

TEST YOUR *taste*



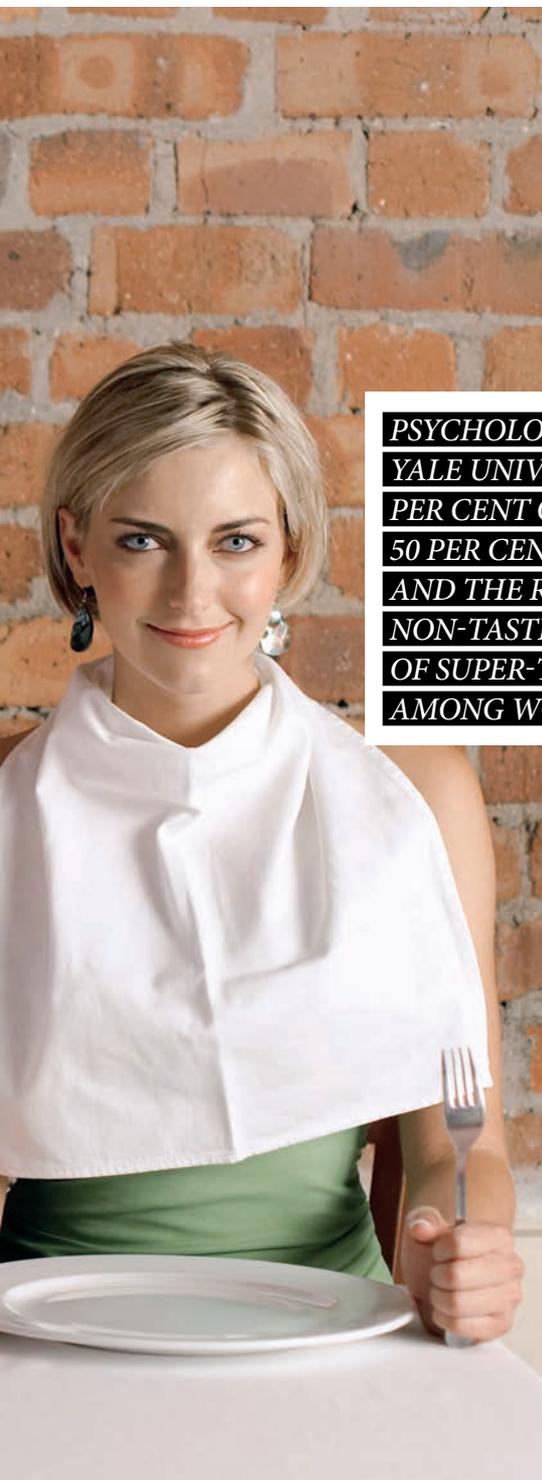
WANT TO IMPROVE YOUR PALATE, OR PERHAPS CONVINCING YOURSELF TO TRY SOMETHING NEW? THERE IS SOME SCIENCE BEHIND OUR INDIVIDUAL SENSE OF TASTE. WE SPOKE TO THE EXPERTS ON HOW TO MASTER IT.

Words: **Paula Hagiefremidis**

I've never been fond of seafood. From an early age it was something I abhorred, and a distaste that puzzled my seafood-loving family. Summer holidays by the coast would see me standing on the sideline observing the familiar ritual of family members picking sea urchins straight from the rocks. The shell would be expertly cracked open and doused with vinegar, the bright orange eggs inside scooped out with bread and devoured with insatiable appetites. The look of contentment on my parents' faces

was never enough to stir my curiosity and I've maintained a stubborn aversion to sea urchins ever since.

Taste is probably one of the most puzzling senses – a flavour can be repulsive to one person and delectable to the next. And while there are some generally accepted norms – things that everyone tends to like such as chocolate or chips – the cause of food aversions is the subject of much debate among industry professionals. Usually, they are a product of



bitter foods and whether we enjoy them or not depends on which version of taste-receptor genes we inherit. While taste receptors may be responsible for deciding our preferences, automatic cautionary responses of the body work simultaneously as a measure of warning against the potential danger of ingesting poisonous foods. Aversions

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to bitter foods have evolved since the time of our ancestors as a means of safeguarding our survival. With bitter foods generally considered poisonous, our tongues are specially designed to distinguish the difference between whether or not a food is safe to eat. With just one or two types of receptors to detect sweet, there are over two dozen receptors present to detect bitter foods. Our preference for sweet or fatty foods is thought to have stemmed from evolution – back to when we were hunters and gatherers and seeking high-calorie foods for survival. Although our circumstances have changed, these preferences remain.

Research into the biology of our tastes has led to a classification of our taste conditioning, ranging from super-tasters, regular tasters to non-tasters. Psychologist Linda Bartoshuk, of Yale University, claims that up to 25 per cent of people are super-tasters, 50 per cent are regular tasters and the remaining 25 per cent are non-tasters, with the population of super-tasters averaging higher among women than men. Bartoshuk's findings report that super-tasters were found to have more 'fungiform papillae' – technically tastebuds or taste receptors – on their tongue and, as a result, were subject to a greater number of signals being sent to the brain determining if something

both nature (the taste reception genes we are born with) and nurture (the things we learn to love or hate). The big questions, often, are a) Can we change our taste preferences? and b) Can we hone our sense of taste to get more out of our meals?

Genetics of taste

The taste-receptor genes we're born with often influence our likes and dislikes. How we perceive the taste of

What type of taster are you?

Super-tasters have a highly attuned sense of taste. They tend to find some foods particularly delicious, and others particularly revolting. Bitterness and astringency are particular turnoffs, so they might be fussy eaters, or simply steer clear of strong-tasting foods that tend to overwhelm their palate.

Regular tasters make up 50 per cent of the population, so there is a good chance you are one. Regular tasters tend to have their likes and dislikes, but not in the same extremes as super-tasters. "Super-tasters live in a 'neon' taste world, while others live in a 'pastel' world," Bartoshuk says.

Non-tasters are the least taste-attuned of the three groups. They tend to be unfussy eaters, but also seek out extremes of flavours to please their palate. A preference for things like super-spicy food and black coffee might be a sign of a non-taster.

were sweet or bitter. Their sensitivity can make foods seem three times stronger than the average taster, which means that super-tasters tend to be picky eaters with an aversion to strong or complex flavours. Foods such as rich, creamy sauces, coffee and alcohol tend to fall onto super-tasters' 'nope' list. If you're more of an all-rounder, chances are you're a regular taster or non-taster.

A healthy tongue sheds and regrows tastebuds constantly, but by middle age a smaller number regenerate and, once we hit our forties, they stop regenerating almost completely. With fewer tastebuds, flavours begin to taste blander. Bartoshuk researched the decrease in sensitivity with ageing women and found that only seven per cent of women 65 years and older were super-tasters compared to the expected 25 per cent in younger women.

Learned preferences

Although genetics may determine our taste sensitivity, flavour preferences can



be singled out early on and are often predisposed by the dietary habits of our mother while we are still in the womb. The amniotic fluid that surrounds the foetus while it grows can be flavoured by the mother's diet; and as they swallow hundreds of millilitres a day, by 21 weeks, an unborn child's taste and smell are already well developed. Even after birth – as certain flavours carry through into the mother's breast milk – the food exposure of mothers will determine a child's preferences. Tests conducted on pregnant women exposed to foods including carrots and aniseed found that babies taking in those flavours before birth responded favourably upon trying them compared to mothers who had not been exposed. Our preferences continue shaping for the next two years after birth. Research has shown that,

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up until the age of two, we'll eat pretty much anything. But around 24 months the 'picky eater phase' tends to set in, and we become neophobic – meaning we don't like new foods. So if we hadn't already been exposed to a particular flavour by that stage, chances are we're not going to like it. But, that's certainly not permanent. Julie Mennella, a biopsychologist studying the sense of taste in babies and toddlers, says that food tolerances in children may be governed by the mother's diet, but they can still learn to like a variety of foods. Parents often make the mistake of eliminating foods that a child rejects;

instead, if they continued persevering, they build a familiarity into that child's diet that will eventually override that initial rejection.

As a sensory experience, the tongue detects basic tastes, but our entire culinary experience is directed just as much by the nose. With hundreds of receptors to detect aromas that waft off foods, the flavour profile of what we eat is being processed by the brain and makes a complex flavour impression that lingers in our brain. It's a complete physical, neurochemical and memory-based experience that forms the basis of our likes and dislikes and the combination of five fundamental tastes – sweet, sour, salty, bitter or umami (savory) that comes through to us first.

LET'S TALK *taste*

Changing the food we enjoy is certainly possible. It just comes down to making an effort and being patient in expecting results. A combination of age, food exposure and personal will is a huge determinant in the evolution of our tastes. On the other end of the spectrum, industry professionals including sommeliers and chefs learn to enhance and mature their palate through regular exposure to their practice. Just like any muscle, exercise it enough and you'll be rewarded with surprising results.

While conditioning may form the base of our taste preferences, introducing new tastes broadens the depth of our palate and can alter the preferences of even the most discerning individuals. It simply comes down to how willing we are to open our worlds to a more adventurous eating experience...perhaps it's time for another attempt at those sea urchins.

Taste like...A CHEF

Culinary chef Louis Naepels of Melbourne's iconic Lamaro's Bodega attributes his appreciation for taste as the inherited experience growing up with his grandmother and mother's cooking. It's formed the foundation that his entire tasting palate rests on and the early exposure served to influence his decision to pursue a career in food. "I've been a chef for 15 years, more than half my life. I grew up eating home-cooked food that was made with love. Typical French flavours, almost peasant-like food." Though his interest in food may stem from influences at home, it took a while for his tastebuds to develop and the learning process as an esteemed chef continues

to be an ever-evolving work in progress. "I'm a classically trained chef and I've been fortunate to have that experience as my base for tasting and understanding flavour," Naepels says. "As a young chef you don't understand flavour and taste very well, you execute what you've been told to do, but climbing through the ranks of the



kitchen really matured my tastebuds." Although many of us use taste more for pleasure than work, you can still choose to expand your palate through exploration of unfamiliar flavours.

"Although I might like certain flavours, I expose myself to different cuisines – I really like south-east Asian, Japanese and Indian," Naepels says "It's not something I do at work, but it helps to broaden my palate." Constantly tasting as part of everyday routine has built a kind of flavour vocabulary, and he immediately notices a difference on the rare occasions he takes time off. "You can't just let go and think your sharpened taste will still be there – it dulls. Anyone that's into wine or creates perfumes, it's one of those things that has to be constantly exercised."

Taste like...A WINE PROFESSIONAL

Tom Hogan, sommelier, national wine judge and owner of wine bar Harry & Frankie in Melbourne, grew up in Adelaide, exposed to South Australia's acclaimed wine and food scene. But the transition from enthusiast to sommelier is not an easy one, even for the most determined connoisseur. A som's job is not simply to understand whether a wine tastes

good or bad, but to be able to describe the wine based on characteristics the lay drinker might not even be able to detect. Similar to Naepels, Hogan says he lacked the necessary 'bank' or vocabulary of flavours in the early stages of his profession. Having undertaken the prestigious Court of Masters Sommeliers as part of his education and as a trainee judge (where he was required to participate in eight wine shows one year), again his now advanced palate is largely due to exploration and constant exposure. "I'm a true believer that the majority of the population have the capabilities of being a good taster," he says. "It's about application; the thing that sets me aside is my recall, so if I've tasted something and then tasted it again, nine times out of 10 I can say whether or not I've had that wine before.

However, if I'm tasting 50 different shiraz, it's important to observe when your mind starts wandering, withdrawing from the process, taking some time and going back in it. I developed that focus myself through practice."

Taste is also unpredictable. What we experience from one day to the next will vary depending on a range of factors – how we're feeling, the mood we're in, what we've ingested that day, the experience waivers. "There are days where I can tell you I'm not tasting to the same standard as other days. You're not going to get it right all the time. The same bottle of wine will taste differently one day to the next. You evaluate it differently. You have to admit that you're fallible. You just hope you get it right way more than you don't get it right." ■

