

Nutrigenetic Testing Lab Companies, Software and Apps

Lab: Cell Science Systems

Website: cellsciencesystems.com

Panels offered:

- Basic Methyl Detox Profile (Wholesale cost- \$149)
 - o MTHFR
 - o MTR
 - o COMT
- Advanced Methyl Detox Profile (Wholesale cost- \$249)
 - o MTHFR C677T and A1298C
 - o MTR C3518T and A2756G
 - o MTRR A66G
 - o COMT G472A and G304A
 - o AHCY C112T, G367A and g.G32878481C

Ala carte testing available - \$65 each

Collection: Buccal swab or blood draw

Lab: <u>Doctors Data</u> Website: doctorsdata.com Panels offered: DNA Methylation Pathway Profile (Wholesale cost- \$425) SNPs included: 30 Collection: Whole blood

Lab: Genomic Solutions Now (GSN)

Website: genomicsolutionsnow.com

Panels offered:

- Ultimate Health and Wellness (Wholesale cost- \$1240)
- Immune Health (Wholesale cost- \$540)
- Sports and Exercise Performance (Wholesale cost- \$520)
- Detox Complete (Wholesale cost- \$540)
- Nutrient Utilization (Wholesale cost- \$405)
- Emotional Health (Wholesale cost- \$540)
- Complete Health (Wholesale cost- \$675)
- Detox (Wholesale cost- \$405)
- CardioMetabolic Health (Wholesale cost- \$720)
- Weight Management Plus (Wholesale cost- \$675)

Collection: Buccal swab

Lab: GenoMind

Website: genomind.com

Panels offered: Genecept Assay

SNPs included: 18

Collection: Buccal swab

- * Physician authorization required
- * Related to psychiatric conditions
- **Cost** Billed to insurance OR cash price is \$2900

Lab: Genova Diagnostics

Website: gdx.net

Panels Offered:

- CardioGenomic Plus Profile (12 SNPs) Wholesale cost- \$498
- Detoxigenomic (26 SNPs) Wholesale cost- \$569
- EstroGenomic Profile (14 SNPs) Wholesale cost- \$712
- ImmunoGenomic Profile (6 SNPs) Wholesale cost- \$285
- NeuroGenomic Profile (5 SNPs) Wholesale cost- \$428

Collection: Buccal Swab

Lab: Interleukin Genetics

Website: http://ilgenetics.com

Panels offered:

- PerioPredict Test- (Dentist authorization required) \$200
- Weight Management Test- \$169
- Nutritional Needs Genetic Test- \$169
- Heart Health Test- (MD or DO authorization required) \$169
- Bone Health Test- (MD DO authorization required) \$169

Collection: Buccal swab

Lab: Kimball Genetics

Website: http://www.kimballgenetics.com

Panels offered:

- Celiac HLA-DQA/DQB Genotyping
 - o DQ2 (DQA1*0501, DQA1*0505 and DQB1*0201/*0202)
 - DQ8 (DQB1*0302)
- Narcolepsy DNA Test
- Apo E Genotyping: Cardio Risk
- Factor V Leiden DNA Test
- Prothrombin (Factor II) DNA Test
 - o Prothrombin G20210A
- Factor V R2 DNA Test
- Combined Factor V Leiden/Prothrombin (Factor II) DNA Test
- Factor V Leiden Reflex to Factor V R2
- MTHFR DNA Test
 - o C677T and A1298C
- Hemochromatosis DNA Test

Collection: Whole blood or buccal swab

Cost: Billable to insurance. Costs may vary.

Lab: Myriad Genetics

Website: https://www.myriad.com

Panels offered:

- BRACAnalysis[®] (Blood draw or oral rinse)
- COLARIS[®] (Blood draw or oral rinse)
- COLARIS AP[®] (Blood draw or oral Rinse)
- MELARIS[®]
- Myriad myPath[™] Melanoma Coming Soon
- Myriad myPlan[™] Lung Cancer
- Myriad myRisk[®] Hereditary Cancer (Blood draw or buccal swab)
- Prolaris[®]
- PANEXIA

Collection: Whole blood, Oral rinse or Buccal swab

Cost: Billable to insurance. Costs may vary.

Lab: NeuroScience (Pharmasan Lab)

Website: neurorelief.com

Panels offered:

- Oxidative Stress/Inflammation (Wholesale cost \$99)
 - o SOD1 (2 SNPs)
 - o SOD2
 - o SOD3
 - o GPx1
 - o CAT
- Vitamin D (Wholesale cost \$89)
 - o **CYP27B1**
 - o GC (2 SNPs)
 - o VDR
- Neurotransmitter Degradation/Methylation Cycle (Wholesale cost \$75)
 - MTHFR (C677T & A1298C)
 - o COMT
- Celiac Disease (Wholesale cost \$75)
 - o HLA-DQ2.5

- o HLA-DQ8
- Detoxification (Wholesale cost \$83)
 - o GSTM1
 - o GSTP1
- Multiple Drug Resistance (Wholesale cost \$49)
 - MDR1(ABCB1)
- Genetics Multi Option (Cost varies)

Collection: Saliva disc

Lab: NutriGenomiX

Website: nutrigenomix.com

Panels offered:

- 7 Genes Panels (wholesale cost- \$199 use health2016 promo code)
 - o GST-T1
 - o MTHFR
 - o TCF7L2
 - o NOS3
 - o ApoA2
 - o ACE
 - o CyP1A2
- 45 Genes Panel (wholesale cost- \$ 298 use health2016 promocode)
 - Includes the original 7-genes plus the 6 HLA markers for gluten intolerance along with 32 additional genetic markers.

Collection: Buccal swab

Lab: Pathway Genomics

Website: https://www.pathway.com/

Panels offered:

- General Health and Wellness Tests
 - o SkinFit™
 - PathwayFit[®]
 - Healthy Weight DNA Insight[®]
 - Healthy Woman DNA Insight[®]

- Cardiac DNA Insight[®]
- Cardiac Healthy Weight DNA Insight[®]
- Pharmacogenomics Tests
 - Mental Health DNA Insight[®]
 - o Pain Medication DNA Insight®
 - Cardiac DNA Insight[®]
- Liquid Biopsy Tests
 - CancerIntercept[™] Detect
 - o CancerIntercept[™] Monitor
- Hereditary Cancer Tests
 - o BRCATrue®
 - BreastTrue[®] High Risk Panel
 - BRCATrue[®] Ashkenazi Jewish (3-Site)
 - BRCATrue[®] Hispanic (8-Site)
 - ColoTrue[®]
 - o LynchSyndromeTrue™
- Carrier Screening
 - o Carrier Status DNA Insight[®]

Collection: Buccal swab

Cost: Billable to insurance. Costs may vary.

Lab: Prometheus Laboratories

Website: http://www.prometheuslab.com

Panels offered: GI Diagnostics

- Anser[®] IFX & Anser[®] ADA (list price \$2,500)
- IBD sgi Diagnostic[®] (list price \$690)
- Crohn's Prognostic (list price \$750)
- Celiac (list price \$290 serology OR \$650 genetics)
- TPMT (Thiopurine) Testing (list price \$395 genetics \$395 or \$220 enzymes)
- Thiopurine Metabolites, including monitoring (list price \$270)
- FIBRO*Spect*[®] II (list price \$350)

Collection: Whole blood

Cost: Billable to insurance. Costs may vary.

Lab: <u>Pure Encapsulations</u>

Website: pureencapsulations.com

Panels offered: PureGenomics

SNPs included:

- MTHFR (C677T & A1298C)
- MTR
- MTRR
- CBS
- COMT
- TCN2
- FUT2

Collection: Buccal swab

Cost: \$199 (cost of 23andme kit)

* Patient must order kit from 23andme.com and then PureGenomics interpretation is free.

Lab: Nordic Laboratories DNAlysis Biotechnology

Website: http://dnalysis.co.za/

Panels Offered:

- DNA Diet (13 SNPs) Wholesale cost \$126.65
- DNA Health (26 SNPs) Wholesale cost \$194.65
- DNA Oestrogen (5 SNPs) Wholesale cost \$126.65
- DNA Sport (18 SNPs) Wholesale Cost \$126.65
- DNA Single SNPs Wholesale Cost \$ varies

Collection: Buccal swab

23andme Interpretation:

- 1. Genetic Genie http://ww17.geneticgenie.com/
- 2. Livewello https://livewello.com/
- 3. PureGenomics http://puregenomics.com/
- 4. Promethease https://www.snpedia.com/index.php/Promethease
- 5. MTHFRSupport <u>https://mthfrsupport.com/</u>
- 6. Genealogy Junkie: <u>http://www.genealogyjunkie.net/starter-pages-23andme.html</u>

Apps, Extensions, Programs, and Websites:

- 23++ (http://23pp.david-web.co.uk/about/) (FREE) An extension for the Google Chrome web browser that adds additional functionality to the 23andMe website. The extension especially adds a number of features to Relative Finder.
- 529andYou (http://goo.gl/FQSiwW) (FREE) An extension for the Google Chrome web browser that works with 23andMe's Family Inheritance: Advanced tool (found under Ancestry Labs or, in the new beta website design, under My Results, Ancestry Tools) to collect information about DNA matches. The information, which includes shared segment data, is stored in a local database on your computer.
- David Pike's Utilities (http://www.math.mun.ca/~dapike/FF23utils) (FREE) A comprehensive suite of tools for analyzing raw data, including searching for Runs of Homozygosity (ROHs), searching for shared DNA in two files, and several advanced phasing tools.
- **DNAGedcom** (http://www.dnagedcom.com) (FREE) A suite of tools for 23andMe and Family Tree DNA customers. Users can download their matches, shared segments, and other data into a handy spreadsheet for further analysis.
- **DNAMatch4iPad** (http://www.dnamatch4ipad.com) (\$) An app for the iPad that is an "alternative to the use of conventional spreadsheets for the processing of autosomal DNA data." Users download their match data from one of the testing companies in the form of a .CSV file and upload it to DNAMatch4iPad.
- **GEDmatch** (http://gedmatch.com/) (FREE) A powerful suite of tools for 23andMe, AncestryDNA, and Family Tree DNA raw data. Users can compare their DNA to everyone else in the database or to a specific individual in the database, or perform numerous admixture analyses, phase their DNA, and much more.
- Genes & Us (http://www.genesand.us) (FREE) A website for 23andMe users to "combine their genomes in order to better understand what disease risks most affect their family." For example, a mother and father can link their 23andMe accounts to the site and determine the possible combinations for their children's DNA. Appears to work with 23andMe's new API offering.
- Genetic Genealogy Tools (http://www.y-str.org) (FREE) An impressive and ever-growing list of advanced tools for analyzing raw data, including an X-DNA Relationship Path Finder, Ancestral Cousin Marriages, Autosomal Segment Analyzer, a DNA Cleaner, a SNP Extractor, My-Health, and many more! A terrific resource from Felix Jeyareuben Chandrakumar, an Australian software professional.
- Genetic Genie (http://geneticgenie.org/) (FREE) A tool that analyzes your 23andMe results to perform a methylation gene analysis ("Methylation Analysis"). The site also provides a tool for a "Detox Profile" which looks for defects in the Cytochrome P450 detox enzymes. The site uses the 23andme API, so users can link their 23andMe account to the service.
- Genetrainer (https://www.genetrainer.com/) (cost?) Users of 23andMe and Family Tree DNA can link their results to the Genetrainer service, which will then provide you with training plans and exercises personalized to the user.
- **HIR Search** (http://hirs.snpology.com) (FREE) Once your raw data is entered in the database, you can find HIRs (half-identical regions) that you share with others in the database.

- Imputation Tools (http://mathgen.stats.ox.ac.uk/impute/impute_v2.html) and (http://faculty.washington.edu/browning/beagle/b4.html) (FREE) – Sometimes you find a SNP in the literature that isn't tested by any of the big testing companies. Imputation allows you to determine the most probable genotype for that SNP based on the surrounding SNPs and a database of known sequencing results (such as the 1000 Genomes data). IMPUTE2, for example, is a computer program for phasing observed genotypes and imputing missing genotypes. See more about IMPUTE2 here, including a link to a script to convert your 23andMe raw data to a useable form. BEAGLE4 is similarly performs genotype calling, genotype phasing, imputation of ungenotyped markers, and identity-by-descent segment detection. Learn how to use BEAGLE4 here.
- Interpretome (http://esquilax.stanford.edu/) (FREE) A collection of tools for analyzing 23andMe raw data using only a web browser (i.e., raw data is not uploaded). The tools include an admixture analysis, health information, and a Neanderthal calculator.
- Livewello (https://livewello.com) (\$19.95) Livewello generates health reports from Raw Data issued by labs including: 23andMe, AncestryDNA, Gene By Gene, National Geographic, BioCore, FamilyTreeDNA. For a 1- time fee of \$19:95, users keep their accounts for life and get free App updates.
- Minor Allele Program (http://www.ianlogan.co.uk/23andme/23andMe_index2.htm) (FREE) A tool to identify rare SNPs in your 23andMe or Family Tree DNA raw data.