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Health Options

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Genetics determines how we taste

Have you ever wondered why people like different foods? Do foods taste the same to different people? If so, then why do some people dislike foods that you really like and vice versa? Does the tongue play role in whether you like or dislike grape-fruit or is preference determined by learned experience? The answers to these questions are not only interesting but also may play only interesting but also may play a role in our body weight and evolutionary survival.

Adam Drewnowski from the University of Michigan has found that some people are "supertasters" some are "regular tasters" and others are "non-tasters" based on their ability to taste specific bitter substances. Some people do not detect these substances at all, while others find them intensely bitter and offensive.

Linda Bartoshuk at Yale University found that about 25 percent of people are supertasters,50 percent are regular tasters and 25 percent are nontasters. This is based on people's ability to taste a bitter substance called n-6 propylthiouracfl (PROP for short). The ability to taste or not taste PROP appears to be determined by genetics. Apparently, if you have the genes that confer sensitivity to PROP, then you are a supertaster. If you have one these genes, you are a regular taster and if you have none, you are a non-taster.

The tongues of supertasters are physically different from nontasters. Bartoshuk found that supertasters. Bartoshuk found that supertasters have more taste buds on their tongue. Consequently, there are more taste buds to send bitter messages to the brain, as well as sweet messages.

Our age plays a role in the density of taste buds on our tongue. Children have the most taste buds which may explain why they are more sensitive and it sends bitter messages to the brain, as well as sweet messages.

Our age plays a role in the density of taste buds on our tongue. Children have the most taste buds, which may explain why children tend to be more "fincky" about what they eat. Bartoshuk documented the decrease in taste sensitivity with aging in women. Only about 7 percent of women 65 and older were supertasters as compared to the expected 25 percent in younger women.

Women tend to be supertasters or nontasters, while men tend to be regular tasters. Research shows correlations(not cause and effect) between the type of taster you are and your body weight.

Supertasters tend to be thin and nontasters tend to be heavier. Possibily because of the intesity of flavors supertasters tend to eat less foods. Nontasters, on the other hand, may eat more while searching for a fuller flavor.

In evolution, supertasters may have had some advantage since may toxins are bitter in taste. Interestingly, the sensitivity of women to bitterness commonly increases during the first trimester of pregnancy when the fetus is most vulnerable to damage by most any toxins. For example, in some women who typically love coffee a strong aversion to coffee's bitterness occurs as soon as they become pregnant.

But being a supertaster also may be detrimental in terms of long-term survival. Many of the chemicals in fruits and vegetables called phytochemicals are bitter in taste, but they have cancer protective properties. Some researchers have expressed concern that supertasters may tend to avoid potentially cancer-preventive foods like broccoli, cabbage and grapefruit, since they find the phytochemicals they contain to be excessively bitter.

Here are 3 ways to make even bitter vegetables taste better:

In general, the younger and fresher the vegetable-the sweeter the vegetable.

Cooking(not overcooking) usually helps reduce bitterness.

Adding a little salt can suppress some of the bitterness and adds a flavor most find pleasant.

Also, remember that taste preferences typically change with age, resulting in a new appreciation of foods that were disliked during youth.

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