

Genetic Testing Options

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Popular genetic testing services (~\$99) include www.ancestry.com/dna/ (preferred), or www.23andMe.com. (The standard services are adequate for our needs; extra options, for a higher fee, may not help for our genetic analysis.) After enrolling online with one of these testing services, paying the fee and obtaining your password access, you download the test-requisition form, and a saliva collection kit is sent to you, to send with saliva & requisition back to the lab (~6-8 week turnaround for results). It produces a unique genetic database computer ZIP file for you, to download to your computer for safe-keeping after notification that your file is ready.

NOTE: These tests only look for common published SNPs (genetic variations) (~640,000 SNPs in the 2017 version of 23andme), rather than the entire genome which would be much more expensive and of little additional benefit.) Your genetic data file (a huge list of genetic codes in a ZIP file) will then need to be uploaded to another website for health-related genetic interpretation. There are several of these genetic interpretation website choices with different features, which I can guide you on; you will probably need only one of these:

(1) StrateGene (<https://www.drbenlynch.com/product/strategene/>) is a Strategic Genetic Analysis tool designed by Dr Ben Lynch. It shows potential issues by overlaying your SNPs onto its Pathway Planners covering the important biochemical pathways for folate, methionine, transsulfuration, biopterin, and histamine. Each pathway shows your SNPs with description and details, such as potential associated symptoms and conditions, and the influence of nutrition & lifestyle factors. The "Super Seven" Genes are given special emphasis. There are "bonus SNPs" which the research team included for added value (including **ApoE**). There are overview **tables of known SNPs** with gene, rsid, variant name, risk allele, and genotype; "GSTT1 deletion", if detected; plus the predicted **NAT2** acetylator phenotype.

(2) GeneticGenie.org will provide a Methylation and/or a Detoxification genetic profile that you can download, after you upload your Ancestry.com or 23andMe data file there. This provides your status of the most important genes for these 2 areas, but no information about what to do about them. The service is free, but they request a small charitable donation to pay for their costs.

NOTE: SNPs reported by www.AncestryDNA.com are different from those available from the latest version of www.23andMe.com. www.drbenlynch.com shows which SNPs with RSID numbers it can analyze for each option:

- AncestryDNA V2 (data after May 2016 only), &
- 23andMe (data from before vs after Aug 2017).

Key differences:

- You get **MAOA, MAOB, and DAO** with Ancestry V2, but not with 23andMe. (These are StrateGene "Super Seven" Genes!)
- You get a total of 2 more RSID#'s analyzed with Ancestry V2 than with 23andMe.
- Ancestry no longer offers separate mtDNA or Y-DNA tests, but 23andMe does (for tracing a single family line very far back).
- Connecting results to a family tree requires a paid subscription to Ancestry. 23andMe requires no subscription, but genealogy options are limited (unless you transfer raw data to another website, which could require a subscription).