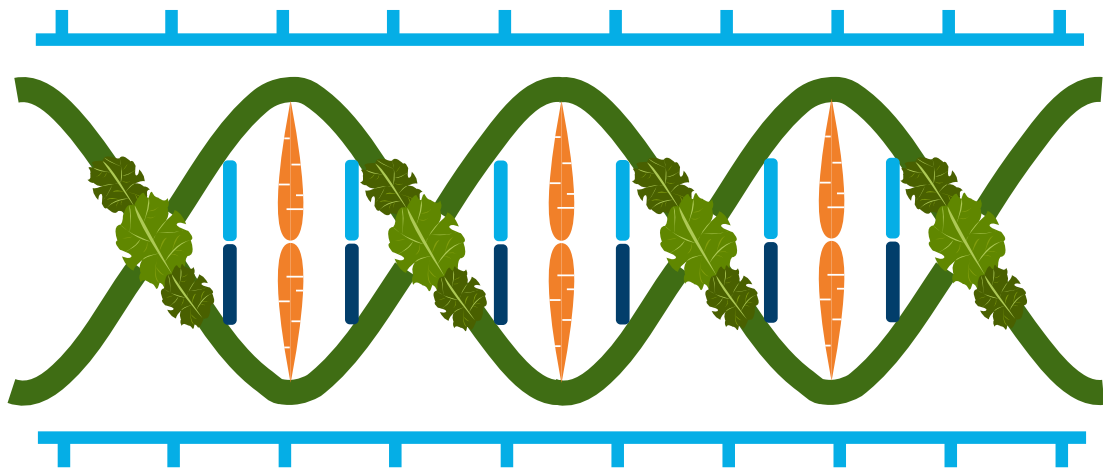
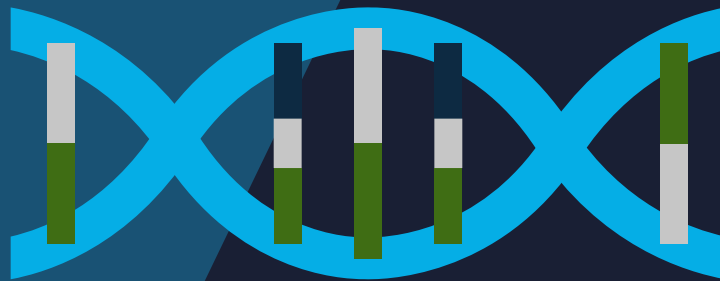


THE NUTRITION GENOME REPORT PREVIEW



The Nutrition Genome Report looks at over 200 genes...



The Nutrition Genome Report looks at over 200 genes and is organized by the following order:

Your Final Results

Digestion

Methylation

Hormone Health

Neurotransmitters and Mental Health

Inflammation and Antioxidant Protection

Pharmacogenomics and Detoxification

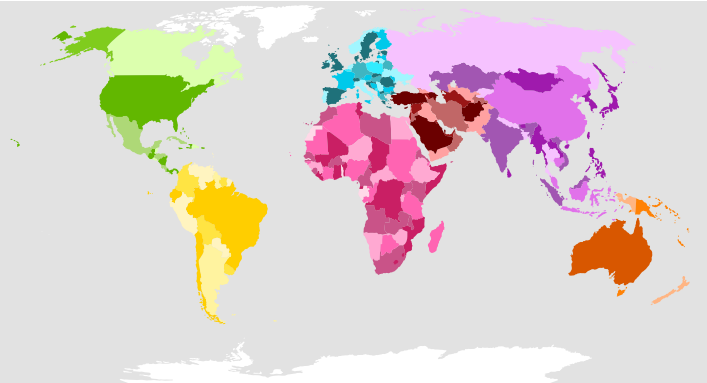
DNA Damage, Protection, and Repair

Cardiovascular and Exercise Health

What to expect in your report...

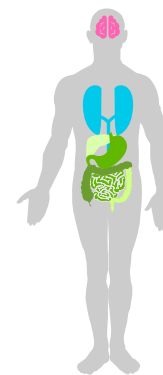
The introduction of your report will explain how to read your genetic report, as well as a basic overview of your analysis.

PATIENT OVERVIEW



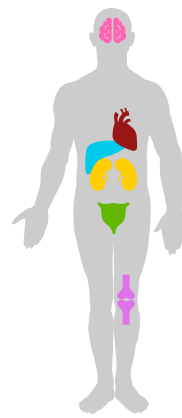
YOUR ANALYSIS

PATIENT NAME: Your Name
DATE OF ANALYSIS: Today's Date



The Methylation Cycle Analysis

Here is an example of the methylation section. You are given the gene, the gene function, and your specific variants. The paragraphs are customized based on your unique genotype.



METHYLATION CYCLE

B12, CALCIUM, LITHIUM, B6 & FOLATE:

Heart Health, Reproductive Health, Brain Health, Pregnancy

CHOLINE:

Liver & Brain Health, Gallbladder, Pregnancy

ZINC:

Mental Health, Skin Health, Immune Health

MAGNESIUM & VITAMIN C:

Heart Health, Adrenal Health, Mental Health

SAMPLE REPORT

GENE	GENE FUNCTION	GENE RSID	NORMAL	HETEROZYGOUS	HOMOZYGOUS
MTHFR C677T	The MTHFR C677T gene encodes the MTHFR gene to convert folate into the active form, methylfolate. Variants in this gene slow down enzymatic function, increasing the need for folate and B2.				
		MTHFR C677T-rs1801133		AG	
MTHFR A1298C	MTHFR A1298C is involved in converting 5-methylfolate (5MTHF) to tetrahydrofolate (THF). Unlike MTHFR C677T, the A1298C mutation does not lead to elevated homocysteine levels unless paired with a heterozygous MTHFR C677T.				
Normal Variants Found					

METHYLATION ANALYSIS

Folate-MTHFR 677

Improves MTHFR C677T Gene Function: Riboflavin and methylfolate.

Decreases Gene Function: PPI'S, birth control pills, NSAIDs, anticonvulsants, antivirals, antibiotics and acid blockers/antacids.

Research: If you have a heterozygous MTHFR 677 (30% reduced function) or homozygous (50% reduced function) gene, your methylfolate requirement is higher. Reduced levels of methylfolate lead to decreased production of neurotransmitters, reduced conversion of homocysteine to methionine, and reduced s-adenosyl-methionine (SAMe) concentrations. Multiple studies have considered riboflavin status and shown that the MTHFR 677 homozygous genotype is associated with high homocysteine when riboflavin (B2) status is low.

Homocysteine is a non-protein amino acid that is created and recycled in the methylation cycle. Sluggish enzymes in the cycle can cause elevated levels in the blood, which can cause inflammation in the blood vessels. High homocysteine has been implicated in amyloid buildup, DNA damage and cancer, mitochondrial dysfunction, cardiovascular disease, and apoptosis of neurons. Targeting the slow enzymes with methylfolate helps bypass it and can maintain normal levels of homocysteine.

It is important to consider riboflavin intake, PEMT, MTR/MTRR, BHMT and CBS activity to assess overall homocysteine metabolism. Too high or too low levels of B12, B6, folate or their co-factors may cause dysregulation of methyl donor activity. The amount of methylfolate used in studies to reduce homocysteine with MTHFR variants has been 400-800mcg, and should be used with B12, B2 and B6.



Strengthening Your Genome...



This section will give you an overall summary of your strengths and weaknesses, and how to strengthen the “chinks” in your armor.

You will be given the following based on your genetic results:

- Your highest vitamin, mineral and compound needs
- You will learn what foods, drinks, toxins and additives to minimize/avoid
- Recommended routine blood work markers

SAMPLE REPORT

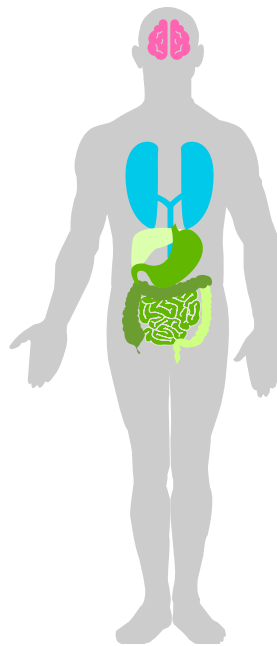
VITAMINS, MINERALS, AND OTHER COMPOUNDS

Your genetic report showed an increased need for the following based on the highest amounts of vitamins and minerals. These are based on foods with the highest levels of these nutrients and do not take into account any food allergies beyond gluten and lactose.

VITAMINS, MINERALS AND OTHER COMPOUNDS	FOODS TO EMPHASIZE
Calcium	Gerolsteiner mineral water, spinach, kale, almonds, parsley, and grass-fed dairy
B6	Wild salmon, wild cod, pistachios, avocados, spinach, Yukon gold or red potatoes, cauliflower, Kombucha and unfiltered beer
Glycine	Bone broth, chicken broth and grass-fed whey protein
B12	Pastured eggs, grass-fed beef, grass-fed lamb, pastured pork, chicken, turkey and seafood

STRENGTHS

- Good protein and fat metabolism
 - Good folate absorption
- Optimal hormone function
- Excellent liver detoxification



WEAKNESSES

- Higher sensitivity to gluten
- Increased need for B6 for healthy neurotransmitters
- Increased antioxidant support needed
- Increased need for stress relieving strategies for heart health
- Increased support needed for post-workout recovery