

Methylation Panel

Activate Better Health Through Targeted Methylation Insights

Feeling low on energy, dealing with mood swings, or experiencing chronic inflammation? Your methylation pathways may be the missing link. The Methylation Panel analyzes key genetic and biochemical markers to uncover how efficiently your body performs critical functions like detoxification, neurotransmitter synthesis, cardiovascular protection, and DNA repair.

Disruptions in methylation can silently impact energy metabolism, immune function, brain health, and hormone regulation. This test reveals imbalances in B-vitamin status, methylation cycle enzymes, and related cofactors that may contribute to symptoms like fatigue, anxiety, elevated homocysteine, poor focus, or increased toxic burden.

With clear insights into your body's biochemical pathways, your provider can design a targeted plan to support methylation balance, promote longevity, and optimize whole-body health.

How It Works

The Methylation Panel is a simple blood test that comprehensively views your body's methylation pathways and nutritional status. It analyzes key enzymes, genes, and nutrient cofactors involved in detoxification, hormone metabolism, cardiovascular protection, and neurotransmitter balance. It also evaluates B-vitamin levels, methyl donors, and related biomarkers influencing mood, energy, and longevity. With detailed visuals and personalized insights, your provider can pinpoint specific methylation imbalances and create a targeted plan to support optimal function, reduce inflammation, and enhance overall well-being.

Why Choose the Methylation Panel?

- **Reveal Hidden Biochemical Imbalances:** Identifies deficiencies and functional blocks in the methylation cycle that may drive fatigue, poor focus, mood instability, and immune challenges.
- **Support Detoxification & Hormone Regulation:** Evaluates pathways critical for estrogen metabolism, toxin clearance, and stress response to guide more personalized support strategies.
- **Protect Heart & Brain Health:** Assesses homocysteine and related cardiovascular risk markers tied to methylation function, oxidative stress, and neural repair.
- **Promote Longevity & Genetic Expression:** Provides insights into DNA methylation and nutrient cofactors needed to support healthy aging, cellular repair, and long-term wellness.

GNMT

⊕⊕ T/T

MTHFR

⊕⊖ C/T

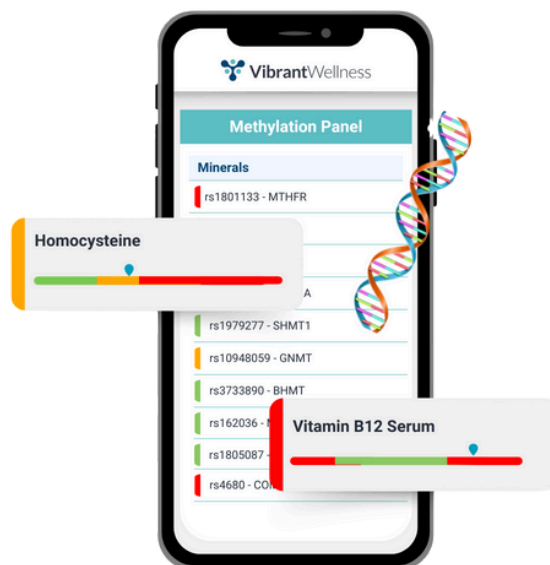
Homocysteine (μmol/L)

11 



Key Markers Include:

- **MTHFR & MTR/MTRR (B-Vitamin Processing):** Genes that affect how your body uses folate and B-vitamins, which are important for energy, mood, and overall health.
- **COMT (Stress & Mood Balance):** Helps break down “feel-good” brain chemicals and stress hormones, supporting emotional well-being and focus.
- **BHMT, GNMT & MAT1A (Methylation Support):** Genes that keep your body’s methylation process running smoothly, important for heart, brain, and liver health.
- **Homocysteine (Heart & Brain Health):** A blood marker that, when high, can increase the risk for heart problems, memory issues, and inflammation.
- **Vitamin B9 (Folate) & B12:** Essential vitamins that keep your blood, nerves, and energy systems healthy.
- **GSTP1, SOD2 & NOS3 (Detox & Antioxidants):** Support your body’s ability to clear toxins, reduce oxidative stress, and protect your cells from damage.



The Methylation Panel analyzes functional and genetic markers involved in methylation, detoxification, neurotransmitter balance, and cardiovascular protection. It uncovers imbalances that may be contributing to fatigue, mood changes, hormone disruption, inflammation, and cognitive decline. By identifying nutrient deficiencies, enzyme inefficiencies, and metabolic roadblocks, this test reveals core contributors to chronic symptoms and long-term health risks.

Who Should Take This Test?

- **Feeling Constantly Fatigued or Mentally Drained?** Low energy, brain fog, or poor stress tolerance may point to methylation imbalances. This test helps uncover what’s holding you back.
- **Struggling with Mood, Sleep, or Hormone Fluctuations?** Anxiety, irritability, insomnia, or hormonal symptoms may be linked to impaired detox or neurotransmitter metabolism.
- **Managing Cardiovascular or Inflammatory Concerns?** Elevated homocysteine, chronic inflammation, or family history of heart disease are signs this panel can offer deeper insights.
- **Dealing with Toxin Sensitivity or Low B Vitamins?** This test identifies whether your detox pathways are overburdened or if key nutrients like B9 and B12 are insufficient.
- **Focused on Healthy Aging or Preventive Wellness?** For those optimizing longevity, the Methylation Panel can help fine-tune cellular health, DNA repair, and metabolic resilience.

Take the First Step Towards Better Health

If you’re experiencing fatigue, mood swings, brain fog, or trouble detoxing, your methylation pathways might be the missing link. The Methylation Panel delivers clear insights and personalized data to help optimize how your body processes nutrients, hormones, and toxins. Talk to your healthcare provider today and take the first step toward better energy, a balanced mood, and long-term wellness from the inside out.

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.