

DNA Testing, Is It Right for You?

By Phyllis Kramer, VP, Education, JewishGen.org



Note, this is a personal opinion...but I will explain how to easily evaluate your test results.

DNA testing is a commercial application of the science which generally promises great things. You may waste a lot of time on the results unless you have specific goals to accomplish. A good goal would be to see if you match a specific individual; another goal might be to join a surname or town group to see if your DNA matches others within the group. Doing the testing for “let’s see what turns up” is sometimes non-rewarding.

DNA testing for immediate families is easy, and determining ethnic origin is easy, in between is not yet ready for prime time. A few things to keep in mind:

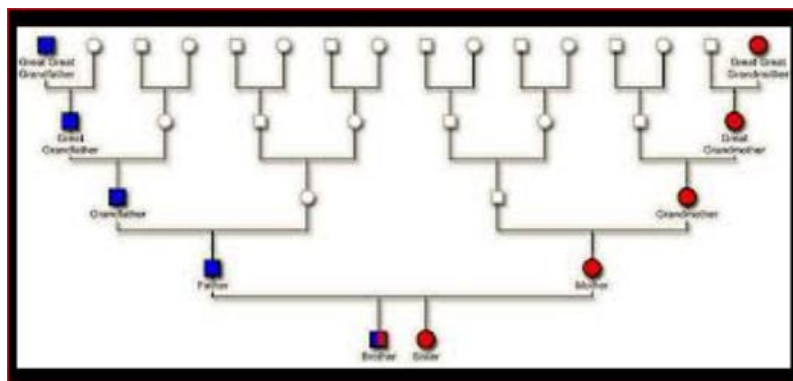
- Ethnicity results are (so far) only accurate to the continent or area level (e.g.: United Kingdom, Scandinavia, Eastern Europe, Ireland).
- The testing company **compares your results to their databases** (there is no central database), and thus determine to what degree you compare with, say, their 2000 native Icelanders.
- One reason for so many “cousins” is Endogamy. Endogamy occurs when families intermarry over the centuries; the same pool of DNA is used over multiple generations, usually for populations separated from the mainstream by religious law and/or discrimination. In these cases predicted “close” cousins may actually be just **distant cousins in multiple ways**.
- Suspected match relationships have to be verified with solid genealogical research.

Types of Testing

Basically there are three kinds of DNA testing: those tests that only trace the **male line (Y-DNA)**, those tests that only trace the **female line (mt-DNA or mitochondrial DNA)** and those tests that trace everyone (**Autosomal DNA**).

The most popular DNA test is the family finder, or **autosomal test**, which will test against everyone in your tree. The bad news is that **it is not particularly exacting**. Why? This DNA is only partially passed down. You receive 50% from each parent, who only receives 50% from each of their parents, and so on. Thus when someone shares .1% of their autosomal DNA with me, we can make an educated guess that we are closely related...and yes, it's my third cousin!

Gender based tests: for the male test, a male can only trace his father, his gfather, his ggfather etc. It is a very small part of his tree. The same limitations apply to the female test (diagram on right). Now you might ask, why is it they sent me 300 or 3000 "distant cousins"? Answer, distant "matches" will be folks you share 25 or 50 generations back, much further than our current genealogical capabilities can research.



Now for some **personal suggestions:**

By all means do the autosomal test. Ancestry has the largest testee database (10M), FTDNA the largest number of Jewish testees (1M) and 23andMe will provide some medical test results (6M) and MyHeritage has some good tools (2M).

- Once you take the test **send the results to GEDMATCH** so that your DNA can be compared to all the other testing company results.
- **Wait for the sales** as these companies are competitive.
- On Ancestry when you research another tree where the author has also tested, Ancestry will tell you if there is a DNA relationship.
- **Contacts past second or third cousins are unproductive**, and I ignore them, unless a surname or town matches mine.
- **Consider urging paternal and maternal cousins to take the test**, as then you can triangulate; that is, if a new cousin appears, you can figure out which of your two sides (paternal or maternal) his DNA matches.

And just one personal success story before I go. Laurel lives in Delray, she is 88 and my mother's first cousin. Her autosomal test found me as first cousin, but also three men named Smith. Smith? you might ask...??

With some digging and communication with the family genealogist in the Smith family, we determined that Laurel's grandfather indeed had 3 sons in Minsk, before he emigrated and married Laurel's grandmother in Chicago. Now she has 300 more half-cousins to email with. Go Laurel! Go DNA!

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Updated Nov 2018