

Bitter Taste



A bitter warning

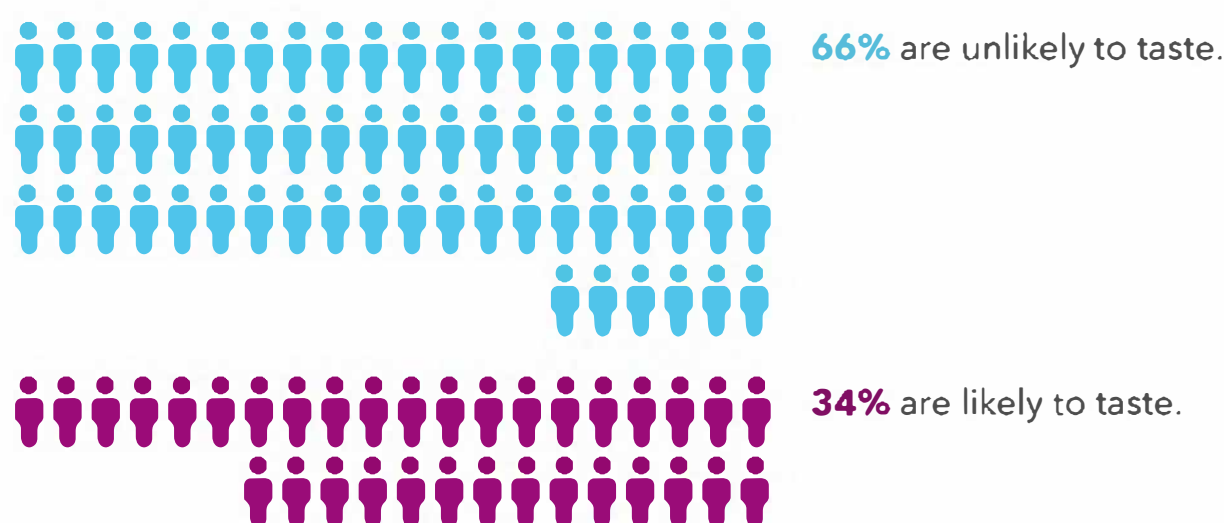
Scientists believe the bitter taste sense developed to help animals detect toxins or poisons in food. But not everyone can taste the same things.

Your Traits Result



Jamie, your genetics make you **unlikely to detect certain bitter tastes.**

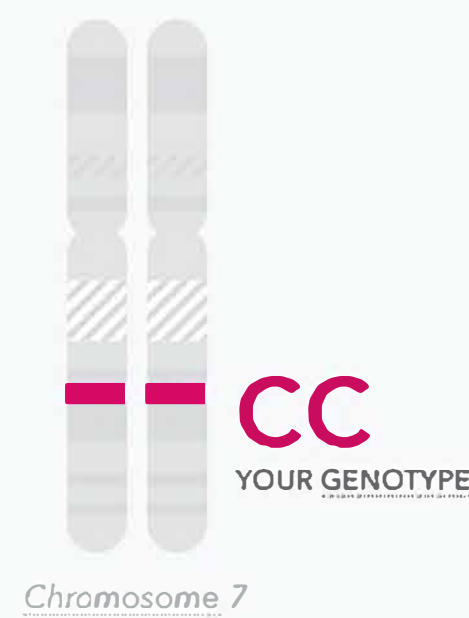
Of 23andMe research participants with genetics like yours:



→ Do raw broccoli or brussels sprouts taste bitter to you?

How did we calculate your result?

We looked at a place in your DNA (a genetic marker) that affects your chances of being able to detect a certain bitter chemical called "PTC." Some vegetables like raw broccoli and brussels sprouts, contain bitter chemicals similar to PTC. Your combination of variants at this marker is usually found in people who are unable to detect these bitter chemicals.

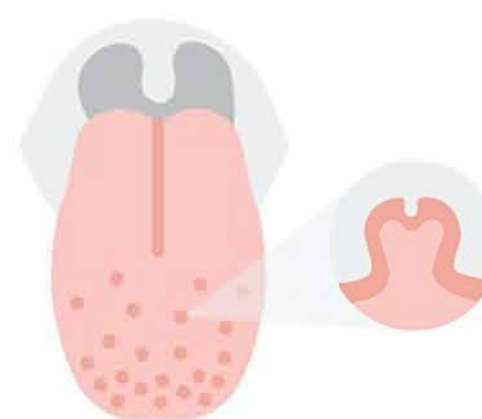


[See Scientific Details](#)

More about bitter taste

Biology of taste

Taste buds are covered with tiny molecular sensors, called "taste receptors," that specialize in detecting the five basic tastes: sweet, salty, sour, bitter, and umami (a savory, meat-like taste). The types of taste receptors you have determine what tastes you can, or cannot, detect in foods. Some vegetables, like broccoli and brussels sprouts, contain naturally bitter chemicals. Scientists think some people may be unable to detect these bitter chemicals based on what taste receptors they have.



Genetics of bitter taste detection

The TAS2R38 gene contains instructions for a protein, or taste receptor, that can detect the bitter chemical called "PTC." PTC isn't usually found in the human diet, but it is similar to chemicals present in vegetables like broccoli and brussels sprouts. People with the G variant have a taste receptor that can detect these PTC-like chemicals. This means people with the G variant may taste bitterness in these foods and avoid them all together.

Genetic result	What it means
GG	Likely able to detect certain bitter tastes
GC	Likely able to detect certain bitter tastes
CC	Likely unable to detect certain bitter tastes

Humans aren't the only ones with food preferences related to genetics

Giant pandas cannot detect umami (a savory, meat-like taste) because their umami taste receptors don't work properly. This means they can't taste meatiness, and don't show a preference for meat. Scientists believe this explains their strict bamboo diet, despite being closely related to other carnivores.



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