dnaPower

POWER OVER YOUR HEALTH

YOUR metalPower RESULTS

Personal DNA Report for:

[redacted]

[redacted]

[redacted]

[redacted]

Your Personal DNA Results

Congratulations on making the decision to take Power over your Health!

Your personalized DNA results contain information unique to **your body**, giving you the power to make informed decisions about your health.

WHY DNA IS IMPORTANT

DNA is our personal biological roadmap. It guides the development and functioning of our bodies. DNA sequences, known as genes, contain genetic markers that differ among people. dnaPower's genetic testing zeros in on specific genes and genetic markers that have been scientifically proven to impact health, nutrition, fitness, and disease and that may vary between people.

HOW GENETIC VARIATIONS CAN IMPACT YOUR HEALTH

Hereditary and environmental factors can cause genetic variations or mutations in your DNA. Some mutations have minimal effects, while others may alter a gene in such a way that its function is changed or lost. When this occurs, there is a risk that your gene may not function at an optimum level.

HOW YOUR DNA RESULTS CAN HELP YOU

Your dnaPower results provide a snapshot of selected genetic variations that have been proven through scientific studies to impact your health. By knowing your genetic variations, you can learn where you may be predisposed to good or poor health related traits. By understanding this information, you can take proactive steps to enhance your wellbeing. The good news is that through healthy diet, nutrition and exercise, you can change or improve how your DNA functions.

RELIABLE RESULTS

dnaPower uses a state of the art Agena MassArray genotyping platform to provide greater than 99.7% accuracy in the genes and SNPs (Single Nucleotide Polymorphisms) that we test. We test genetic sites that identify the most common DNA markers scientifically studied and proven to be associated with certain conditions. We report on genes that have a high incidence relationship. It is important to note that DNA research is constantly evolving. There may be variations related to a condition that are yet to be discovered and may in future improve on the accuracy and thoroughness of the results.

MAXIMIZING YOUR RESULTS

Knowledge is power. We encourage you to use your dnaPower results to understand potential impacts to your health and to take positive action. We recommend consulting a qualified health practitioner to gain further insight and advice for a program specific to you.

How To Read Your Report

YOUR SUMMARY
A snapshot of each area tested and your genetic composition results.

PAGE 4

YOUR ACTION PLAN
Key suggested actions based on areas with higher variations.

PAGE 8

YOUR DETAILED TEST AREA DESCRIPTIONS
Detailed information on each test area along with further tips to take power over your health.

PAGE 11

YOUR GENETIC PROFILE
Your personal genotype results for each gene tested.

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READING YOUR GENETIC COMPOSITION GRAPH

Your personal results are represented in a genetic composition graph.

Green is Good. Indicates the percentage of gene(s) or SNPs tested that are normal. With good health decisions, your gene(s) should function properly.

Red is Poor. Indicates there are variations in the gene(s) or SNPs that have potential to impact your health. This is a possible area of risk. Take proactive action to look after your health.

In your report, focus on areas that are 50% red or more as this is where you are more likely to experience issues over time.

YOUR metalPower SUMMARY

Your personal report covers your genetic composition for results related to how well your body regulates detoxification, methylation and heavy metal toxicity. The results give you an indication of your predisposition to the health factors tested. Your genetics are your blueprint. You can enhance and improve your health outcomes through diet, fitness and environment.

AREA TESTED	TELLS YOU (Risk Potential)	YOUR GENETIC COMPOSITION RESULTS	PAGE
HEAVY METAL TOXICITY			
Metals	*Your sensitivity and the severity of health effects caused by heavy metals*		12
Neurological Wellness	*Your normal genetic susceptibility for neurological degeneration*		14
HEAVY METAL ACCUMULATION			
Cadmium	*Your normal genetic susceptibility to cadmium*		17
Copper	*Your normal genetic susceptibility to accumulation of copper*		19
Mercury	*Your normal genetic susceptibility to mercury*		20
DETOXIFICATION			
Detoxification Phase 1 - Activation	*How efficiently your body manages oxidation*		22
Detoxification Phase 2 - Conjugation	*How efficiently your body neutralizes drugs, hormones and various toxins into water soluble substances for elimination*		24
Detoxification Phase 2 - Acetylation	*How efficiently your body catalyzes acetylation reactions to detoxify harmful carcinogens*		25
Detoxification Phase 2 - Methylation	*How efficiently your body metabolizes dopamine, epinephrine (adrenalin), norepinephrine (noradrenaline), and estrogen*		26
Detoxification Phase 2 - Oxidative Protection	*How efficiently your antioxidant enzymes can protect you against reactive oxygen species*		28

Normal Genes Variations

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AREA TESTED	TELLS YOU (Risk Potential)	YOUR GENETIC COMPOSITION RESULTS	PAGE
METHYLATION			
Methylation - FUT2	*How effectively you absorb cobalamin (vitamin B12) essential for methylation*		31
Methylation - TCN2	*How effectively you transport cobalamin (vitamin B12) essential for methylation*		33
Methylation - SHMT1	*How effectively you convert folate (vitamin B9) derivative THF into 5,10-MTHF*		34
Methylation - MTHFR	*How effectively you metabolize folate (vitamin B9) from food into its bioactive form*		35
Methylation - MTR	*How efficiently you transform homocysteine into methionine*		36
Methylation - MTRR	*How efficiently you methylate cobalamin (vitamin B12) to methylcobalamin*		37

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AREA TESTED	TELLS YOU (Risk Potential)	YOUR GENETIC COMPOSITION RESULTS	PAGE
VITAMINS & SUPPLEMENTS			
Vitamin A	*How well you convert vitamin A for healthy growth and immune response*	75% / 25%	40
Vitamin B2 (Riboflavin)	*Your need for vitamin B2 for health, development, and management of cardiovascular risk*	50% / 50%	41
Vitamin B6	*How well you process vitamin B6 for macronutrient metabolism*	50% / 50%	42
Vitamin B9 (Folate)	*How well you process folate for cell growth and healthy red blood cells*	71% / 29%	43
Vitamin B12	*How well you process vitamin B12 for healthy nerve and blood cells*	67% / 33%	44
Vitamin C	*How well you process vitamin C for growth and development*	62% / 38%	45
Vitamin D	*How well you process vitamin D to support calcium absorption and cell growth*	55% / 45%	46
Vitamin E	*How well you convert vitamin E for antioxidant and anti-aging benefits*	67% / 33%	47
Vitamin K	*How well you process vitamin K for coagulation and neural protection*	100%	48
Calcium	*How well your body absorbs calcium for bones, teeth and muscles*	50% / 50%	49
Choline	*How much dietary choline your body requires for your brain and nervous system*	75% / 25%	50
Iodine	*How well your body transports iodine to support thyroid function*	100%	51

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AREA TESTED	TELLS YOU (Risk Potential)	YOUR GENETIC COMPOSITION RESULTS	PAGE
Iron Deficiency	*How well your body absorbs iron for red blood cells to carry oxygen*		52
Iron Overload	*How well your body regulates iron for red blood cells to carry oxygen*		53
Magnesium	*How much dietary magnesium your body requires for health*		54
Omega-3 Fatty Acid	*Your need for beneficial omega-3 fatty acid for metabolism, brain health and reducing disease*		55
Zinc	*How well you process zinc for antiviral and inflammatory response*		56

Normal Genes Variations

YOUR metalPower ACTION PLAN

Your personal DNA results provide valuable insights into your body based on your unique genetic code.
This is a suggested metalPower Action Plan based on your personal DNA results. We have provided you with Action Tips that may help support your DNA and health.

The areas below are where you have higher genetic variations (>50% red in the Genetic Composition graphs). This increases your risk potential in that area over time. By taking action to support your health in these areas and managing lifestyle factors such as diet, exercise, sleep, stress and environmental factors, you increase the opportunity for your genes to function optimally.

AREA TESTED	ACTION TIPS	PAGE
HEAVY METAL ACCUMULATION		
CU Copper	*Limit high-copper foods like shellfish, liver, nuts, seeds, and chocolate. Maintain a balanced diet with moderate copper intake and choose organic produce when possible. Use a certified water filter to remove copper and opt for stainless steel, glass, or enamel cookware instead of copper. If your home has copper plumbing, use cold water for drinking and cooking, as hot water increases leaching. Replace copper pipes if needed.*	19
Mercury	*Avoid high-mercury foods like shark and swordfish, and limit exposure to contaminated water and industrial emissions. Eat plenty of fiber-rich foods to aid elimination through the digestive tract. Stay hydrated, to support kidney function. Maintain a healthy liver by eating well, staying hydrated, consider liver-supporting supplements like milk thistle and N-acetylcysteine. Consider supplements like antioxidants, sulfur-containing compounds, and minerals to support natural detoxification processes. Use sauna sessions to promote sweating.*	20
DETOXIFICATION		
Detoxification Phase 2 - Methylation	*Maintain adequate magnesium intake. Foods high in magnesium include pumpkin seeds, spinach and chard, avocado, banana, yogurt or kefir and dark chocolate. Include vitamin C rich foods like citrus (tangerines and oranges) as well as strawberries and bell peppers. Have adequate intake of foods containing folate, include dark leafy greens, mushrooms, oranges, whole grains and cereals in your diet.*	26

» Additional Tips are available throughout the report. Focus on areas where you have high red variations.

» These Action Tips are based on your genetic predisposition only. They are intended to support better health. They are not an indication of a problem and do not take into account where your health may be today.

» Consult with a healthcare practitioner before embarking on any major lifestyle changes.

YOUR metalPower ACTION PLAN

AREA TESTED	ACTION TIPS	PAGE
METHYLATION		
FUT2 Methylation - FUT2	*Include healthy sources of foods rich in vitamin B12 in your diet such as eggs, sardines, clams, fortified nutritional yeast, grass-fed meat, and dairy. Consider supplementing with a methylated B vitamin complex. Fiber-rich as well as fermented and prebiotic foods can help support a diverse and healthy gut microbiome.*	31
TCN2 Methylation - TCN2	*Include healthy sources of foods rich in vitamin B12 in your diet such as eggs, sardines, clams, fortified nutritional yeast, grass-fed meat, and dairy. Consider supplementing with a methylated B vitamin complex.*	33
MTRR Methylation - MTRR	*Include healthy sources of foods rich in vitamin B12 in your diet such as eggs, sardines, clams, fortified nutritional yeast, grass-fed meat, and dairy. Ensure adequate intake of trace mineral zinc found in shellfish, seeds and legumes such as lentils, chickpeas and beans. Consider supplementing with a methylated B vitamin complex.*	37
VITAMINS & SUPPLEMENTS		
B2 Vitamin B2 (Riboflavin)	*Increase your consumption of healthy dietary sources of vitamin B2 which include vegetables (especially mushrooms and spinach), brewer's yeast, cereal grains, cheese, eggs, fish and almonds. Consider taking vitamin B2 in a methylated vitamin B complex.*	41
B6 Vitamin B6	*Increase your consumption of good dietary sources of vitamin B6 such as vegetables (especially spinach, bell peppers and cauliflower), bananas, walnuts, cereal grains, legumes, sweet potatoes, sunflower seeds, eggs, fish, fortified nutritional yeast and wheat germ.*	42
Calcium	*Increase your intake of dietary calcium found in dark leafy greens including collard greens and kale. Eat sesame, chia, or poppy seeds, sardines, salmon and tofu, white beans and lentils. Reduce consumption of animal protein and cereal grains to prevent excess excretion of calcium.*	49
Iron Deficiency	*Include good sources of dietary iron in your diet such as beans, peas, lentils and dark leafy greens as well as meat, fish and poultry.*	52

My personal action plan and notes:

HEAVY METAL TOXICITY

Heavy metals are more common in our environment than most of us realize. They can make their way into our bodies through water, air, and food—especially seafood—even if we're not working in an industrial setting. We may even inherit a certain level of metals in-utero at birth. Over time, low-level exposure to certain metals has been linked to a range of health concerns.

Our bodies need small amounts of some metals, like iron, zinc, and copper, to function properly. But others—like lead, arsenic, cadmium, and mercury—can be harmful if they build up. These toxic metals may affect the brain, nervous system, and cellular function, especially when the body has trouble clearing them out.

How much of these metals we retain depends on a mix of factors—age, diet, lifestyle choices and exposures, and more. But genetics also plays a key role. Some people are better equipped at processing and eliminating these metals than others. By looking at how your body handles metals on a genetic level, we can better understand your personal needs and take more tailored steps to support your long-term health.

Metals

YOUR SENSITIVITY AND THE SEVERITY OF HEALTH EFFECTS CAUSED BY HEAVY METALS

Heavy metal exposure is a part of modern life—whether through food, water, air, or certain products we use every day. While small amounts of some metals like copper and zinc are essential for health, others like mercury, cadmium, lead, and arsenic can be harmful when they accumulate in the body over time. The effects of exposure can vary widely from person to person, depending on many factors—including genetics.

Genetic testing provides insight into how your body may process, store, or eliminate these metals. Some people are genetically better equipped to detoxify heavy metals, while others may be more vulnerable to buildup and its potential health effects. Differences in genes that affect liver function, antioxidant protection, and cellular transport can all influence how your body handles toxic metal exposure.

By identifying these genetic patterns, we can take a more personalized approach to minimizing risk and supporting your body's natural defenses. Whether you're looking to understand your sensitivities, make more informed lifestyle choices, or build a targeted wellness plan, genetic testing offers a valuable tool for navigating the hidden burden of heavy metal exposure.

TIPS TO TAKE POWER OVER YOUR HEALTH

If you have a variation in this panel, you may want to consider the following to improve your health:

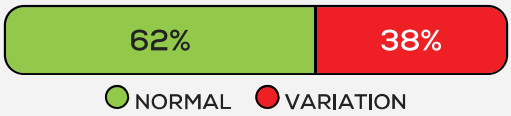
» Test your water source for metal levels. Invest in a high-quality water filtration system to remove heavy metals from drinking water, especially if you live in an area with known contamination issues.

» Be selective about the types of seafood you consume, opting for varieties that are lower in mercury contamination. Avoid marine top feeders, like marlin and swordfish, that are high in heavy metals especially methylmercury because of bioaccumulation. Instead include fish that have shorter lives and are lower on the food chain.

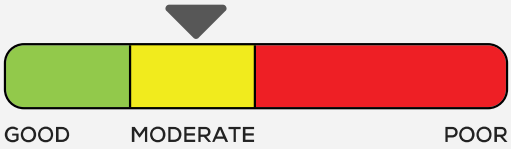
» Avoid arsenic in rice, substitute with barley, multigrain, and oats as preferred nutrition sources.

» Maintain a balanced and nutritious diet rich in antioxidants and nutrients that support detoxification pathways, such as sulfur-

YOUR GENETIC COMPOSITION %



YOUR GENE FUNCTION



You have some increased genetic risk for sensitivity and severity of health effects caused by heavy metals based on these genetic variations.

containing foods (e.g., garlic, onions), cruciferous vegetables (e.g., broccoli, cabbage), and foods high in vitamin C and selenium.

» Engage in regular physical activity to support overall health and promote detoxification through sweating and increased circulation.

» Avoid occupations that increase your chronic contact to heavy metals.

» If you smoke, quit smoking or avoid exposure to secondhand smoke, as tobacco smoke is a significant source of cadmium exposure.

» Take steps to minimize exposure to lead in the home by regularly cleaning dust, and using lead-safe renovation practices.