

Smell

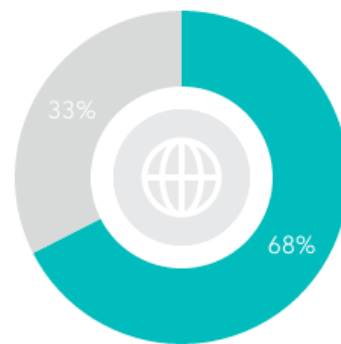
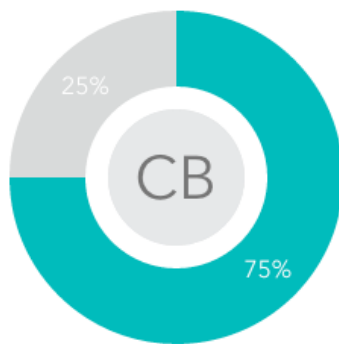
Does your nose tell you when it's asparagus season? DNA influences our ability to detect certain smells.

Asparagus Odor Detection

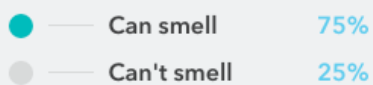
What You Can Do

Cordell, you are likely to be able to smell the asparagus metabolite in your pee.

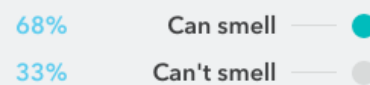
75% of customers who are genetically similar to you can smell the asparagus metabolite.



Your genetic likelihood



European ancestry customers



This prediction best applies to people of European descent. We analyzed your DNA at one genetic marker that studies have shown is associated with detecting the asparagus metabolite. Your prediction is based on data from 23andMe customers who consented to research and are genetically similar to you at this marker.

About Asparagus Odor Detection

Some people smell a unique odor in the urine of those who've just eaten asparagus, while others do not notice this odor at all.



Biology

Scientists think the funny smell in your urine after eating asparagus is likely a byproduct (a metabolite) of digesting the aptly named asparagusic acid, a molecule found only in asparagus. Whatever the culprit, your genes seem to influence your ability to smell it.



Asparagusic acid



History

Asparagus has been cultivated for at least 2,000 years. Written references to its unique effect on urine first appeared around the turn of the 18th century.



Other factors

There's more to this quirky story.



Ancestry



Sense of smell



Metabolite production



Do more with your Traits results.



Help us develop more trait reports by contributing to research.

Contribute



Compare your results to your family and friends.

Compare



Join the discussion with other 23andMe customers interested in Traits.

Discuss

 Patent Pending

Your Sense of Taste and Smell

Scientific Details

Methodology

About Your Results

References

We use two different methods to calculate your trait results.

Statistical Model

Most traits are influenced by many different factors, including genetics, lifestyle, and environment. Usually, a statistical model using many factors provides better predictions than looking at single factors by themselves. To develop our models, we first identify genetic markers associated with a trait using data from tens of thousands of 23andMe customers who have consented to research. Then, we use statistical methods to generate a "score" for that trait using your genotype at the relevant genetic markers as well as your age and sex. We predict your likelihood of having different versions of the trait based on the survey responses of 23andMe customers with similar scores. These predictions apply best to customers who are of the same ethnicity as the people whose data contributed to the model. The accuracy of these predictions varies from trait to trait.

[Read more about our statistical methodology](#)

Curated Model

For some traits, just a few genetic markers can strongly predict whether a person will have a particular version of the trait. For curated models, we first evaluate published scientific studies to identify genetic markers with well-established associations with the trait. Then, we look at genetic and survey data from tens of thousands of 23andMe customers who have consented to research. We estimate your likelihood of having different versions of the trait based on survey responses from customers who are genetically similar to you at those markers. These results apply best to customers who are of the same ethnicity as the people whose data contributed to the predictions.

About your Asparagus Odor Detection result

Your result for this trait was calculated using a **curated model**.

Variants Detected

1

View All Tested Markers

1

Marker Tested

Your Genotype*

Additional Information

rs4481887

Gene: Near
OR2M7

Marker:

rs4481887

A

Variant copy from
one of your
parents



G

Typical copy from
your other parent

> **Biological explanation**

> **Typical vs. variant DNA sequence(s)**

> **Percent of 23andMe customers with variant**

> **References [2, 15]**

*This test cannot distinguish which copy you received from which parent. This test also cannot determine whether multiple variants, if detected, were inherited from only one parent or from both parents. This may impact how these variants are passed down.

23andMe always reports genotypes based on the 'positive' strand of the human genome reference sequence (build 37). Other sources sometimes report genotypes using the opposite strand.

References

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