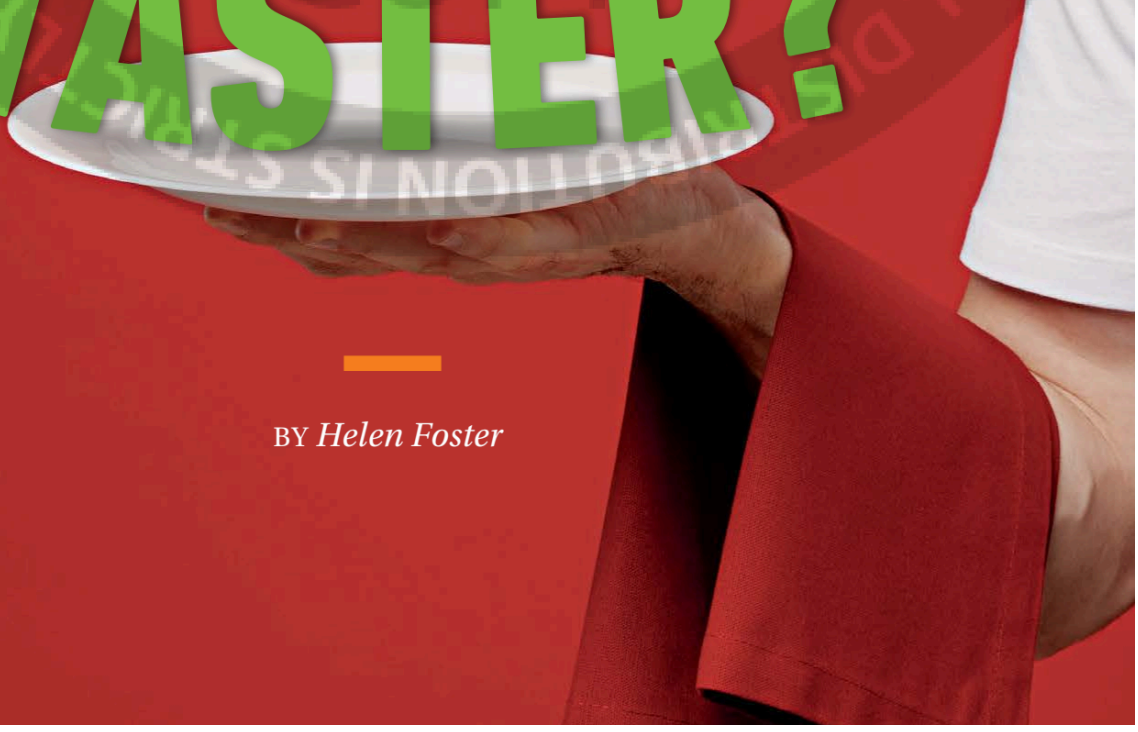
- Senses and sensation

HEALTH

Your sense of taste could affect your weight, your eating habits, and possibly even your risk of COVID-19. By understanding taste sensitivity, you can influence your eating behaviours for the better

ARE YOU A SUPER TASTER?



BY *Helen Foster*



PRINTED FROM PRESSREADER
NOT FOR SALE
PERSONAL COPY

Around 10 years ago, Kavita Favelle, a food blogger from Wales, was enjoying a beer-tasting event when she and the other beer enthusiasts were each given small pieces of paper to put in their mouths. The bite-sized paper contained a sample of a bitter chemical called phenylthiocarbamide and, by needing to spit it out, the 52 year old had revealed herself to be one of the 25 per cent of the population known as supertasters.

"Your taste type is determined by how strongly you perceive this bitter taste," says Andrew Costanzo, lecturer in food and nutrition at Deakin University in Melbourne. "Supertasters find it highly distasteful, normal tasters who make up around 50 per cent of the population don't mind it and the 25 per cent of non-tasters can't taste it at all."

Which of these three groups you fall into can play a role in what you choose to eat—and how much of it—with knock-on effects to health.

Supertasters, like Favelle, tend to avoid foods that they consider taste bitter. On the positive side, this means they are less likely to smoke or drink alcohol. On the negative side, they tend to shun brassica vegetables like kale, cabbage, broccoli and Brussels sprouts that are high in bitter compounds—but also contain cancer-fighting compounds. Originally this was thought to be why supertasters have around a 40 per cent higher risk of some cancers than non-tasters, "but the issue is more that it's not just bitter foods that super tasters avoid," says Dr Costanzo. "They have generally less diverse diets possibly because they are more cautious about trying new things."

SUPERTASTERS TEND TO ADD MORE SALT TO THEIR FOOD, AS SALT DISGUISES BITTERNESS.

And this could lower their general level of nutrition and exposure to protective compounds in fruit, vegetables, herbs, spices—and even coffee. Supertasters also tend to add more salt to their food, as salt disguises bitterness which might also have negative health effects like raising blood pressure.

Medium or normal tasters tend to have a broader palate because they are neither adverse to bitter-tasting foods, nor do they need to douse their food in sauces to make it palatable.

COMPOSITE PHOTO (OPENING SPREAD): SHUTTERSTOCK

WHAT DETERMINES WHETHER YOU ARE A SUPERTASTER OR A NON-TASTER? IT'S MOSTLY GENETICS.

While supertasters avoid certain foods, non-tasters have the opposite issue. They tend to be higher in weight than supertasters, possibly because they need higher quantities of high fat, high sugar foods to satisfy their flavour needs. They're also more likely to smoke and drink alcohol.

The fact that their taste isn't so sensitive might also have a surprising effect on immunity. A study published in the *Journal of the American Medical Association* discovered that non-tasters were more likely than supertasters to test positive to COVID—and had worse symptoms when they did.

The reason, explains Dr Henry Barham, a US-based ear, nose and throat (ENT) specialist at Sinus and Nasal Specialists of Louisiana, is that when the taste receptors activate, the small hairs inside the nose and mucus membranes of the nose and mouth fire up—both of which are part of our defence against infection. Plus, you produce a substance called nitric oxide which inhibits the spike protein on COVID-19. "Because this response in a supertaster is stronger than in a non-taster, it's possible this results in a more effective clearing of the infection microbe and a reduced susceptibility to infection," he says.

Primarily, what determines whether you are a supertaster or a non-taster is genetics. According to researchers in the UK and New Zealand, these genes don't just run in families, but they might also correlate to ethnicity—with those with an Asian background more likely to be supertasters than Caucasians. But, while we can't change our genes, we can trick our tastebuds in ways that make it easier to eat more of the things you should—and less of those we should avoid.

MORE DAIRY

Supertasters tend to add salt to their food to disguise bitterness, "but dairy does the same thing," says Clare Collins, Laureate Professor in nutrition and dietetics at the University of Newcastle. "Serving vegetables with a cheese sauce or a yoghurt-based dip could make them easier to eat."

ADD HERBS AND SPICES

If you can tolerate hotter herbs and spices, Professor Collins says these can also act as a decoy to bitter tastes. "Pepper, chilli, ginger work well—and, adding a mix of garlic and browned onions to vegetables makes everything moreish."

TRY ALTERNATIVES

Favelle says she finds it hard to disguise strong bitter flavours so she looks for alternatives. These include



COMMERCIAL DISTRIBUTION IS STRICTLY PROHIBITED
PRINTED FROM PRESSREADER
NOT FOR SALE
periodicalqcpubliclibrary@gmail.com
PERSONAL COPY

little gem lettuce instead of radicchio, savoy cabbage instead of kale and also drinking light roast coffees. "I pick milder teas like oolong and find higher quality green teas don't have the same bitter edge."

STIR-FRY INSTEAD

Avoid boiling vegetables. "A lot of taste comes from smell, and the smell of boiled cruciferous vegetables is high in sulphur which can amplify the bitter taste," says Professor Collins. "Stir-frying doesn't release the smell in the same way."

AVOID COLD FOODS

Some people also taste food differently depending on its temperature. In those who do this, bitter tastes are strongest when food is cold, so avoid raw vegetables.

TRY NEW FOODS

And keep trying the foods you don't like: "Our tastes do change with age, and we can also get used to a taste by exposing ourselves to it," says Dr Costanzo.

EASE OFF FAT AND SUGAR

If you overindulge in high fat or high sugar foods, start reducing how often you consume them. "The feeling of satisfaction you get from a taste changes in relation to how often we interact with a food—the more of it you consume, the more you will need to stay satisfied," says Dr Costanzo. "So, start cutting back—it's hard at

PHOTO: SHUTTERSTOCK

first, but you will acclimatise—and eventually even fruit will taste intensely sweet."

EAT SLOWLY

It's a good idea for everyone, but particularly non-tasters. "When you chew food well it passes over your taste buds for longer and you will get more satisfaction from a smaller amount," says Dr Costanzo.

WHITE DINNER PLATES

According to research from the Memorial University of Newfoundland, food tastes sweeter if you serve it on a round white plate—so, non-tasters might need less of it to feel satisfied—and super tasters might find things less bitter served this way.

EAT COLOURED VEGGIES

"There are a lot of vegetables out there that aren't bitter—pumpkin, sweet potato, beetroot, carrots and corn are all good for you," reminds Professor Collins. "Don't quit all vegetables just because you don't like green ones." You can also try roasting vegetables to increase natural sweetness.

No matter where you are at on the 'taster' spectrum, understanding your genetically primed taste preferences can help you expand and retrain your palate, because repeatedly trying a food can increase acceptance. R



HOW TO TEST YOUR TASTEBUDS

You'll need some blue food colouring, a cotton bud, a piece of cardboard with a four-mm hole, and your phone.

Add the food colouring to the cotton bud and rub it over a small area of your tongue. Now, hold the cardboard over your tongue, with the hole placed over the blue area. Get someone to photograph this.

Inside the hole you will see a mix of blue areas and pink dots—these are the papillae that house your tastebuds. Enlarge the phone image so you can count the dots. If you count fewer than 15 you are a non-taster. If you count more than 35 you're a supertaster. Anything in between is a normal taster.

Obviously don't try this if you are allergic to blue food colouring.

PHOTO: SHUTTERSTOCK

Forever In Blue Jeans

Scientists have found a sustainable replacement for the popular but toxic indigo used to dye denim. Indican, a compound also derived from indigo-producing plants, could reduce denim's environmental and societal impacts by up to 90 per cent.

PHYS.ORG