



Whole Blood Nutrient Profile

Key Clinical Messages

What is the Whole Blood Nutrient Profile?

The Whole Blood Nutrient Profile is a microtube blood test that provides a snapshot of individual micronutrient needs by measuring nutrients in whole blood. Whole blood is a mix of capillary blood, arterial blood, interstitial fluid, and extracellular fluid. It measures vitamins, minerals, antioxidants, metabolites, and amino acids, with the option for a fatty acid add-on. This test uses at-home sample collection, making it more convenient for patients.

Order the Whole Blood Nutrient Profile?

The Whole Blood Nutrient Profile detects nutrient deficiencies, insufficiencies, and toxicities that may impact health. Micronutrients are essential for every system in the body and are crucial for overall well-being as they affect energy levels, immune function, cognitive function, and various other physiological processes.

Nutrient abnormalities are associated with many chronic diseases, including cardiovascular disease, immune dysfunction, hormonal abnormalities, metabolic dysfunction, neurological imbalances, and more. Identifying and addressing micronutrient abnormalities is a critical step in managing chronic conditions and promoting optimized physical function.

The Whole Blood Nutrient Profile can provide key insights into your patients' nutrient status, enabling personalized interventions and optimal patient care.

Whole Blood Nutrient Profile vs. Micronutrient 3.0: Key Differences

The Whole Blood Nutrient Profile is an at-home test that assesses nutrient status in the blood by measuring nutrients in a mix of capillary blood, arterial blood, interstitial fluid, and extracellular fluid. This provides micronutrient data similar to a serum nutrient assessment.

On the other hand, the Micronutrient 3.0 assesses micronutrients both intracellularly (WBC and RBC, depending on the nutrient) and extracellularly. The Micronutrient 3.0 tests also includes more markers and requires phlebotomy.



Which Patients Benefit from This Test?

Conditions and symptoms that may benefit from the Whole Blood Nutrient Profile include:

- **Chronic inflammatory conditions:** Conditions characterized by chronic inflammation, such as rheumatoid arthritis, inflammatory bowel disease (IBD), or psoriasis.
- **Autoimmune diseases:** Conditions like Celiac disease, Crohn's disease, or Hashimoto's thyroiditis.
- **Nutrient malabsorption:** Conditions that impair nutrient absorption, such as irritable bowel syndrome (IBS), lactose intolerance, or gastric bypass surgery.
- **Restricted diets:** Vegetarian or vegan diets, as well as other restricted diets that may lead to nutrient deficiencies.
- **Athletes and active individuals:** Those engaged in regular intense physical activity that may increase nutrient demands.
- **Preconception and pregnancy:** Women planning to conceive or who are pregnant, as adequate nutrient status is vital for fetal development and maternal well-being.
- **Older adults:** Aging-related changes in nutrient absorption and metabolism make older adults more susceptible to deficiencies.
- **Fatigue and low energy:** Persistent fatigue, lack of energy, and poor exercise tolerance.
- **Mood disorders:** Symptoms of depression, anxiety, and mood swings.
- **Cognitive impairment:** Memory problems, difficulty concentrating, and brain fog.
- **Digestive abnormalities:** Digestive issues like diarrhea, constipation, bloating, or abdominal pain.
- **Weakened immune system:** Frequent infections, slow wound healing, or immune system dysfunction.
- **Skin problems:** Skin issues like dryness, dermatitis, or poor wound healing.
- **Numbness or tingling:** Sensations of numbness or tingling in the extremities.
- **Fluctuating weight:** Unexplained weight gain or loss, or difficulty maintaining a healthy weight.

Sample Report

Vitamins				
Test Name	Current	Previous	Result	Reference
Folate (ng/mL)	532.4			≥498.0
Vitamin A (mcg/dL)	53.2			40.0-90.0
Vitamin B1 (nmol/L)	158.1			70.0-180.0
Vitamin B2 (mcg/L)	265.6			137.0-290.0
Vitamin B3 (ng/mL)	3.3			
Vitamin B5 (mcg/L)	90.3			
Vitamin B6 (ng/mL)	14.6			
Vitamin C (mg/dL)	0.3			
Vitamin D3 (mcg/mL)	2.9			
Vitamin E (mg/L)	20.3			

Minerals				
Test Name	Current	Previous	Result	Reference
Chromium (ng/mL)	0.50			0.1-1.2
Copper (mcg/mL)	1.4			0.5-1.5
Copper to Zinc Ratio	0.19			0.15-0.41
Iron (mg/dL)	90.8			88.0-117.0

Why Vibrant?

Lab Methodology

The Whole Blood Nutrient Profile uses reliable liquid chromatography–mass spectrometry (LC-MS) and inductively coupled mass spectrometry (ICP-MS) to measure micronutrient status.

We're proud to be a CLIA-certified and CAP-accredited lab.

Which Tests Pair Well with the Whole Blood Nutrient Test?

Gut Zoomer: To assess for any digestive dysfunction that may play a role in micronutrient deficiencies or insufficiencies.

Test Prep for Microtube Blood Collection

Collection: One (1) microtube.

Hydration: No restrictions. It's recommended to drink a glass of water 30 minutes before collecting sample.

Fasting/Dietary Restrictions: Not required.

Medication/Supplement Restrictions: None.

Other Restrictions: A warm shower is required before collection.

**This is very important to stimulate blood flow to the hands. Wash hands in warm water for at least 1 minute right before the finger-prick.*

What Markers Are Included on the Whole Blood Nutrient Profile Test?

The Whole Blood Nutrient Profile tests for vitamins, minerals, amino acids, antioxidants, and metabolites, with the option for an omega fatty acids add-on.

Whole Blood Nutrient Profile Markers		
Vitamins	Vitamin A	Vitamin C
	Vitamin B1	Vitamin D3
	Vitamin B2	Vitamin E
	Vitamin B3	Vitamin K1
	Vitamin B5	Vitamin K2
	Vitamin B6	Folate
Minerals	Calcium	Iron
	Chromium	Magnesium
	Copper	Manganese
	Copper to Zinc Ratio	Zinc
Amino Acids	Arginine	Isoleucine
	Asparagine	Leucine
	Citrulline	Serine
	Glutamine	Valine
Antioxidants	Coenzyme Q10	Glutathione
	Cysteine	Selenium
Metabolites	Carnitine	Inositol
	Choline	Methylmalonic acid (MMA)
Omega Fatty Acids (Optional Add-On)	Docosahexaenoic acid (DHA)	Linoleic acid (LA)
	Eicosapentaenoic acid (EPA)	Arachidonic acid (AA)
	Docosapentaenoic acid (DPA)	Total Omega 6%
	Total Omega 3%	AA/EPA Ratio
	Omega 3 Index	Omega 3/Omega 6 Ratio

Regulatory Statement:

This test has been laboratory developed and their performance characteristics determined by Vibrant America LLC, a CLIA-certified laboratory performing the test CLIA#:05D2078809. The test has not been cleared or approved by the U.S. Food and Drug Administration (FDA). Although FDA does not currently clear or approve laboratory-developed tests in the U.S., certification of the laboratory is required under CLIA to ensure the quality and validity of the tests.

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