

A PUFF OF BREATH TO MEASURE digestive health, at-home test kits and personalised pills: the era of bespoke probiotics is inching closer. The gut is home to 70 per cent of the immune system and can affect mood and metabolism. But the gut microbiome – the complex network of bacteria in the gut – is a bit like the ball pit at a child's birthday party, except vaster and trickier to navigate.

The diversity of bacteria varies from person to person. Trillions of different microorganisms live in the gut, which means that our microbiomes are as unique as our fingerprints. "Our gut microbiome is influenced by lots of things, such as food, where we live and who we socialise with," explains Tim Spector, a professor of genetic epidemiology at King's College London. "These factors directly impact which gut microbes thrive and which don't."

While there's a compelling argument for keeping our gut microbiome healthy, up until recently the consumer approach has been to pop pills without knowing which bacteria are depleted. "Currently, most probiotic supplements use the same types of strain, when it actually makes perfect sense that we would need different microbes to support our individual gut health needs," says nutritional therapist Eve Kalinik.

Plus, these drinks and pills only offer a temporary boost. "The microbes don't colonise the gut, so their effects are likely to be short-lived and stop when a person is no longer taking the supplement," says Spector.

As advances in personalised health show no sign of slowing down, Spector believes that "bespoke probiotics based on an individual's gut microbiome analysis" are on the horizon. "The science is still evolving," he says, "but this is the next step."

The future is biohacking better health. "We now know that the gut microbiome impacts so many parts of our health, from

mental wellbeing and fertility to metabolic disease risk and immunotherapy cancer treatment efficacy," explains Spector. "The potential benefits of personalised probiotics include being able to target something called gut dysbiosis, which occurs when the bacteria in the gut become unbalanced."

With the global digestive health market predicted to hit £74.8 billion by 2031, some brands are already rewriting their approach. Given that many people with IBS lean on probiotics, Artah's Enhanced Probiotic shuns fibre-based probiotics that can often cause discomfort. Heights Smart Probiotic focuses on the "gut-brain axis", using bacteria that work on the vagus nerve for better mental health. Healy offers wearable tech, where personalised microcurrent frequencies claim to balance the gastrointestinal tract.

And what about getting the microbiome assessed? Kalinik uses functional medical testing (stool, saliva and blood analysis) and remains a firm believer in visiting a clinical practitioner. In the research stages is a swallowable sensor which, once

ingested, measures gut gases. FoodMarble is the world's first personal digestive breath tester, with an app that helps people tackle conditions such as IBS by analysing fermentation levels with real-time results.

The Zoe personalised nutrition programme, cofounded by Spector, is now available in the UK. Customers wear continuous glucose monitors and take blood and stool samples to see how they metabolise foods. Zoe, which costs from £24.99 per month, plus £299.99 for the test kit, has amassed a waitlist of more than 200,000 people.

Using personalised probiotics is the shape of the future. But diet remains crucial, advises Kalinik: "If you don't have a diet rich in the plants that are essential fuel for our gut microbes, no probiotic, however bespoke, will be a panacea for gut health." ⑦

"OUR GUT MICROBIOME IS INFLUENCED BY FOOD, WHERE WE LIVE AND WHO WE SOCIALISE WITH"

TOTAL GUT RESET

MEDISPAS THAT WORK FROM THE INSIDE OUT

VIVAMAYR MARIA WORTH AUSTRIA

Vivamayr practises Modern Mayr Medicine, which believes that a poorly functioning gut is linked to physical and emotional ailments. Microbiome expert Dr Georg Stossier is part of the team here. The personalised overhaul includes a digestive tract assessment, blood tests, metabolic measurement and a tailored diet alongside abdominal massages and yoga. vivamayr.com

THE ORIGINAL FX MAYR AUSTRIA

The oldest sibling in the Mayr family of spas, FX Mayr opened in 1976. The premise is de-stressing, detoxifying the organs and alkalising meals. There's a "chew, chew, chew" eating mantra, and vegetable bouillon dinners encourage the digestive system to rest for 16 hours to achieve ketosis, whereby the body burns fat. original-mayr.com

SHA WELLNESS CLINIC SPAIN

Sha's Gut Health Focused Pack programme takes a multidisciplinary approach to improving intestinal health and the microbiome. Detailed assessments identify the physical issues to be treated, as well as psychological factors that may affect eating habits. An anti-inflammatory diet and supplements designed to detoxify and repair the intestinal mucosa cleanse the body. shawellnessclinic.com

PARK IGLS AUSTRIA

Modern Mayr is also the central building block at this retreat, where the goal is to allow the digestive tract to rest and repair. The package includes slow, mindful eating and a prescribed seasonal diet with a medical backup that includes blood, hormone, vitamin and mineral tests, plus ultrasound scans of the carotid artery and thyroid. park-igls.at