

FREQUENTLY ASKED QUESTIONS ABOUT A Y-DNA PROJECT

1. Will my complete genetic profile be determined?

No, this test only looks at Y-DNA. This particular type of DNA is found on the Y chromosome which is only found in males and it is passed from father to son. Y-DNA, which is used for genealogical testing, is found on areas of the Y chromosome called “junk DNA.” “Junk DNA” carries no information regarding a person’s health, traits, and does not contain markers that could possibly identify any specific inherited condition. This type of DNA is slow to mutate, so it is excellent to determine ancestries generations deep. This helps surname studies place a particular lineage correctly within a context of a complete genetic family.

2. Can I be identified by Y-DNA?

No, Y-DNA looks at two aspects: haplogroup and haplotype. The haplogroup is the larger context within which the Y-DNA falls. For example, twenty two of the twenty five Brewertons tested thus far fall within the R1b1a2 haplogroup, the most common haplogroup.

Your haplotype is more specific – this is determined by your own markers. Your haplotype is mirrored by your close paternal relatives, but can go back many generations.

3. Will my identity be protected?

Most definitely; I am only identifying persons by anonymous groups such as Yorkshire, Oxford, Everton etc. The only other information will be earliest ancestor and the place of that ancestor’s birth, if known.

4. Why do you want my Y-DNA?

It is my goal in the initial round to capture two samples from each main Brewerton family tree to validate the results. I would then like to have at least one sample from each small group to see if they do stand alone or match another tree. I have already shown that the tree which started in Newcastle is from the Oxford tree.

5. Are there any other reasons for collecting as many samples as possible?

Yes, the greater number of participants adds validity to the study. A wide net that is spread over descendants across the world will also lend credence to this study. We would like to have representatives from the UK, Canada, the US, Australia, New Zealand and any other country where Brewertons live.

6. If I participate, can my brother, father, son, and/or Brewerton first cousin also participate?

Your Y-DNA and the Y-DNA of your close relatives should produce identical matches – so it is not necessary to test males in the surname line that are at a close relationship with you. This includes anyone at the second cousin level or closer. While differences can occur between close relatives, the greater likelihood of having identical results will not provide any new information to your family or to the study. In the event of unusual results, we may test second cousins in the same lineage.

7. Can my sisters participate?

No, women carry two X chromosomes and do not have a Y chromosome. Men carry one X chromosome and one Y chromosome. This type of DNA study only looks at Y-DNA. Only men can supply Y-DNA.

8. Will my sexual preference be identified or measured via my Y-DNA test? No. Sexual preference is irrelevant. We know of no DNA marker for sexual preference and Y-DNA carries no measured trait information. Your sexual preference is your business and not ours.

9. Will health issues be identified or measured via my Y-DNA test?

No. Health related data is found on the 22 autosomes and the X chromosome, but not on the Y chromosome. So nothing related to health is sampled, measured, or recorded.

10. Can mental illness or other psychological issue be ascertained via my Y-DNA test? No.

As with health data, any psychological issue related to genetics is transmitted via chromosomes 1-22 and the X chromosome – not on the Y chromosome.

11. How much will this cost me?

At the moment it is \$149.00 if ordered via a project but there is often a sale around Christmas.

12. Who else is participating?

Without revealing specific names, I currently have twenty five participants. Five represent the Oxford family, two from the Bethnal Green family and we have 6 different DNA results from different families which is why it is so important to gather more results. Participants currently hail from England (10), Canada (1), South Africa (1), Australia (1), and New Zealand (1). We have 11 results of men with a different surname who connect to the Brewerton name via DNA.

The study represents a cross section of demographics. The ages range from 18 to 87. The participants were selected in the following manner: prior knowledge of the individual, Facebook friendships, via email connections, and through postal correspondence.

13. Will I receive my results?

Yes. As soon as your results are returned, a copy of the results will be emailed to you from Family Tree DNA. Testing is a long process and could take as long as 12 weeks after the lab receives your sample. You will also receive a copy of the final study and periodic updates on the study.

14. What kind of sample will I need to provide?

The kit contains 2 swabs. These must be rubbed against the inside of your cheek. There should be a gap of a couple of hours between doing the first swab and the second. Full instructions come with the kit

15. What company provides the tests?

I use www.familytreedna.com. I ask participants to do a Y-37 test. Anything smaller does not give enough results. Some participants have upgraded to Y-67. For the most part, 37 markers and above provide enough data to determine that an ancestral connection exists. Thirty-seven markers are often considered the current minimal standard.

16. What kind of results do you get?

Y-DNA does not look at the chemical make-up of the DNA, but rather how many times a segment of DNA code is repeated on each marker. Therefore, the results will be returned with a series of numbers for the number of repeats.

17. You mentioned mutations. Is this something I should be concerned about? Absolutely not! Everyone's DNA naturally mutates from time to time. In most cases this poses no harm or threat to the individual. Historically, mutations introduced new eye colours, blood types, and other aspects of the human race that make us somewhat different. Y-DNA STR mutations occur on "junk DNA" that carries no building blocks for the human species or for us as individuals.

With Y-DNA, a mutation does not affect a person's health. The mutation will manifest itself with an increased or reduced number of repeats found on a particular marker. The markers have the same chemical makeup for every man – only the number of repeats might vary. For example, DYS388 has the chemical code of ATT. This particular marker shows between 10 and 16 repeats of the code. Typically, most Y-DNA markers mutate about every 500 years. Some mutate more rapidly (i.e., every five generations).

To illustrate how a mutation occurs, Family Tree DNA (FTDNA) in "Understanding Matches" equates the copying of genetic data to that of a photocopier machine. "You can have a copy machine doing 1,000 copies without a problem, and then, the 1,001 copy may have an 'o' that looks more like an 'e.' And when we use this copy to make additional ones, all the new ones will now have an 'e' instead of an 'o.'"

18. What if I or my father (or other ancestor) was adopted?

We would want to know this prior to participation. If the adoption was generations ago and there are numerous descendants with the name Brewerton from the adoptee, we may still want a participant to identify the Y-DNA of this lineage for future reference.

19. What if my great-great grandfather was illegitimate and he took his mother's surname which was Brewerton? The same principles apply as above. We would want to know this information prior to participation and then depending on the number of Brewertons descended from this individual, I may or may not desire to test someone from this line.

20. What if I find out that my markers don't match others in the Brewerton family that I thought I belonged to? With any genetic test, you may find that you don't match others in a family. With a Y-DNA test, this is less traumatic than other types of DNA testing. A mismatch may only mean that an illegitimate birth, adoption, or other non-paternal event occurred in the lineage in the past – it may even have occurred centuries in the past. This may also indicate that you descend from an entirely unrelated line that has the same surname but different origins. It does not indicate that you are not related to your family and it does not mean you are not a Brewerton; it only confirms you are a Brewerton with a different Y-DNA haplotype/haplogroup.

21. What's in it for me?

The only thing we can offer is knowledge and the satisfaction that you contributed to a greater knowledge about your/our family. This is especially helpful if your generation is the final generation of Brewerton males in your line.

22. If I decide to participate can I later change my mind?

While it would be impossible for me to prevent you from changing your mind, I would prefer that you would make that decision prior to agreeing to participate or before a Y-DNA kit is sent to you.

23. Who is conducting this study and what are her qualifications?

Jeanie Atkins nee Brewerton started a Brewerton One-name study some years ago. She started the Brewerton DNA project in September 2011. Her only qualifications in this field are her passion for family history and her determination to work hard to carry out the DNA project. She comes from a small tree which originated in Cheshire/Wales.

The one name study is at www.onenamedstudy.tribalpages.com If you wish to contact me you can use the contact admin button.

I do hope that you will join in the project or encourage your family relatives to do so.

Jeanie Atkins.