

Starting out with DNA: Using DNA to Expand Your Family Tree

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Have you heard about DNA testing? Do you wonder how it could help you with your family history research? There are three different tests; which one should you take and which company should you use? In this presentation we will examine these questions and help you make your decisions.

Why do people take DNA tests?

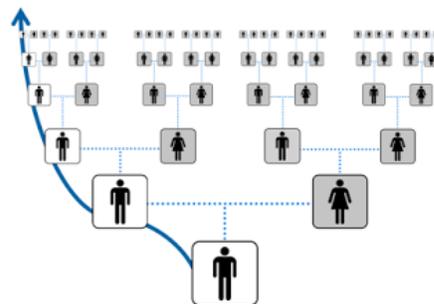
- Discover ethnicity also called genetic admixture
- Confirm previous research
- Find cousins
- Break down brick walls
- Answer specific questions
- Research Adoptions
- Learn medical history

Let's look at the three different types of tests

YDNA, Mitochondrial or mtDNA and Autosomal DNA

YDNA

YDNA is a paternal test. It tells you about your father's, father's, father's line. Because of this, it is frequently a surname test. Only males can take a YDNA test. Women will have to get a brother, father, paternal grandfather or uncle or paternal male cousin to take the test.



Who sells these tests? FamilyTree DNA

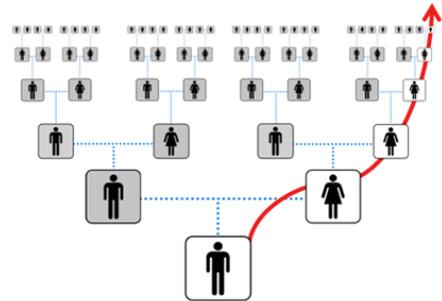
Which test should you take? 37, 67 or 111 marker test. Take 37 or 67 marker test

What do you get?

- List of your matches – consider only a distance of 3 or less
- Your paternal haplogroup can give you evidence of the origins of your paternal line
- Family surname groups

mtDNA

mtDNA or mitochondrial DNA is a maternal test. It tells you about your mother's, mother's, mother's line. Because of this, the surnames will usually change with each generation. Mothers pass their mitochondrial DNA on to both their sons and daughters but sons do not pass on their mother's mitochondrial DNA to their children. Anyone can take a mtDNA test.



Who sells these tests? FamilyTree DNA

Which test should you take? Full sequence test

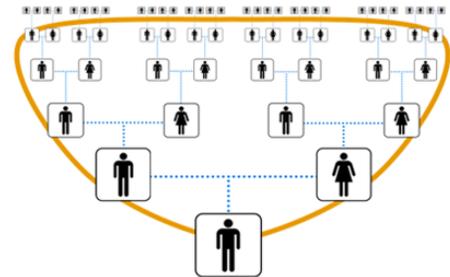
What do you get?

- List of your matches – only exact matches should be considered
- Your maternal haplogroup can give you evidence of the origins of your maternal line
- Can be used to validate or disprove siblingship

Is it useful? Sometimes, especially if you have a specific question to answer.

Autosomal DNA - atDNA also called a Family Finder test or Relative Finder

Autosomal DNA can potentially find information on all the people in your family tree back, reliably, about five or six generations. Autosomes are the 22 pairs of chromosomes we inherit from our parents. In addition there are two sex chromosomes. Females have two X-chromosomes and males have one X-chromosome and a Y-chromosome. You receive about 50% of your atDNA from each of your parents but it is not the same 50% as your siblings receive. You will get about 25% of your atDNA from each grandparent and 12.5% from each great-grandparent. Anyone can take an atDNA test.



Who sells these tests? Ancestry DNA
FamilyTree DNA
23 and Me

Who should you test? Test your oldest relatives first and then as many relatives as you can afford.

What do you get?

- Ethnicity estimates
- Living cousins
- Ancestry.com DNA – shakey leaf hints. Other companies you may get pedigree charts
- Chromosome browser with FamilyTree DNA and 23 and Me



Is it useful? YES

DNA Testing

Ancestry DNA – spit test

23 and Me – spit test

FamilyTree DNA – cheek swab

Each company will mail you a testing kit. You follow the directions and mail the test back in the provided box or bag. Wait.

Ancestry DNA – autosomal test. – <http://dna.ancestry.com>

Ancestry DNA you must have a subscription to use many of the features.

FamilyTree DNA – YDNA, mtDNA, atDNA tests <http://www.familytreedna.com>

23 and Me – autosomal test – <http://23andme.com>

Hint – each company has its own database. For best results, test with all three companies. To save money you can test with Ancestry DNA and then transfer your data to FamilyTree DNA.