



Your name
Eating For Your Genes

NUTRITION
PROFILE



PERSONALIZED
FOODS



FTO GENE



GENE-BASED
RECOMMENDATIONS





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Fun Fact: If you stretched the DNA found in one cell all the way out, it would be about 2 meters long.

Welcome to GenoPalate

Dear Your name,

Discovery can be fun, and we're excited that you want to learn more about yourself.

Every day you're making decisions about what to eat. Now with insights about your genes, you'll be able to make even smarter decisions. Whether you're in a grocery store, a farmer's market or your neighborhood restaurant, you now have the power to personalize your nutrition based on your genetic results.

Enjoy Eating For Your Genes!

GenoPalate®



Fun Fact: 25% of the population are supertasters – people who have an increased number of taste buds.

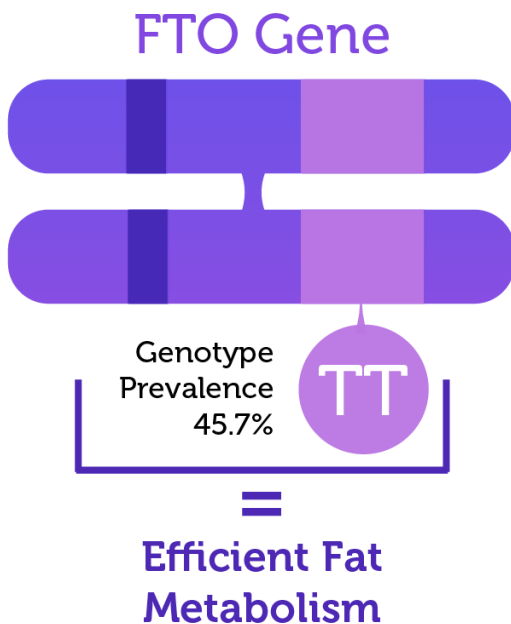
Your Crash Course in Genetics

DNA is genetic material that carries the instructions for your body's structure and function. DNA is made up of molecules called nucleotides, which come in four types: Adenine (A), Thymine (T), Cytosine (C), and Guanine (G).

Specific sequences of nucleotides are called genes, and genes provide instructions for making proteins. For example ACTCG is a gene.

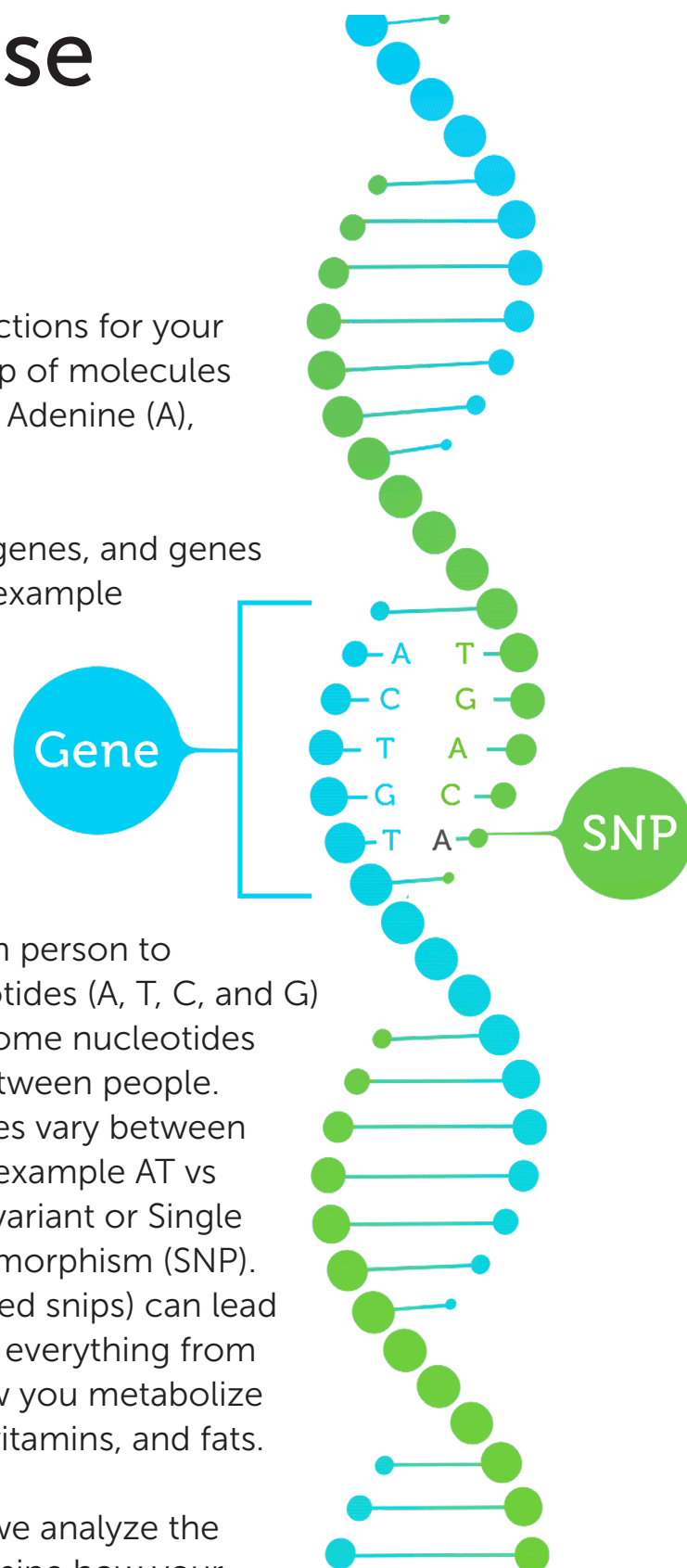
Proteins do most of the work in your cells and are responsible for the function of your body's tissues and organs. Proteins also control the way your body processes food.

Instructions for making proteins can vary from person to person depending on the sequence of nucleotides (A, T, C, and G)



in their genes. Some nucleotides tend to differ between people. When nucleotides vary between two people, for example AT vs TT, it is called a variant or Single Nucleotide Polymorphism (SNP). SNPs (pronounced snips) can lead to differences in everything from eye color to how you metabolize carbohydrates, vitamins, and fats.

At GenoPalate, we analyze the SNPs that determine how your body processes food.



Fun Fact: Identical twins have the exact same DNA, so if you're recommending GenoPalate to any twins you know, tell them they only need to buy one.

What is a Carrot?

Maybe you see some delicious carrots at your local farmer's market. What GenoPalate sees is a vegetable with moderate fiber, no vitamin D, and an abundance of vitamin A.

The different nutrients in carrots each play a unique role in your body. Fiber supports your intestinal health, vitamin D promotes calcium absorption, and vitamin A helps you maintain healthy skin and vision.

When we consume these nutrients, our bodies each respond differently based on our genes. For example, if you have the GG genotype of the BCO1 gene, your body will not absorb vitamin A optimally. Therefore you will benefit from consuming foods higher in vitamin A like carrots, sweet potatoes, and eel.

We analyze your unique genetic profile to determine your optimal intake levels for key macro- and micronutrients. By combining your genotype results and the nutrient composition of foods, we provide you with a comprehensive list of foods that are healthier for you.



Your Genes + Nutritional Science = Your Foods

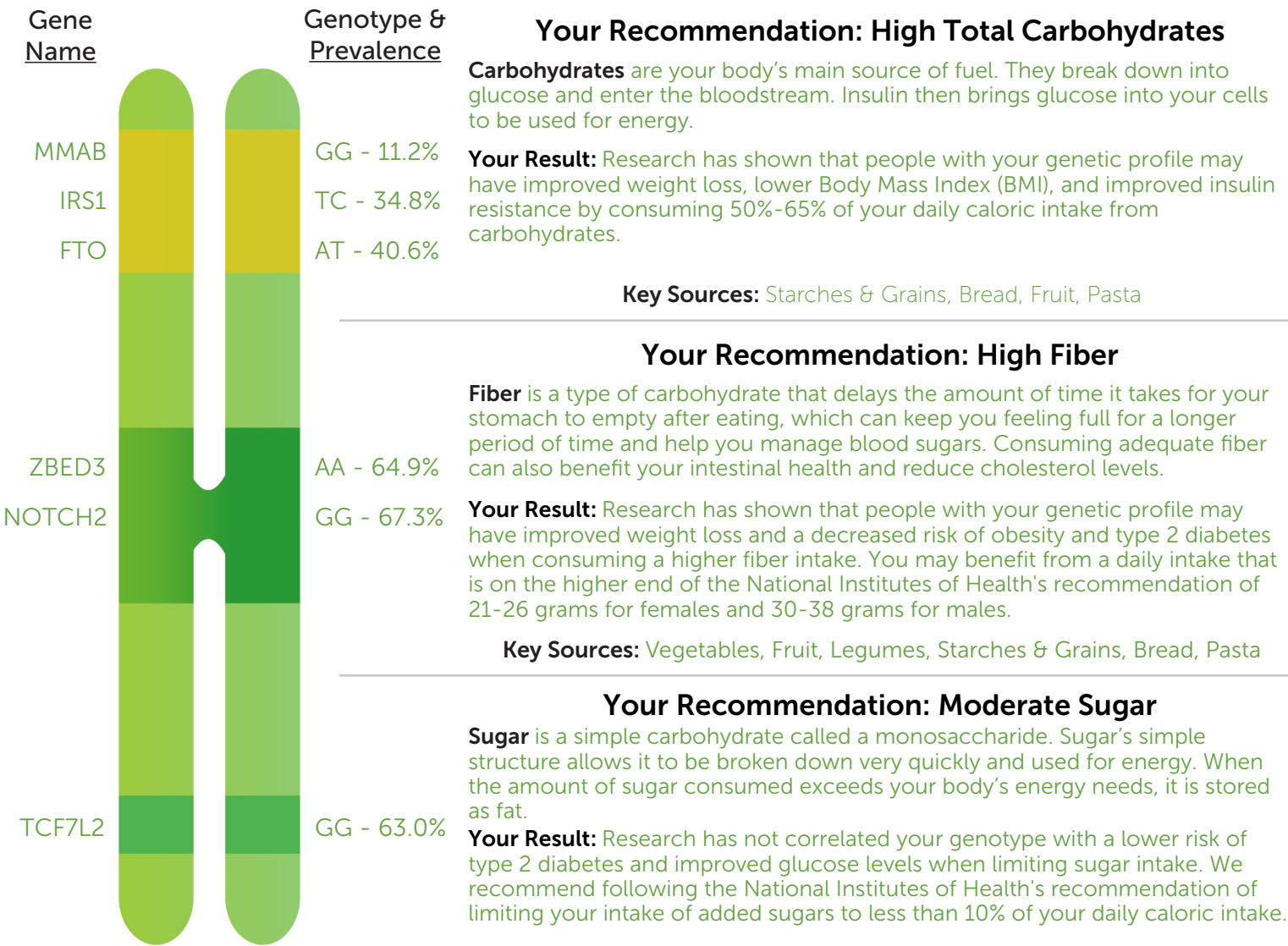
We analyzed your genetic variants (SNPs) that impact your nutrition. Below you will see the genes that these SNPs are located on, along with their associated genotype and prevalence. Your **Genotype** is your unique set of nucleotides that determines your nutrition recommendation. The **Prevalence** is the percentage of the population that has this genotype.

Your recommended macro- and micronutrient levels are based on the analysis of the most impactful nutrition SNPs. On the following pages, you will see examples of some of the SNPs we analyzed.

Your Recommendations are derived from research showing positive health outcomes associated with your genotype.

If you are recommended a high intake for a nutrient, we are suggesting you will benefit from consuming foods higher in that nutrient. If given a low recommendation, we are suggesting that you don't need to consume as many foods that are high in that nutrient.

Carbohydrates



Your Genes + Nutritional Science = Your Foods

Fats

Gene
Name

Genotype &
Prevalence

Your Recommendation: Low Total Fat

Fats provide your body with energy and also support cell growth. They protect your organs, help keep your body warm and produce important hormones. Your body needs fats for the absorption of vitamins A, D, E and K.

Your Result: Research has shown that people with your genetic profile may benefit from consuming 20%-25% of their daily caloric intake from fat. Benefits can include: improved Body Mass Index (BMI), weight loss, increased High-Density Lipoprotein (HDL) cholesterol, the "good" cholesterol, decreased Low-Density Lipoprotein (LDL) cholesterol, the "bad" cholesterol, triglyceride levels, and total cholesterol levels.

Key Sources: Nuts & Seeds, Meat, Seafood, Fats & Oils, Cheese

Your Recommendation: Low Saturated Fat

Saturated Fats are fat molecules "saturated" with hydrogen molecules. Consuming too much saturated fat can increase total cholesterol and increase levels of the Low-Density Lipoprotein (LDL) cholesterol, the "bad" cholesterol.

Your Result: Research has shown that people with your genetic profile may have a reduced risk of obesity and Metabolic Syndrome when consuming less than 9% of their daily caloric intake from saturated fats. Metabolic Syndrome is associated with increased triglyceride levels, cholesterol, blood pressure, blood sugar, and body fat around the waist.

Key Sources: Meat, Cheese, Fats & Oils

Your Recommendation: Moderate Omega-3 Fatty Acids

Omega-3 Fatty Acids are a type of polyunsaturated fat that the body cannot produce so they must be obtained from food or other sources. These fats contribute to heart health, the building of brain cells and may even help improve memory.

Your Result: Based on your genotype, you may not see an increase in adiponectin levels, which regulate glucose levels and break down fatty acids, when consuming a high intake of omega-3 fatty acids. We recommend consuming an omega-3 fat intake that is consistent with the National Institutes of Health's recommendation of 1,100 milligrams for females and 1,600 milligrams for males.

Key Sources: Seafood, Nuts & Seeds

Your Recommendation: High Polyunsaturated Fatty Acids

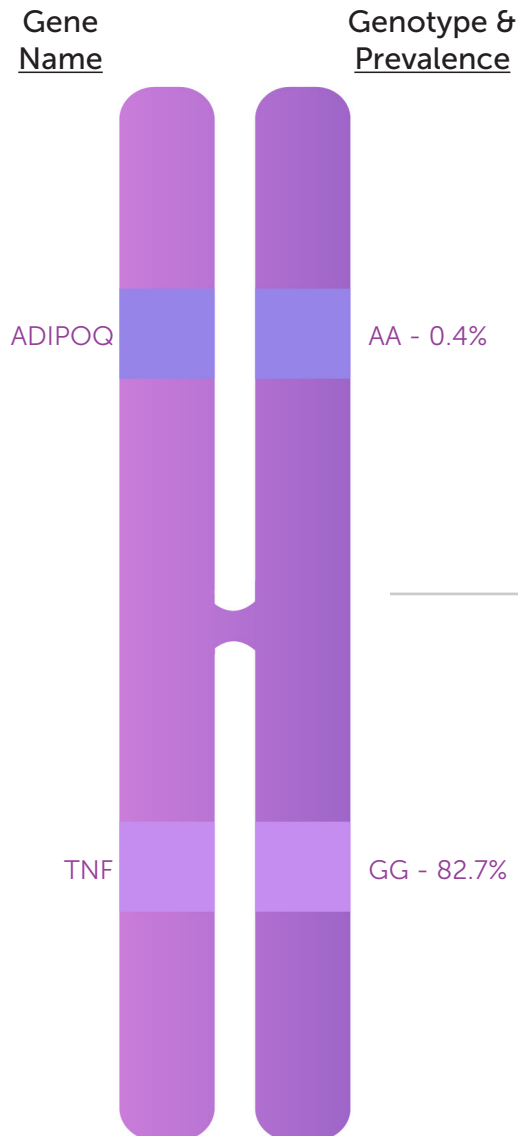
Polyunsaturated Fatty Acids are a type of healthy fat that provides nutrients that help fight Low-Density Lipoprotein (LDL) cholesterol, the "bad" cholesterol. These healthy fats can also contribute nutrients that help develop and maintain your body's cells. The two main types of polyunsaturated fat are omega-3 and omega-6.

Your Result: Research has shown that people with your genetic profile may increase their High-Density Lipoprotein (HDL) cholesterol, the "good" cholesterol, by consuming more than 6% of their daily caloric intake from polyunsaturated fats.

Key Sources: Nuts & Seeds, Fats & Oils

Your Genes + Nutritional Science = Your Foods

Fats



Your Recommendation: High Monounsaturated Fatty Acids

Monounsaturated Fatty Acids are a type of healthy fat that can help decrease Low-Density Lipoprotein (LDL) cholesterol, the "bad" cholesterol as well as provide nutrients that help develop and maintain your body's cells.

Your Result: Research has shown that people with your genetic profile may lower their Body Mass Index (BMI), reduce obesity risk, and maintain adiponectin levels which regulate glucose levels and break down fatty acids by consuming 15%-20% of their daily caloric intake from monounsaturated fats.

Key Sources: Nuts & Seeds, Meat, Fats & Oils

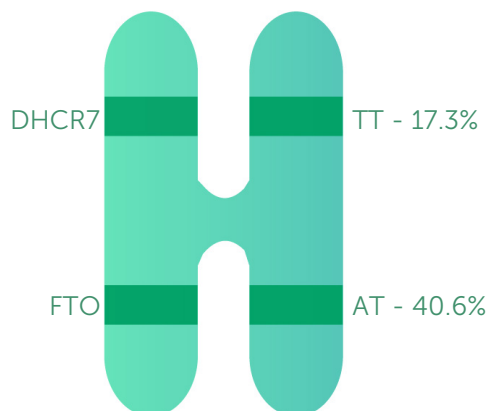
Your Recommendation: Moderate Linoleic Acid

Linoleic Acid, or omega-6 fatty acids, is a type of polyunsaturated fat that the body cannot produce so it must be obtained from food or other sources. These fats are needed for brain function and cell growth.

Your Result: Based on your genotype, you may not have a decreased risk of obesity when consuming a lower linoleic acid intake. We recommend consuming the National Institutes of Health's recommendation of 11-12 grams for females and 14-17 grams for males.

Key Sources: Nuts & Seeds, Fats & Oils, Meat

Protein



Your Recommendation: High Protein

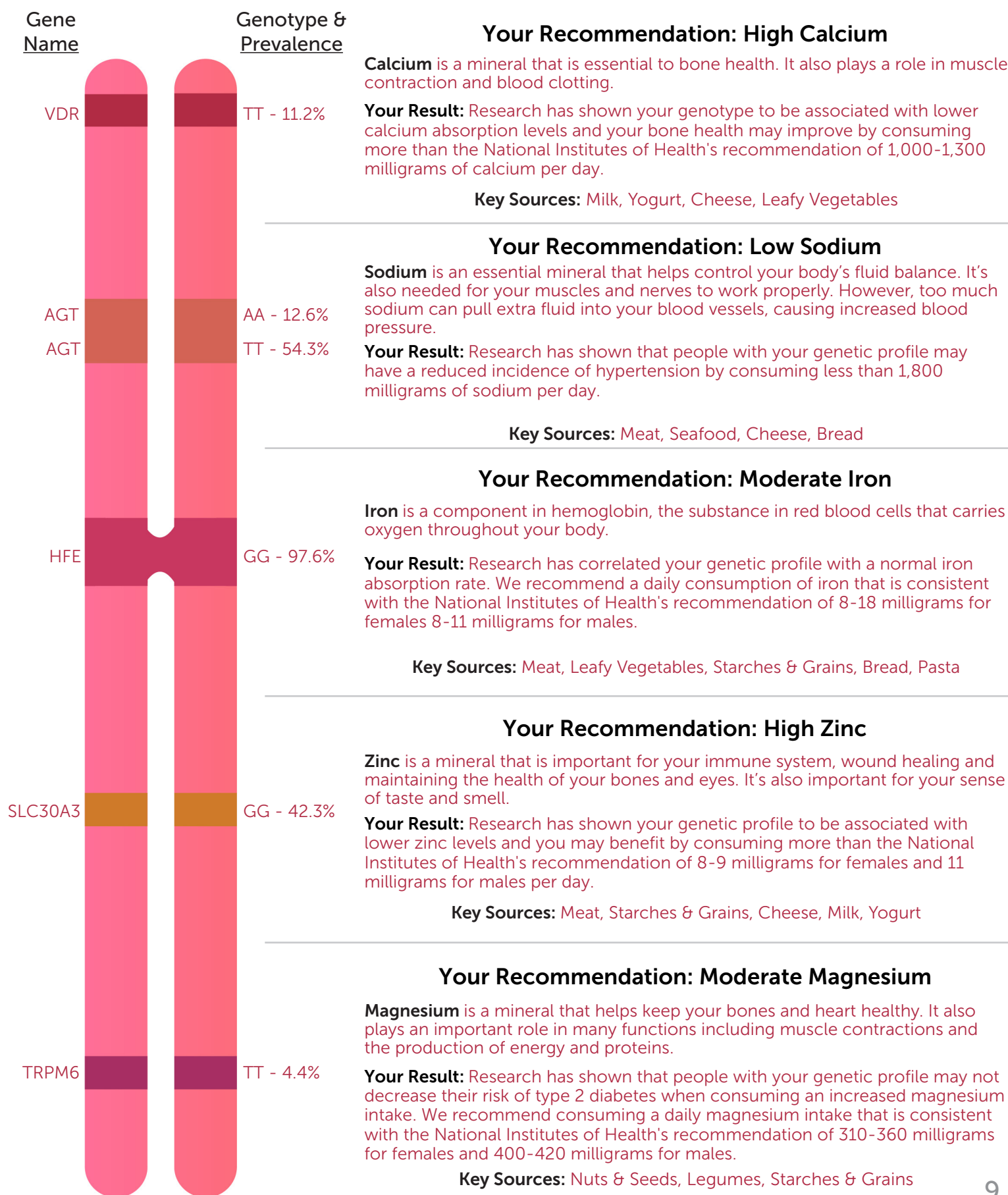
Proteins are made up of amino acids, which are building blocks for your body's tissues such as muscle, skin, and hair. Proteins also support the proper functioning of enzymes and hormones.

Your Result: Research has shown that people with your genetic profile may have improved weight loss, insulin resistance, and metabolic health when consuming 25%-35% of your daily caloric intake from protein.

Key Sources: Meat, Seafood, Other Protein, Milk, Yogurt, Cheese

Your Genes + Nutritional Science = Your Foods

Minerals



Your Genes + Nutritional Science = Your Foods

Vitamins

Gene Name Genotype & Prevalence



Your Recommendation: High Vitamin A

Vitamin A is a fat-soluble vitamin that is important for your immune system, normal vision and reproduction. It also plays a role in keeping organs working properly.

Your Result: Research has shown your genotype to be associated with lower circulating levels of B-carotene, a precursor of vitamin A, and you may benefit from a daily consumption that is higher than the National Institutes of Health's recommendation of 700 micrograms for females and 900 micrograms for males.

Key Sources: Milk, Yogurt, Cheese, Vegetables, Leafy Vegetables

Your Recommendation: High Vitamin B6

Vitamin B6 is a water-soluble vitamin that helps your body fight infection. It's also important for brain development and the production of amino acids, which are the building blocks of proteins.

Your Result: Research has shown your genotype to be associated with lower vitamin B6 levels and you may benefit from increasing your daily vitamin B6 consumption to a level that is above the National Institutes of Health's recommendation of 1.2-1.5 milligrams for females and 1.3-1.7 milligrams for males.

Key Sources: Meat, Seafood

Your Recommendation: Moderate Vitamin B12

Vitamin B12 is a water-soluble vitamin that plays an important role in creating new red blood cells and is needed for making DNA.

Your Result: Research has shown your genetic profile may not be associated with malabsorption of vitamin B12. We recommend a daily consumption of vitamin B12 that is consistent with the National Institutes of Health's recommendation of 2.4 micrograms.

Key Sources: Milk, Yogurt, Meat, Seafood, Other Protein

Your Genes + Nutritional Science = Your Foods

Vitamins

Gene
Name

Genotype &
Prevalence

GC

TG - 31.0%

Your Recommendation: High Vitamin D

Vitamin D is a fat-soluble vitamin that supports bone health by aiding in calcium absorption. It's also needed for the immune system and muscle function.

Your Result: Research has shown your genetic profile to be associated with lower vitamin D levels and you may benefit from a daily consumption that is greater than the National Institutes of Health's recommendation of 15-20 micrograms of per day.

Key Sources: Seafood, Milk, Yogurt

ZPR1

CG - 33.2%

Your Recommendation: High Vitamin E

Vitamin E is an antioxidant that protects your cells from damage and supports your immune system.

Your Result: Research has shown your genetic profile to be associated with lower vitamin E levels and consuming more than 9 milligrams per day may reduce waist circumference.

Key Sources: Nuts & Seeds, Fats & Oils

MTHFR

AG - 32.7%

Your Recommendation: High Folate

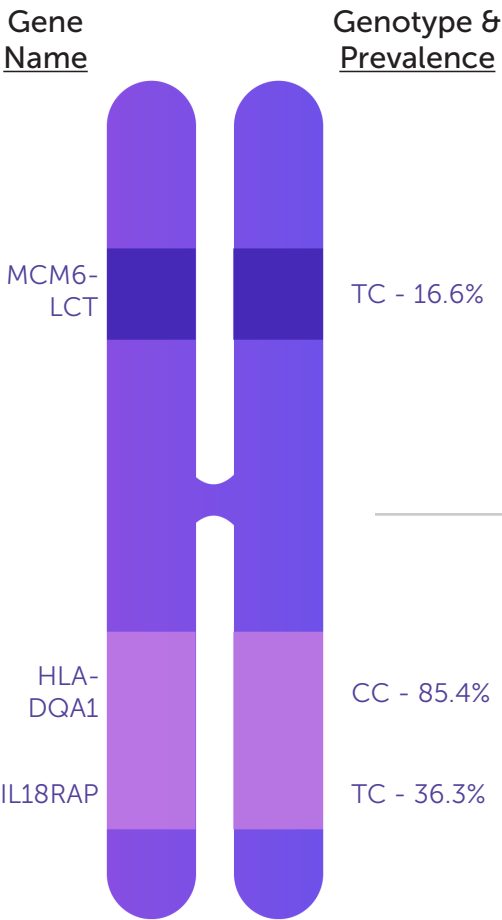
Folate is a B-vitamin that is important for proper fetal development, normal maturation of red blood cells and lowering homocysteine levels. High homocysteine levels have been associated with artery damage.

Your Result: Research has shown your genetic profile to be associated with lower folate levels. Consuming more than the National Institutes of Health's recommendation of 400 micrograms of folate per day may lower your risk for cardiovascular disease.

Key Sources: Vegetables, Leafy Vegetables, Legumes

Your Genes + Nutritional Science = Your Foods

Sensitivities



Your Recommendation: Low Lactose Sensitivity

Lactose is the sugar found in milk and is digested by the enzyme lactase. Lactase gives babies the ability to digest their mother's milk without getting an upset stomach. As a baby grows into adulthood, the enzyme turns off, leading to digestive discomfort when consuming lactose. The genetic mutation that developed over time actually helps to digest lactose in adulthood by keeping the lactase enzyme turned on.

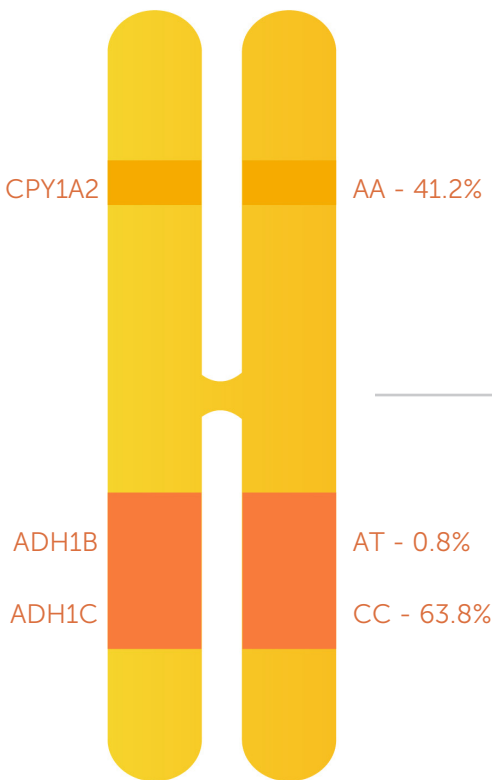
Your Result: Research has shown that people with your genetic profile have a genetic variant associated with the ability to break down lactose. You are unlikely to be sensitive to lactose. However, this is not a diagnosis of an allergy or intolerance.

Your Recommendation: Not Likely Sensitive to Gluten

Gluten is a protein that helps food maintain its shape. It is found primarily in wheat, rye and barley and can also be found in oats. Some people react to gluten consumption with an immune response, which can cause inflammation, intestinal damage, and abdominal discomfort.

Your Result: Research has shown that people with your genetic profile are not likely to be sensitive to gluten. However, this is not a diagnosis of an allergy or intolerance.

Substances



Your Recommendation: Fast Caffeine Metabolizer

Caffeine is a dietary component that acts as a stimulant. It stimulates your central nervous system and may cause you to feel more alert and energized. Caffeine reaches its peak level in your body within one hour of consuming, and its effects can be felt for up to 4-6 hours after consumption. Genetic variants can affect how quickly your body breaks down caffeine.

Your Result: Research has shown that people with your genetic profile metabolize caffeine quickly. After drinking caffeinated beverages, you may have a heightened focus without feeling jittery, anxious or experiencing a headache.

Your Recommendation: Neutral Alcohol Metabolizer

Alcohol is a hydrocarbon that is produced by the fermentation of sugar. When consumed, it acts as a depressant and interferes with the brain's communication pathways until it can be metabolized by enzymes. This rate of metabolism can change depending on your genetic variant.

Your Result: Research has not correlated your genetic profile with a decrease in alcohol biodisposition, the ability for your body to metabolize alcohol. If you choose to consume alcohol, the National Institutes of Health recommend drinking in moderation, which is up to 1 drink per day for women and 2 drinks per day for men.

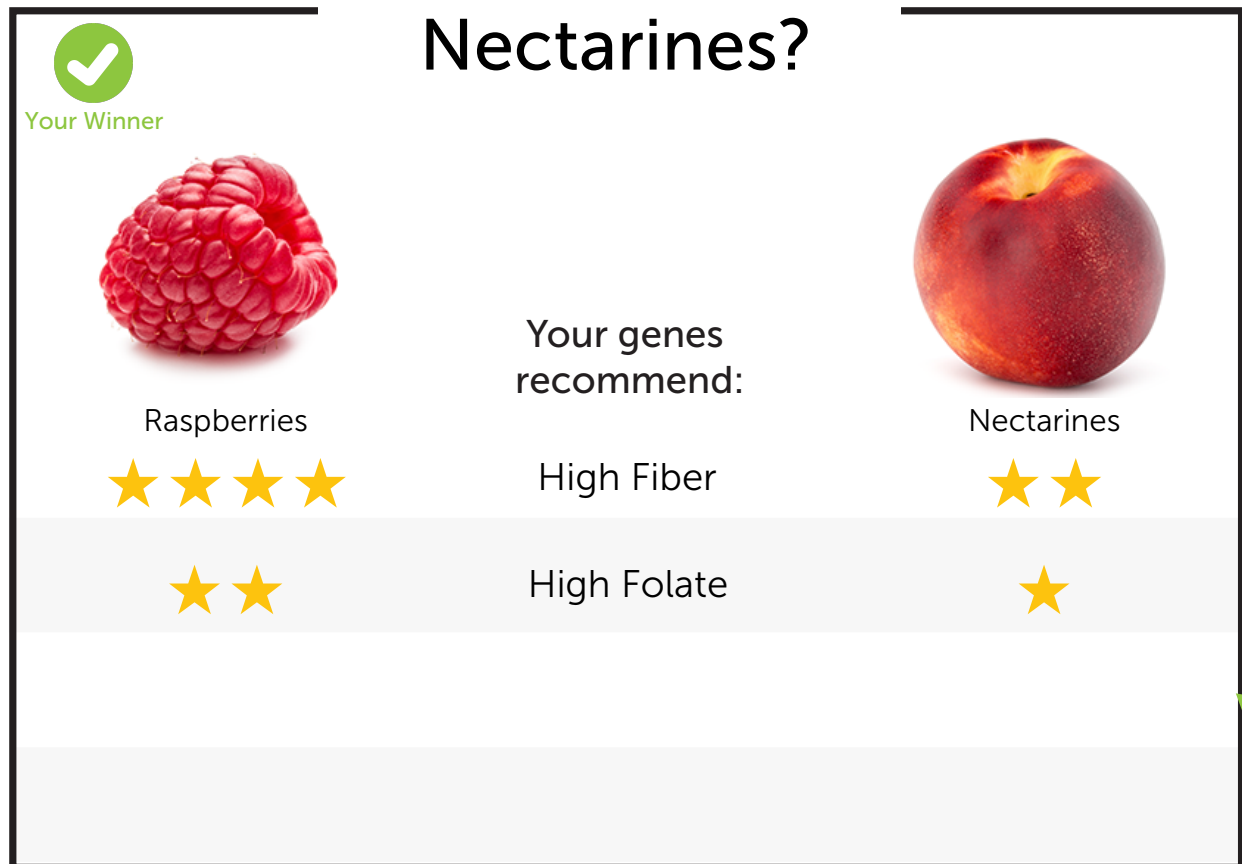
Your Genes + Nutritional Science = Your Foods

Based on your genetic results and your nutrition recommendations, some foods have a nutrient profile that matches your genetic based nutrition recommendations better than others.

The example below illustrates why you were recommended one food over another. The number of stars represents how well each nutrient matches your macro- and micronutrient recommendations.

We combine all of your nutrition recommendations together to determine your food recommendations.

Why Raspberries over Nectarines?



More total stars indicates that the nutrition profile of Raspberries matches better with your genetic recommendations.

Less stars indicates that the nutrition profile of Nectarines matches less with your genetic recommendations.



Fun Fact: We could store all the digital information in the world with only 2 grams of DNA because it is capable of holding so much data!

Your Genes + Nutritional Science= Your Foods

Below are your food recommendations for Fruit, Vegetables, Leafy Vegetables and Fresh Herbs which are good sources of carbohydrates and fiber. Leafy vegetables are also good sources iron, folate and calcium. Your top foods in these categories were uniquely chosen based on all of your genetic-based nutrition recommendations.

Your top **Fruits** were chosen based on your recommendations to consume High Fiber and High Folate.

Your top **Vegetables** were chosen based on your recommendations to consume High Fiber, High Folate, High Calcium and High Vitamin B6.

Your top **Leafy Vegetables** were chosen based on your recommendations to consume High Folate, High Vitamin A, High Calcium and High Fiber.

Your top **Fresh Herbs** were chosen based on your recommendations to consume High Vitamin B6 and High Zinc.

Fruits



Raspberries



Kiwi



Blackberries



Avocados



Cantaloupe



Bananas



Papaya



Strawberries

Vegetables



Okra



Red Bell Pepper



Jalapeño Peppers



Winter Squash



Soybean Sprouts



Pumpkin



Asparagus



Banana Peppers

Leafy Vegetables



Turnip Greens



Collard Greens



Kale



Bok Choy



Mustard Greens



Escarole

Fresh Herbs



Garlic



Scallions



Rosemary



Parsley



Ginger

Your Genes + Nutritional Science= **Your Foods**

Below are your food recommendations for Meat, Seafood and Other Protein which are key sources of protein and vitamins B6 and B12. Meat and Seafood are good sources of iron and zinc can be found in most meats. Your top foods in these categories were uniquely chosen based on all of your genetic-based nutrition recommendations.

Your top **Meats** were chosen based on your recommendations to consume High Folate, High Vitamin B6, High Vitamin A and Low Sodium.

Your top **Seafoods** were chosen based on your recommendations to consume High Monounsaturated Fatty Acids, High Vitamin A, High Vitamin E and High Zinc.

Your top **Other Proteins** were chosen based on your recommendations to consume High Vitamin D, High Monounsaturated Fatty Acids, High Folate and High Vitamin A.

Meats



Chicken Liver



Bottom Round Steak



Pork Tenderloin



Veal



Ostrich



Turkey Breast



Skinless Chicken Breast



Eye of Round Beef

Seafoods



Eel



Sardines



Tuna



Halibut



Swordfish



Sea Bass



Perch

Other Proteins



Whole Eggs



Nutritional Yeast



Tofu



Soy Burger

Your Genes + Nutritional Science= **Your Foods**

Below are your food recommendations for Breads, Starches and Pasta which are key sources of carbohydrates, fiber, iron and magnesium. Your top foods in these categories were uniquely chosen based on all of your genetic-based nutrition recommendations.

Your top **Breads** were chosen based on your recommendations to consume High Fiber, High Protein and High Calcium.

Your top **Starches & Grains** were chosen based on your recommendations to consume High Total Carbohydrates, High Fiber and High Folate.

Your top **Pastas** were chosen based on your recommendations to consume High Protein, High Folate and High Zinc.

Breads



Potato Bread



Plain Bagel



Corn Tortilla*



Whole Wheat Chapati/Roti



Multigrain Bagel



Whole Wheat Tortilla

*Gluten-Free

Starches & Grains



Peas



Quinoa



Sweet Potatoes



Russet Potatoes



Teff

*Contains Gluten

Pastas



Whole Wheat Noodles*



Regular Pasta Noodles*



Whole Grain Noodles*



Egg Noodles*

*Contains Gluten

Your Genes + Nutritional Science= **Your Foods**

Below are your food recommendations for Nuts & Seeds, Legumes, and Fats & Oils which are key sources poly- and monounsaturated fats and vitamin E. Nuts & Seeds are also good sources of omega-3 fats, zinc and magnesium. Legumes are also a good source of fiber, folate and magnesium. Your top foods in these categories were uniquely chosen based on all of your genetic-based nutrition recommendations.

Your top **Nuts & Seeds** were chosen based on your recommendations to consume High Fiber, High Polyunsaturated Fatty Acids, High Calcium and High Protein.

Your top **Fats & Oils** were chosen based on your recommendations to consume High Monounsaturated Fatty Acids and High Vitamin E.

Your top **Legumes** were chosen based on your recommendations to consume High Folate and High Monounsaturated Fatty Acids.

Nuts & Seeds



Chia Seeds



Sunflower Seeds



Sesame Seeds



Flaxseeds



Pumpkin Seeds

Fats & Oils



Sunflower Seed Oil



Almond Oil



Canola Oil



Safflower Oil



Hazelnut Oil

Legumes



Lentils



Navy Beans



Adzuki Beans



Mung Beans

Your Genes + Nutritional Science= **Your Foods**

Below are your food recommendations for Milk, Yogurt and Cheese which are key sources of calcium, protein, vitamin B12 and vitamin D. Milk is also be a good source of vitamin A. Your top foods in these categories were uniquely chosen based on all of your genetic-based nutrition recommendations.

Your top **Cheeses** were chosen based on your recommendations to consume Low Sodium, Low Total Fat, Low Saturated Fat and High Vitamin A.

Your top **Milks** were chosen based on your recommendations to consume Low Total Fat, High Total Carbohydrates, High Protein and High Zinc.

Your top **Yogurts** were chosen based on your recommendations to consume Low Total Fat, Low Saturated Fat, High Vitamin A and High Vitamin D.

Cheeses



Ricotta, Part Skim



1% Cottage Cheese



Swiss*



2% Cottage Cheese



Mozzarella



Gruyere*

*Low Lactose

Milks



Skim Milk



Lowfat Milk



Vanilla Almond Milk**



Unsweetened Almond Milk**

*Low Lactose or **Lactose-free

Yogurts



Lowfat Kefir*



Plain Lowfat Greek Yogurt*



Plain Nonfat Yogurt



Plain Greek Nonfat Yogurt*

*Low Lactose or **Lactose-free

Start Eating For Your Genes

You now have the information and power to walk into a store and know exactly which foods are healthier for you, based on your genes.

It's also important to mention that eating for your genes is only one part of building a healthy lifestyle. Exercise, sleep, and stress management are also essential for a balanced and healthy life.

The next time you're making decisions about what food to eat, Eat For Your Genes!

GenoPalate®



The laboratory genetic testing was performed by GenoPalate, Inc. or one of its contracted labs. The information provided in this report is prepared by GenoPalate, Inc., and is based in part on publicly available databases. Neither the test nor the organization of this information have been cleared or approved by the FDA or any other government authority. Neither the test nor the information provided in any report are intended to diagnose any disease, and they are not intended to tell you anything about your current state of health or used to make medical decisions.