#### **Ears**

Find out what your DNA predicts for your earlobe shape.

Earlobe Type What You Can Do

## Cordell, you are likely to have detached earlobes.

82% of customers who are genetically similar to you have detached earlobes.

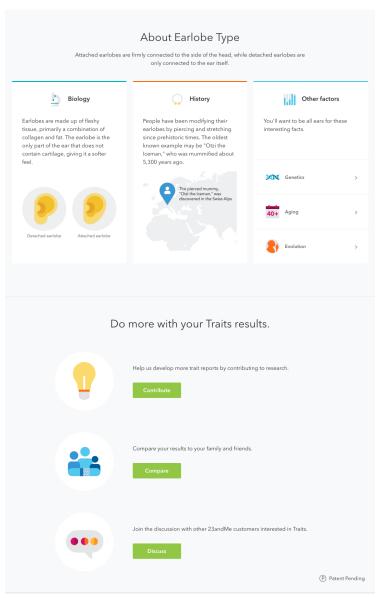








This result best applies to customers of European descent. We analyzed over 50,000 customers who consented to research in order to identify genetic markers that affect earlobe type. Our prediction is based on your results at 32 genetic markers as well as your age and sex.





Receive \$20 when you refer family and friends to 23andMe. Get started today.



Your Facial Features

## **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 Earlobe Type result

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

About the Earlobe Type model
Created based on
customers of ethnicity:
European
Number of customers
used to create: 50,000
Number of markers: 32
Area Under Curve (AUC):
0.641
Non-genetic factors:
Age, Sex

Bin #	Attached earlobes	Detached earlobes
1	49.84%	50.16%
2	39.72%	60.28%
3	37.32%	62.68%
4	35.27%	64.73%
5	32.97%	67.03%
6	30.03%	69.97%
7	28.96%	71.04%
8	27.82%	72.18%
9	25.70%	74.30%
10	25.66%	74.34%
11	23.65%	76.35%
12	23.04%	76.96%
13	20.93%	79.07%
14	19.78%	80.22%
15	18.16%	81.84%
16	16.80%	83.20%
17	15.87%	84.13%
18	13.78%	86.22%
19	12.35%	87.65%
20	9.69%	90.31%
Overall European	25.37%	74.63%

### References

- 1. Cosio R. (2000). The Eyebrow. William Morrow. 🗷
- 2. Daponte PA et al. (2004). "Cheek dimples in Greek children and adolescents." International Journal of Anthropology. 19(4):289-95. 🗷
- 3. Eiberg H et al. (2008). "Blue eye color in humans may be caused by a perfectly associated founder mutation in a regulatory element located within the HERC2 gene inhibiting OCA2 expression." Hum Genet. 123(2):177-87. 🗷
- 4. Eiberg, H., et al. (2008). Blue eye color in humans may be caused by a perfectly associated founder mutation in a regulatory element located within the HERC2 gene inhibiting OCA2 expression. Hum Genet 123, 177-187. 🗷
- 5. Möhrenschlager M et al. (2010). "Synophrys." Eur J Med Genet. 53(4):225-6. 🗷
- 6. Pampush JD. (2015). "Selection played a role in the evolution of the human chin." J Hum Evol. 82:127-36. 🗷
- 7. Pessa JE et al. (1998). "Double or bifid zygomaticus major muscle: anatomy, incidence, and clinical correlation." Clin Anat. 11(5):310-3. 🗷
- Preuschoft S. (2010). Laughter" and "Smile" in Barbary Macaques (Macaca sylvanus). Ethology. 91(3):220-36. 🗷
- 9. Rassman WR et al. (2013). "Phenotype of normal hairline maturation." Facial Plast Surg Clin North Am. 21(3):317-24. 🗷
- 10. Seidler H et al. (1992). "Some anthropological aspects of the prehistoric Tyrolean ice man." Science. 258(5081):455-7. 🗷
- 11. Senior C et al. (2012). "Developmental stability and leadership effectiveness." The Leadership Quarterly. 23(2):281-91. 🗷
- 12. Sturm RA and Frudakis TN. (2004). "Eye colour: portals into pigmentation genes and ancestry." Trends Genet. 20(8):327-32. 🗷
- 13. Sturm RA et al. (2008). "A single SNP in an evolutionary conserved region within intron 86 of the HERC2 gene determines human bluebrown eye color." Am J Hum Genet. 82(2):424-31. 🗷
- 14. Visser M et al. (2012). "HERC2 rs12913832 modulates human pigmentation by attenuating chromatin-loop formation between a longrange enhancer and the OCA2 promoter." Genome Res. 22(3):446-55. [2]

(P) Patent Pending



Receive \$20 when you refer family and friends to 23 and Me. Get started today.





