

Ethnicity-October 2019

Reflects Your Ancient DNA Migration Paths

Your ethnicity is based on the DNA inherited from your parents. You receive 50 percent from each parent (in theory). This amount may not always be the same for each child.

Every child inherits 50 percent of their DNA from each parent, and it is a completely “randomly selected” 50 percent, unless you’re identical twins, but there is 50 percent of each parent’s DNA that is not inherited. It is possible to have an ancestor in your direct line several generations back with whom you share absolutely no DNA. We inherit chromosomes from each parent which are segments from grandparents’ chromosomes, which in turn are bits and pieces of even smaller segments from our great-grandparents. Therefore, you don’t share DNA with all your ancestors. Bits and pieces are lost in each generation. None of us have a genome big enough to fit DNA from all our ancestors. We have four grandparents, eight great-grandparents, 16 great-great grandparents, 32 great-great-great grandparents, 64 great-great-great-great grandparents, and 128 great-great-great-great-great grandparents.

You can see how many ancestors you have just a few generations back, and how fast they add up. The number doubles so quickly that the number of 10th great-grandparents can reach over 4000.

You get about 25 percent of your grandparents’ DNA and about 12.5 percent of your great-grandparents’ DNA, and so on. The testing results come in one big pile, with no distinction as to which piece of DNA came from which parent or ancestor.

The Autosomal DNA test shows your Ethnicity. This is based on the non-sex chromosomes, 22 of the 23 pairs of chromosomes we inherit from our parents.

The highest level of confidence claimed by the testing companies is only at the continental level and for people of Jewish heritage.

A map from one testing company may tell you something totally different from another company’s map. Bottom line, as for accuracy, you cannot think of test results as accurate as shooting an arrow into a bullseye! It’s not that way. Ethnicity tests are talking about being in a place about 500-2000 years ago. This will not look like what we think of the world today. The tests also refer to the population the company has tested. For instance, if they have only tested people from southern Italy and not northern Italy they cannot identify you as northern Italian. These tests are very complicated, using very advanced statistical algorithms. When Ancestry adjusted their ethnicity reports in 2018, they added 16,000 more people, boosting their ability to make their references better. They can refine Scandinavian much better, as well as Europe West. For us it seems there are improvements in some areas and backward steps in others.

This all has to do with the original group they are testing. The more companies you test with the more likely you can take all results and average them for a true idea of your ethnicity. Every company has different categories, though, making it hard to average. They don’t describe the world in the same way.