reflects a seismic shift in the wellness world. A world in which bloating positivity is now a social media movement (#bloated has racked up nearly 200,000 uses); digestive issues are spoken about over brunch (with a side of kimchi); where everyone from Kayla Itsines to Karlie Kloss is talking about gut health. In the last six months alone, we've seen studies linking the gut with depression, "Lose the chewing cardiovascular disease, exercise, obesity, cancer and immunity. Heck, Bill Gates is even investing in probiotics research. sweeteners, it's a

big gut irritant. Proof of this shift isn't confined to Also, when you conventional wellbeing spaces either. Just take chew, you swallow a trip to Melbourne Museum: its interactive air and make vourself more new exhibition, Gut Feelings: Your Mind, Your gassy. Limit stress *Microbes*, aims to demystify what's going on and make sure to in our bellies. "I was getting smacked over the exercise, which head with gut stuff wherever I looked, in both helps digestion." TIFFINY HALL, FITNESS TRAINER the media and medical world," says Dr Johanna Simkin, senior curator of human biology and medicine, on what motivated the project. So, what turned this topic, which we'd never have discussed over avo toast a few years ago, into one of the hottest health conversations on the planet? Glad you asked!

Gut feeling

One major driver is the probability that you spent yesterday bloated/in pain/gassy/in the bathroom on the reg/never in the bathroom ... take your pick. One in two Aussies struggle with digestive problems, while - and here's the kicker - women are more likely than blokes

to suffer from IBS (a 2018 study in *Gastroenterology* suggests genetics should cop some of the blame). "As more people struggle with digestive troubles, due to [factors such as] poor dietary choices and ingredients in our food supply, the focus around improving digestion has lead to individuals taking an interest in gut health," says Kara Landau, accredited practising dietitian and the founder of prebiotic brand Uplift Food. Landau also name-checks groundbreaking research initiatives, such as the ongoing Human Microbiome Project (launched in the US in 2007 to delve into microbes and how they influence our wellbeing), which "has certainly lead to more widespread discussions around how the microbiome connects with health and disease states." Meanwhile. Simkin credits tech advances for enabling scientists to dig deeper. "The biggest thing is [we've become] better at sequencing DNA, so reading genetic material," she says. "This has allowed scientists to pick apart exactly which microbes are present in our gut, and then start to [discover] exactly how they're signalling to each other. We're scratching the surface on how these little microbes can talk to our immune, hormone and nervous systems. They have such a far-

reaching effect all over our bodies."

An exciting discovery adding fuel to researchers' fire is the relationship between the gut and the brain (hence that former's new nickname 'the second brain'). Like Kate Beckinsale and Pete Davidson, it's a connection still being figured out - but the potential is huge for protecting and treating our mental and cognitive health. "Your gut and brain are actually physically connected by this thing called the vagus nerve," explains Simkin. "It's a super highway that kind of flushes information back and forth, allowing the two to communicate. The vagus nerve has been known about for a long time, but what's new is this idea of microbes sending signals via it and to a level of precision nobody

would have guessed before." Talk about mind-blowing.

Food for thought

GUT

HOT TIP

gum - with all

the artificial

When you hear how many areas of health your microbes might impact, the global benefits of our love-fest with the gut are clear. But, what about the everyday wins that come from paying digestion more attention? Hall sees more and more of us appreciating that wellbeing and weight loss are holistic, with gut health (and its link to things like stress and anxiety) playing a key role.

The value in billion dollars of the alobal probiotics market as of 2017. It's predicted to hit \$92.5 billion by 2024.

The kombucha industry is tipped to be worth this many billions of dollars by 2026.

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Ready for it? This is the billion-dollar value the fermented foods biz is expected to reach by 2023. That's a lot of sauerkraut.



"As soon as you treat the gut, you feel better and when you feel better, you make [even] better choices for yourself," she says.

There's also something special about the fact many of us now chat to family, friends, workmates and even the social media sphere about our IBS flare-up, bloat situation or something as simple as the post-meal herbal tea we swear by. "It helps feeling you're not alone and also that you're sharing what you know," adds Hall. "It's proven that support and a community-based approach to health and fitness will have lasting results."

Simkin notes, "The real advantage is that

people are thinking about their gut health. I've heard of parents convincing their kids to eat vegetables by saying 'broccoli is good for your microbes.' That's a beautiful thing." She also adds that it's rare for the hype around something to be so huge while scientists are still figuring out exactly what's going on, "which means that everyone is being swept up in these waves of discovery."

Digest this

That last part is why we need to exercise caution, though, says Dr Nicholas West, a research fellow who works on Griffith University's Aussie Gut project, which invites people to have their microbiomes profiled and contribute to the uni's research (plus, score some useful personal feedback). "There's been an outbreak of alternative medical practitioners making all sorts of claims around modifying gut health and gut bacteria for better health," he explains. "And unfortunately, there's not a lot in the space to support that. [For instance,] there's this concept of dysbiosis, which is gut bacteria that is out of whack, more or less. People say, 'Oh, I'm treating dysbiotic gut bacteria' and I say, 'What do you mean by that? We can't actually identify 30 or 40 per cent of what [bacteria species are] in the gut yet.' The technology is improving and ... identifying more and more but, until that process is a little more developed, it's hard to actually say, 'this profile is associated with this disease'."

One case of where the hype may have jumped the research gun? Taking probiotic supplements after antibiotics. It's popular advice but perhaps shouldn't be, according to a new study by the Weizmann Institute of Science in Israel. A team there gave antibiotics to 21 healthy adults for a week, then assigned them to either have a faecal transplant (don't try that at home) made

GUT HOT TIP!

"People feel like they should scoff fermented foods nonstop ... but you don't have to do anything crazy. Instead just eat a wholefood diet and, occasionally, you might want to throw in some fermented foods."

DR JOHANNA SIMKIN, SENIOR CURATOR OF GUT FEELINGS EXHIBITION from their original microbiome, take probiotics for four weeks or join a control group. While the microbiomes of the transplant group were restored to their original state after a day and the control group after four weeks, the probiotic-popping group were still not back to normal after six months. What that means for your health isn't totally clear yet, but it shows more research is needed.

West's advice for gut-friendly eating is simple: enjoy fibre, swerve processed foods, stay hydrated, balance your diet. "It's not rocket science," he says. "People who have more extreme diets will, in general, also have lower diversity ... across their bacterial species,

which we see as being associated with [lesser] health." Consider gut strategies like probiotics as part of the wellness jigsaw rather than a cure-all, and check in with a trained professional like a dietitian if need be.

Boss bacteria

Picture a trip to your local pharmacy. What you're browsing for? A specific microbe mix you can take to boost your confidence – based on Beyonce's gut make-up. How about Obama's mix to elevate your public-speaking skills? Or a memory champion's for ultimate recall? Sounds far-fetched, but it's an idea Simkin plays with in the *Gut Feelings* exhibition – that one day we could take microbes to alter our mental state or induce certain personality traits. "It's really interesting; I don't know where it could end," she says.

To steal a line from Tina Fey (how about a comedicgenius mix?), the limit does not exist when it comes to the future of gut health. Landau predicts more focus on the nootropic effects of certain ingredients in a bid to improve and protect cognitive function. Meanwhile, West's team is investigating how gut bacteria can influence things like obesity and metabolic health, as well as drug metabolism and our likelihood of getting a cold. There are athlete programs ahead of Tokyo 2020 to see how "gut bacteria primes or interacts with our immune system to promote recovery", he says.

It's exciting stuff but, for the moment, surely the appeal of the gut-health world lies in its accessibility. In the fact that there are steps you can take, right now, to look after your gut and feel happier for it – from boosting fibre and topping up your water bottle to managing stress and working out. We'll raise a glass of kombucha to that. **wh**

Your digestive tract is home to around this many bacteria. That's more than all the stars in the Milky Way.