Toxin Genetics Panel

Identify Genetic Barriers to Toxin Elimination

Dealing with fatigue, weight retention, inflammatory symptoms, or skin issues that don't resolve with diet and lifestyle changes? Your genes may be playing a role.The Toxin Genetics Panel identifies gene variants that impact key detoxification enzymes, offering insight into how efficiently your body processes toxins and manages oxidative stress.

It also highlights where genetic variations may interfere with nutrient pathways, liver clearance, and overall detox function, which can silently contribute to inflammation, hormone imbalances, and chronic symptom burden. If your patients have unexplained symptoms or hit a wall in recovery, this test offers a deeper look at how genetics may be shaping their toxic load.

With clinically relevant insights and targeted recommendations, providers can create a personalized plan to support more efficient detoxification and long-term resilience.

How It Works

The Toxin Genetics Panel is a simple at-home blood test that evaluates key genetic variants involved in detoxification. It analyzes gene variants that affect how well your body neutralizes and clears toxins, including environmental chemicals, medications, and oxidative byproducts. These insights help identify genetic barriers that may impair detox pathways and contribute to chronic inflammation, fatigue, weight challenges, and other persistent symptoms. With easy-to-read visuals and personalized interpretation, your provider can develop a precise strategy to support safer, more effective detoxification.

Why Choose the Toxin Genetics Panel?

- **Explore Potential Contributors to Detox Challenges:** Identifies genetic variants that may impair detox pathways and reduce the body's ability to clear toxins, medications, and oxidative byproducts.
- **Reduce Inflammation and Oxidative Stress:** Highlights SNPs linked to poor antioxidant recycling and liver enzyme activity that can drive chronic inflammation and fatigue.
- **Support Hormone and Toxin Clearance:** Analyzes detox genes that influence estrogen metabolism, bile processing, and toxin elimination under stress or overload.
- **Personalize Nutrition and Lifestyle Support:** Guides targeted interventions based on genetic needs to improve detox efficiency, resilience, and long-term metabolic health.

Genetics Affected By

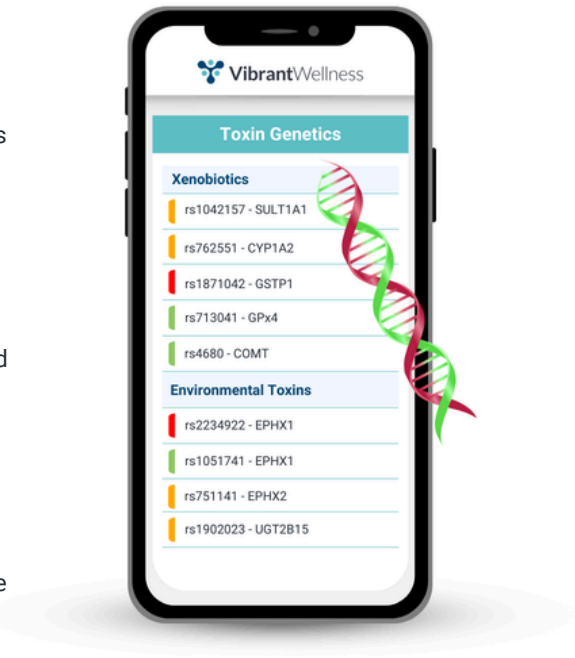
PFAs

Heavy Metals

Environmental Toxins

Key Markers Include:

- **GSTM1, GSTT1, GSTP1 (Detox Enzyme Function):** Variants in these glutathione S-transferase genes may reduce antioxidant capacity and impair phase II detoxification, increasing vulnerability to oxidative stress and toxin accumulation.
- **SOD2, CAT, GPX1 (Oxidative Stress Response):** Key genes neutralizing reactive oxygen species. Polymorphisms here may contribute to inflammation, cellular damage, and poor recovery from toxic exposure.
- **COMT, MTHFR, MTRR (Methylation & Estrogen Metabolism):** Affects methylation efficiency, estrogen clearance, and neurotransmitter balance. Impairment may contribute to hormone imbalance, fatigue, and detox burden.
- **CYP1A1, CYP2C9, CYP2D6 (Phase I Liver Enzymes):** Involved in activating and processing toxins and medications. Reduced function variants may delay clearance and increase sensitivity to drugs or environmental exposures.
- **NQO1, UGT1A1, NAT2 (Phase II & Conjugation Pathways):** Variants in these genes can impair the body's ability to convert and excrete reactive compounds, leading to the buildup of toxins and metabolic byproducts.



The Toxin Genetics Panel analyzes key genetic variants involved in detoxification, oxidative stress, and hormone metabolism to uncover potential causes of fatigue, weight retention, inflammatory symptoms, and chemical sensitivity. It identifies SNPs that impair detox enzyme function, antioxidant recycling, and conjugation pathways, key drivers of toxic burden, chronic inflammation, and impaired recovery.

Who Should Take This Test?

- **Chronic Symptoms That Don't Resolve?** Fatigue, joint pain, skin issues, or poor recovery may be tied to impaired detox capacity. This test helps identify underlying genetic contributors.
- **Tried Detox Protocols Without Lasting Results?** If supplements, saunas, or clean diets aren't enough, your genes may slow your progress. This test reveals key detox enzyme limitations.
- **Struggling with Weight, Hormones, or Sensitivities?** Weight plateaus, estrogen dominance, or chemical reactivity may stem from sluggish detox pathways—this test helps clarify the cause.
- **Living in a High-Toxin Environment or on Medications?** Assess how your genes affect your body processes, environmental exposures, pollutants, and drugs.
- **Focused on Prevention and Longevity?** Get insight into genetic detox risks that can impact long-term resilience, inflammation, and cellular health.

Take the First Step Towards Better Health

If you're dealing with fatigue, weight gain, inflammation, or chemical sensitivity, your detox genetics could be a key piece of the puzzle. The Toxin Genetics Panel delivers clear answers and personalized insights to help support more efficient detoxification. Talk to your provider and take the next step toward lasting energy, balance, and resilience.

Limitations
Please note the information provided by Vibrant Wellness is intended solely for research and informational purposes to help inform lifestyle choices aimed at potential risk mitigation. The information is not intended to be used by the patient for any diagnostic purpose and is not a substitute for medical advice by a healthcare practitioner. Please consult a licensed healthcare practitioner for any questions regarding diagnosis, prevention, or treatment of any disease or health assessment.

The test is not available in NY State.

Regulatory Disclaimer
Please note the information provided by Vibrant Wellness is intended solely for research and informational purposes to help inform lifestyle choices aimed at potential risk mitigation. The tests were developed, and their performance characteristics were determined by Vibrant America and Vibrant Genomics. They have not been cleared or approved by US Food and Drug Administration. The laboratory is certified under the Clinical Laboratory Improvements Amendments (CLIA) as qualified to perform high complexity testing. The laboratory is also in compliance with College of American Pathologists (CAP) regulations and New York State Department of Health (NYSDOH) regulations.