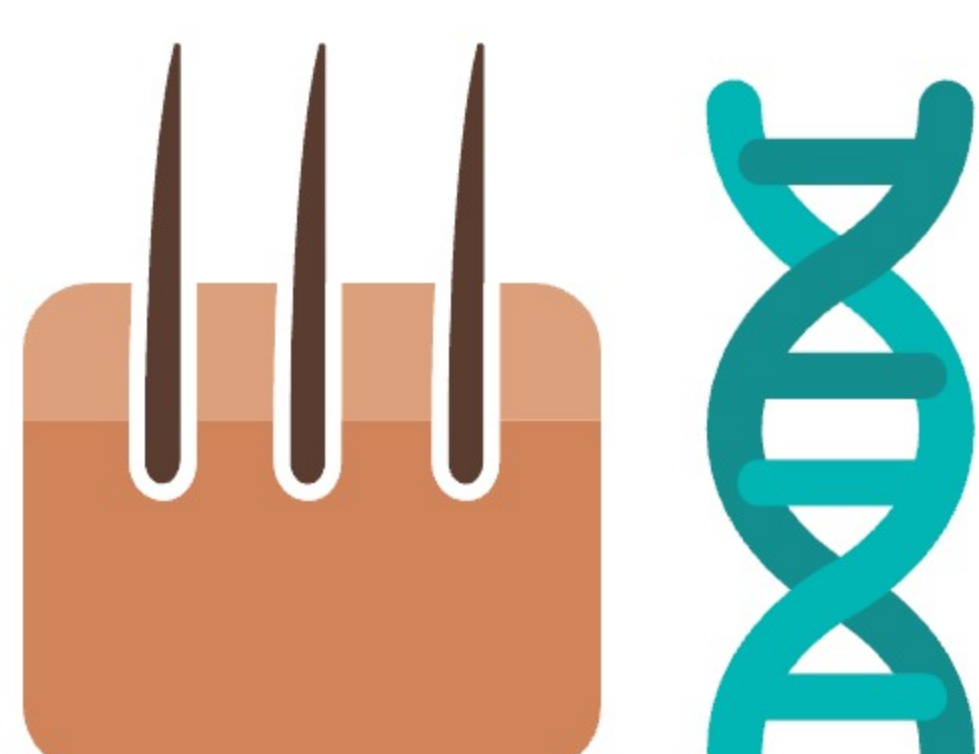


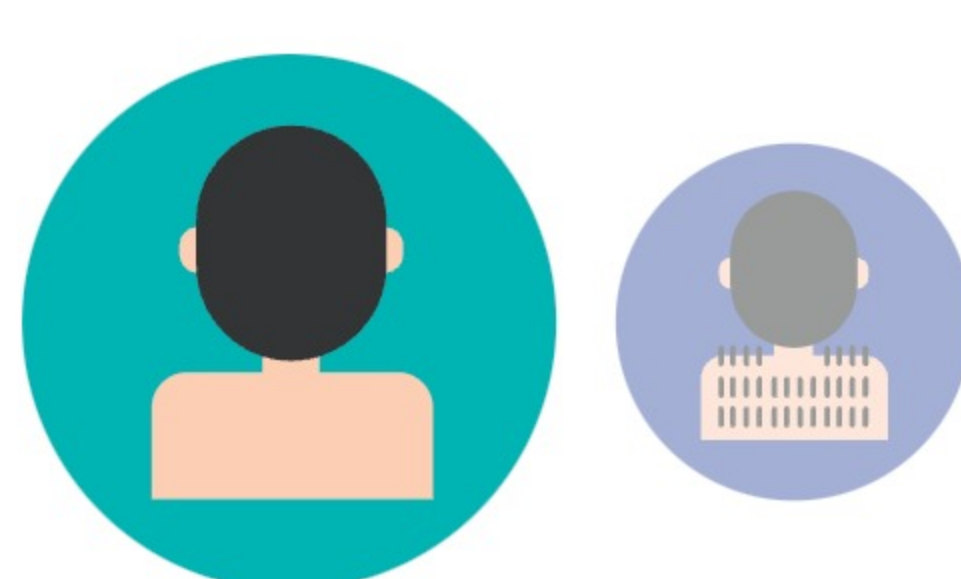
# Back Hair

Overview Scientific Details



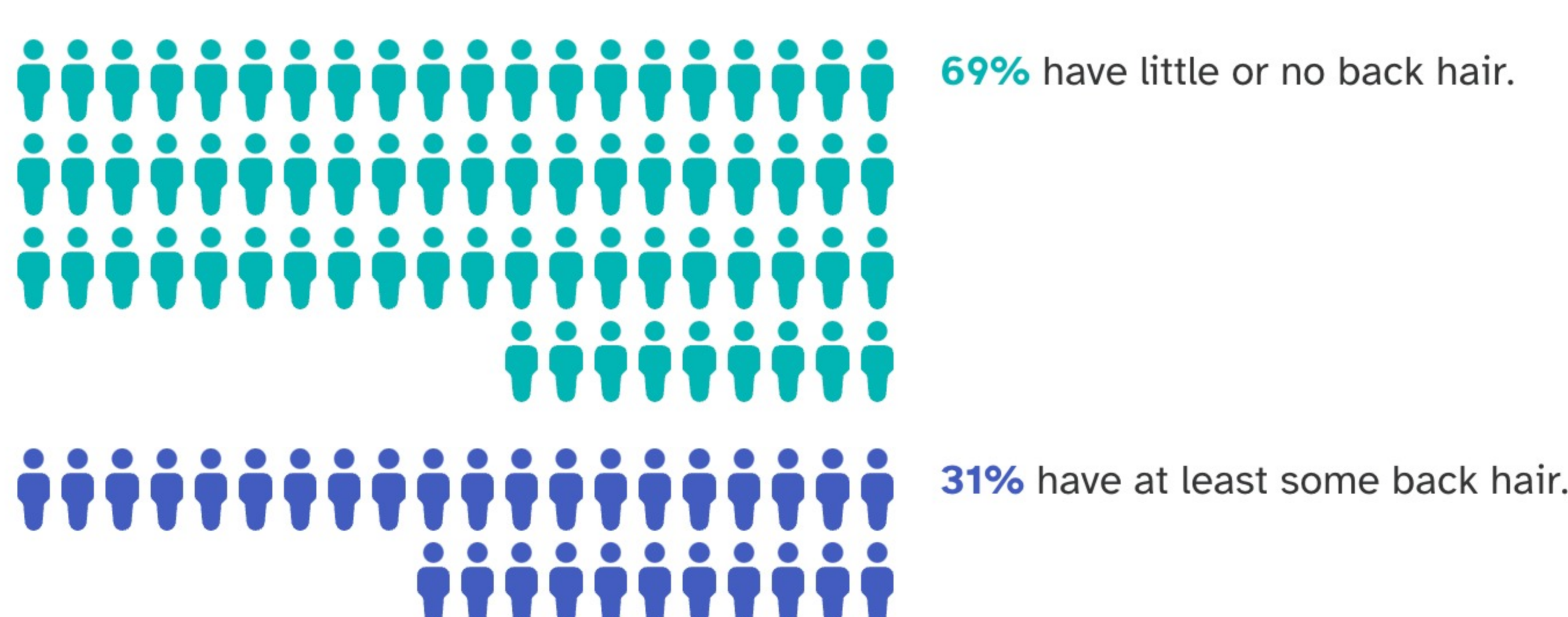
## Hair, hair everywhere

Our body is covered with about five million hair follicles. What types of hair they grow, and when and where they grow it, is influenced by your genetics.



Jamie, the combination of your genetics and other factors makes you **likely to have little or no upper back hair.**

Of 23andMe research participants with results like yours:

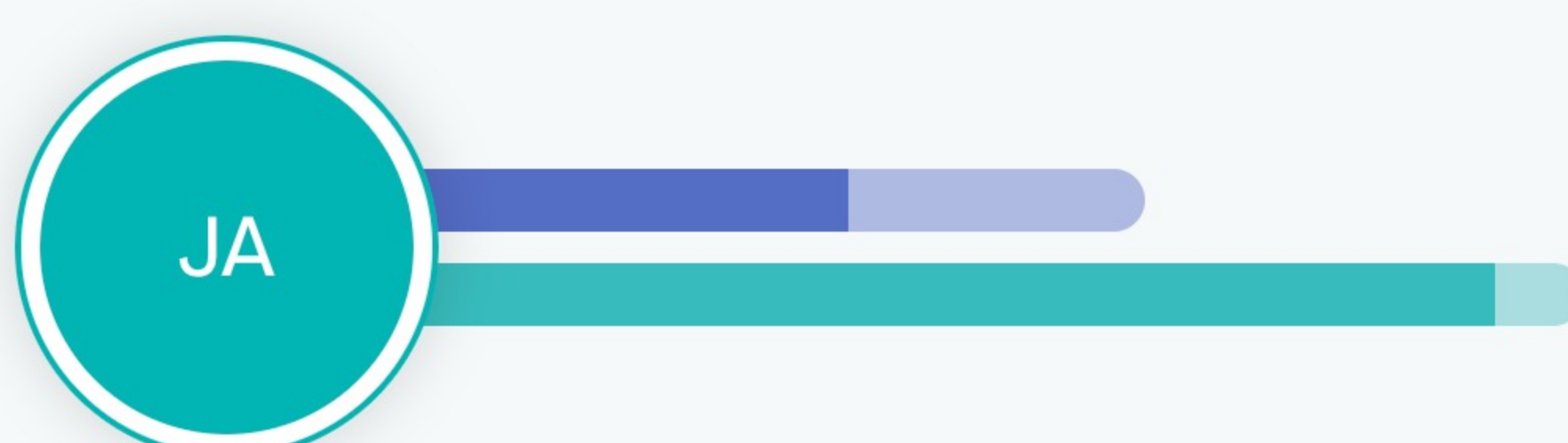


Do you have upper back hair?

## How did we calculate your result?

We added up the effect of your genetic variants at 17 places in your DNA (genetic markers) plus the effect of other factors, including your age.

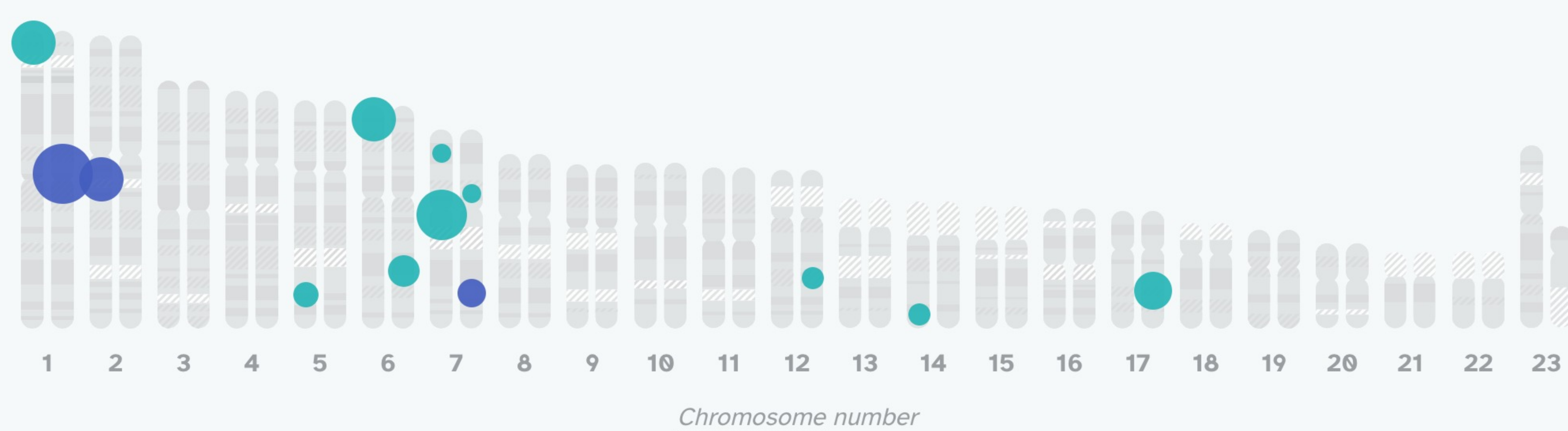
### Total effect of your genetics + other factors



YOUR GENETICS		OTHER FACTORS	
●	less back hair	●	
●	more back hair	●	

### Breakdown of your genetics

The bigger the circle, the stronger the effect your variants have on your overall chances.



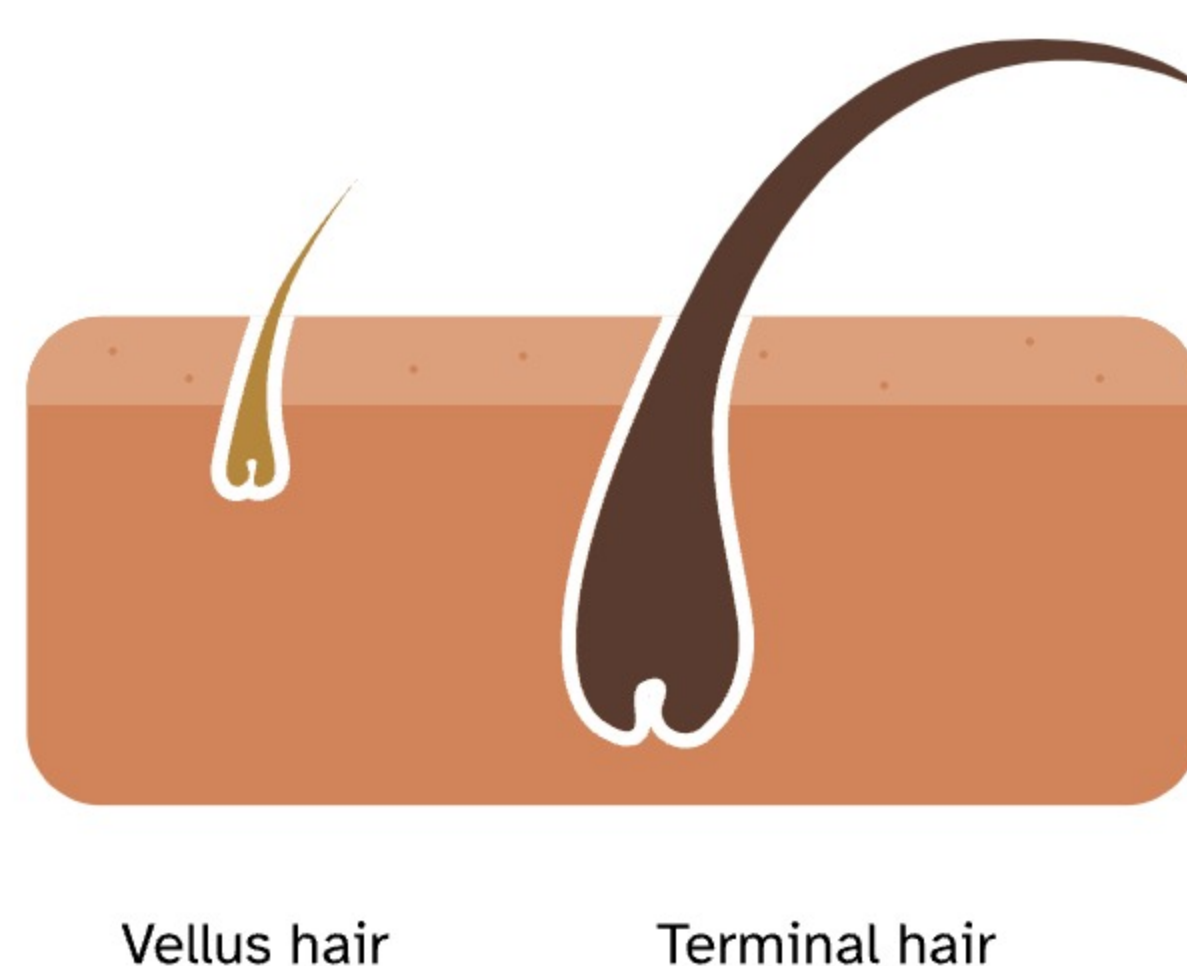
At 10 of the genetic markers we looked at you have variants that make you likely to have less back hair, and at 3 you have variants that make you likely to have more. At 4 of the markers that we looked at, you have variants with no effect either way (not shown).

See Scientific Details

## More about back hair

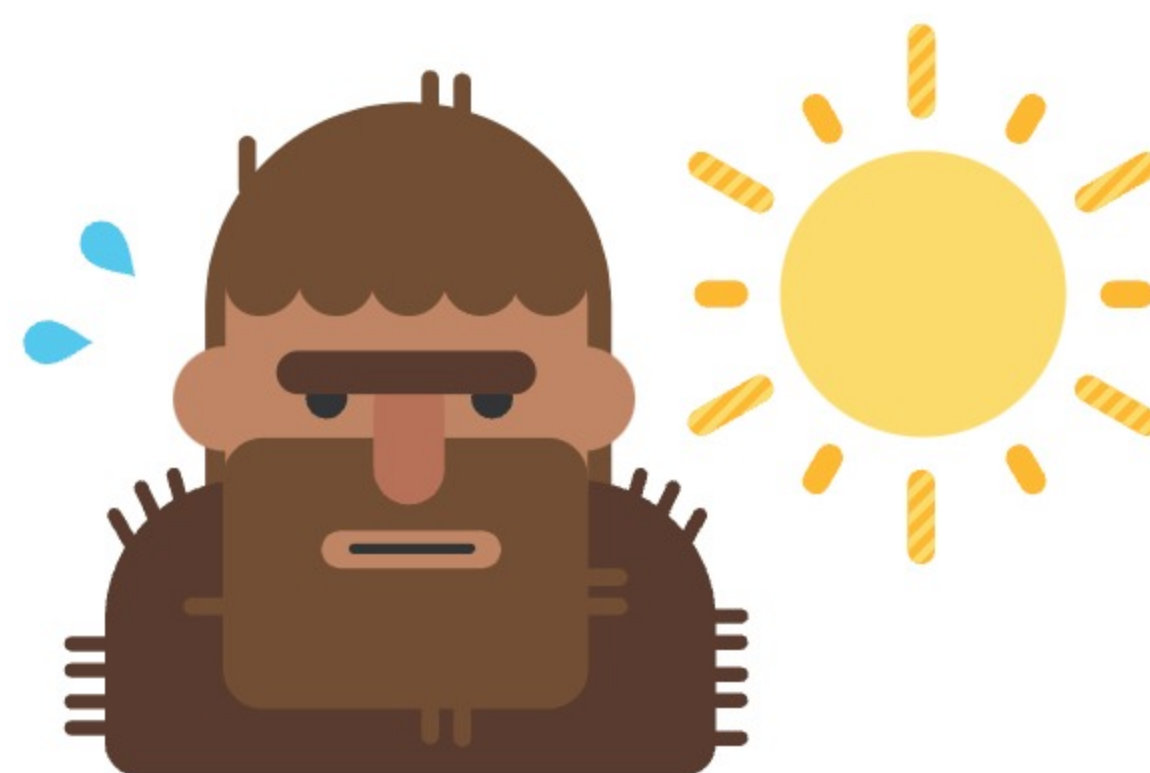
### The biology of hair follicles

We are born with a fixed number of hair follicles. As children, most follicles produce short, fine hairs called "vellus hairs." During adolescence, follicles in certain places (like the armpits and pubic region) begin producing longer, thicker, darker hair called "terminal hairs." As we continue to age, other hair follicles on the body (like the forearms, lower legs, face, back, and ears) make a similar transition from vellus to terminal hair. Where and when the follicle transition occurs is at least partly influenced by your genetics.



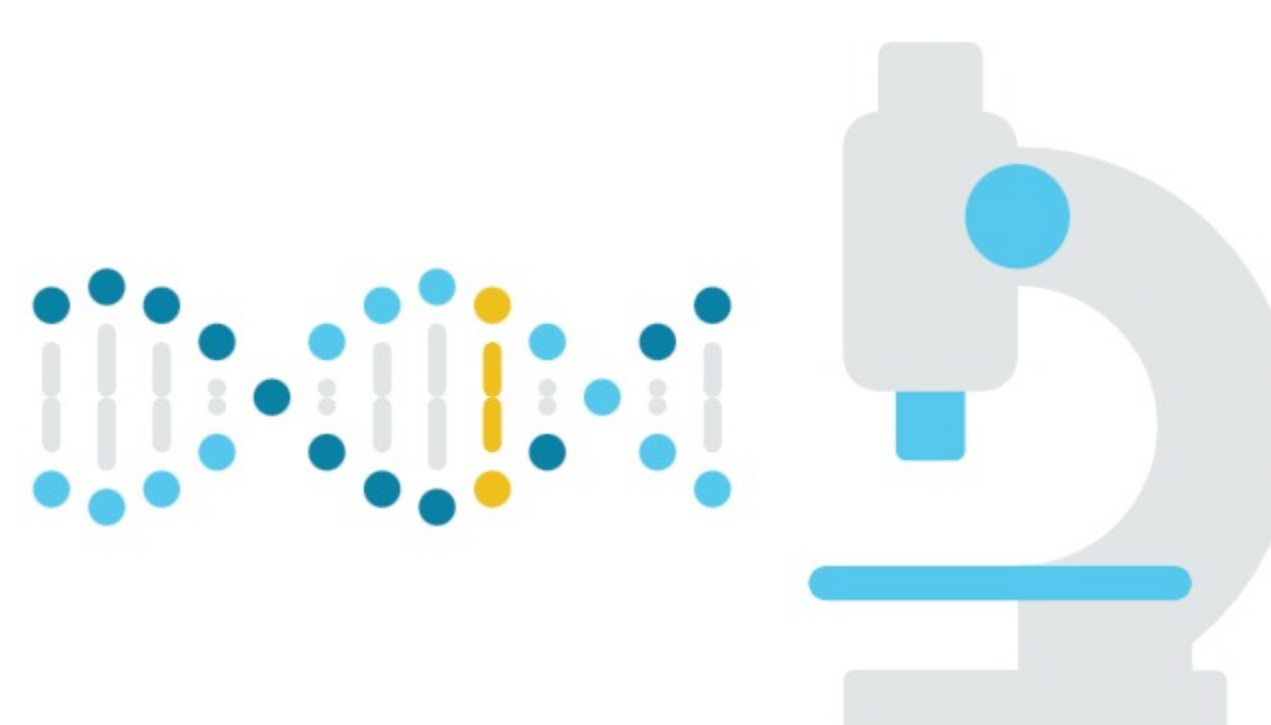
### Body hair and early human history

Hairlessness is the most striking difference between modern humans and our ancient ancestors. Some scientists believe that losing body hair helped control body temperature in hot climates. It is possible that less body hair aided in "persistence hunting" a tactic where teams of hunters chased their prey over long distances until the animal was exhausted. Less body hair meant better sweating and cooling, making humans uniquely successful in this hunting technique.



### Genetics

Scientists remain unsure about why we still have body hair at all. Researchers are on the hunt for genetic factors that determine the growth patterns of body hair. Research at 23andMe identified 17 genetic markers linked to body hair growth but there may be others that we still don't know about yet.



## Keep exploring your Traits results.

- Contribute**  
Join the research effort and contribute to new discoveries.
- Compare**  
Compare your results to your family and friends.
- Discuss**  
Join the discussion with other 23andMe customers interested in Traits.

Did you find this interesting? Yes No



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Get reward

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# Back Hair

Overview **Scientific Details**

We use one of 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 Back Hair result

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

### About the Back Hair model

Created based on customers of ethnicity: **European**

Number of customers used to create: **30,000**

Number of markers: **17**

Area Under Curve (AUC): **0.585**

Non-genetic factors: **Age**

Bin #	A lot of upper back hair	Little upper back hair
1	11.17%	88.83%
2	14.19%	85.81%
3	16.17%	83.83%
4	17.71%	82.29%
5	18.04%	81.96%
6	18.59%	81.41%
7	20.63%	79.37%
8	22.28%	77.72%
9	24.31%	75.69%
10	23.98%	76.02%
11	24.81%	75.19%
12	25.80%	74.20%
13	27.78%	72.22%
14	28.82%	71.18%
15	27.56%	72.44%
<b>JA</b> 16	<b>31.41%</b>	<b>68.59%</b>
17	30.64%	69.36%
18	32.95%	67.05%
19	34.87%	65.13%
20	41.31%	58.69%
<b>Overall European</b>	<b>24.65%</b>	<b>75.35%</b>

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- [Bramble DM et al. \(2004\). "Endurance running and the evolution of Homo." Nature. 432\(7015\):345-52. ^](#)
- [Carrier DR et al. \(1984\) "The Energetic Paradox of Human Running and Hominid Evolution." Current Anthropology. 25\(4\): 483-95. ^](#)
- [Paus R et al. \(1999\). "The biology of hair follicles." N Engl J Med. 341\(7\):491-7. ^](#)
- [Qi, J et al. \(2014\). "An Overview of Alopecias." Cold Spring Harb Perspect Med. 4\(3\). ^](#)
- [Rantala, MJ. \(1999\). "Human Nakedness: Adaptation against Ectoparasites?"Int. J. Parasitol. 29 \(12\):1987-89. ^](#)
- [Stenn KS et al. \(2001\). "Controls of hair follicle cycling." Physiol Rev. 81\(1\):449-494. ^](#)

## Change Log

Your report may occasionally be updated based on new information. This Change Log describes updates and revisions to this report.

Date	Change
<b>Dec. 15, 2017</b>	Back Hair report updated with revised content and design. Additionally, as part of regular report review and improvements in data analysis, some male customers may see an updated result.
<b>June 22, 2017</b>	Back Hair report separated from the Physical Characteristics report.
<b>Oct. 21, 2015</b>	Physical Characteristics report created.



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