Flat Feet

POWERED BY 23andMe RESEARCH

play-447e13165, based on your genetics and other factors, you are less likely than average to have flat feet.

The average 23andMe research participant has a 26% chance of reporting that they have flat feet. Based on your genetics and other factors, specifically age and sex, you have a 22.5% chance of having flat feet.

What are flat feet?

Flat feet occur when the raised structure on the inside of the foot, called the medial arch, is especially low. This is very common in children when the medial arch is still developing. By adolescence it is more fully formed, and most cases of flat feet resolve on their own. But for some, the medial arch never fully develops or may collapse later in life. Studies have shown that injury, obesity, and certain health conditions may be associated with flat feet. Additionally, scientists at 23andMe discovered that genetic variation may make some people more predisposed than others. What a foot!

Factors associated with flat feet

Medial arches falling down

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The next step

If you have concerns about flat feet, talk to a healthcare professional about what next steps are right for you. Many cases are asymptomatic and don’t require treatment. But for those with mild pain, common treatments include physical therapy or wearing specialized footwear like inserts. Certain people with severe cases of flat feet may benefit from surgery.*

How we got your result

For this analysis, more than 460,000 23andMe research participants of European descent contributed their genetic data and survey responses on flat feet. From these data, we identified 14 genetic markers associated with flat feet. We used these genetic markers together with non-genetic factors, specifically age and sex, to create a statistical model that predicts the chances of having flat feet. The model was further re-calibrated to be more accurate when applied to people of European or Hispanic/Latino descent using data from more than 51,000 23andMe research participants. The statistical model for people of European descent has an AUC value of 0.52.

We used the statistical model to predict each person’s chances of having flat feet. The possible results predicted by the model fall between 13% and 46%. The age, sex, and ancestry are used for your result and are based on the information you provided in your account settings. For people of mixed ancestry or ancestries for which we do not yet have enough research participants, we determined this result based on data from people of European descent since that is the group for which we have the largest sample size. 26% of 23andMe research participants reported that they have flat feet.

Read more:


Change log:

• May 2019: Flat feet report created.

*Keep in mind that these results, powered by 23andMe research, are preliminary and meant for informational purposes only. This report does not provide medical advice. Consult with a healthcare professional before making any major lifestyle changes.
Flat Feet

The average 23andMe research participant has a 26% chance of reporting that they have flat feet. Based on your genetics and other factors, specifically age and sex, you have a 36.9% chance of having flat feet.

What are flat feet?

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Factors associated with flat feet

Obesity

Medial arches falling down

Common treatments for flat feet

Physical therapy

Specialized footwear

The next step

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We used this statistical model to predict each person’s chances of having flat feet. The possible results predicted by the model fell between 13% and 44%. The age, sex, and ancestry are used for your result are based on the information you provided in your account settings. For people of mixed ancestry or ancestries for which we do not yet have enough research participants, we determined the result based on data from people of European descent since that is the group for which we have the largest sample size. 26% of 23andMe research participants reported that they have flat feet.

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