



CLINICIAN INFORMATION



A MORE COMPLETE ASSESSMENT OF YOUR PATIENT'S HEALTH

The **ION Profile**® is a comprehensive nutritional evaluation that assesses a patient's functional need for antioxidants, B-vitamins, minerals, essential fatty acids, amino acids, and other select nutrients. Genova offers the **ION Profile with 40 Amino Acids** for a more complete assessment of the amino acids. Additionally, the Cardio ION Profile is ideal for patients with risk factors for cardiovascular disease (CVD).

The ION Profile combines the following test profiles:

- **The Amino Acid Profile** assesses essential and non-essential amino acids and intermediates
- **Homocysteine** is an important risk factor for CVD
- **Nutrient & Toxic Element Profiles** identify a patient's toxic burden and mineral status
- **Coenzyme Q10 Plus Vitamins** measure vitamins involved in antioxidant functions
- **Oxidation Markers** measure oxidative damage to lipid membranes and DNA
- **Fatty Acid Profile** identifies fatty acids that impact inflammation and cardiovascular health
- **Organix® Profile** measures organic acids related to the citric acid cycle and mitochondrial function, neurotransmitter metabolism, vitamin status, detoxification and dysbiosis

Why Use the ION Profile?

Over time, functional nutritional inadequacies can contribute to a variety of chronic health conditions. The ION Profile measures more than 150 biomarkers that provide insight into a patient's health. Common clinical indications for ION testing include:

- Mood Disorders¹⁻⁶
- Cardiovascular Disease^{7,8}
- Fatigue⁹⁻¹²
- Obesity, Diabetes¹³⁻¹⁶
- Athletes^{17,18}
- Digestive Dysfunction

The ION Results Report:

Analyte Pattern Analysis: Organizes results into related functional categories to understand the patient's major areas of focus.

Supplement Recommendation Summary: Synthesizes complex biochemistry into actionable treatment options personalized for each patient.



MOOD DISORDERS



FATIGUE



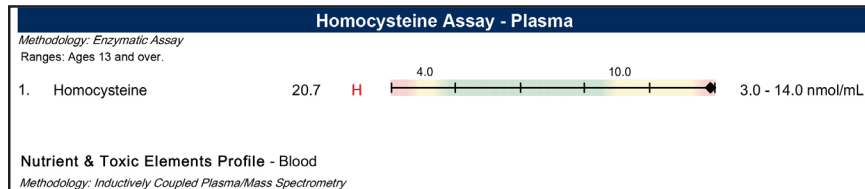
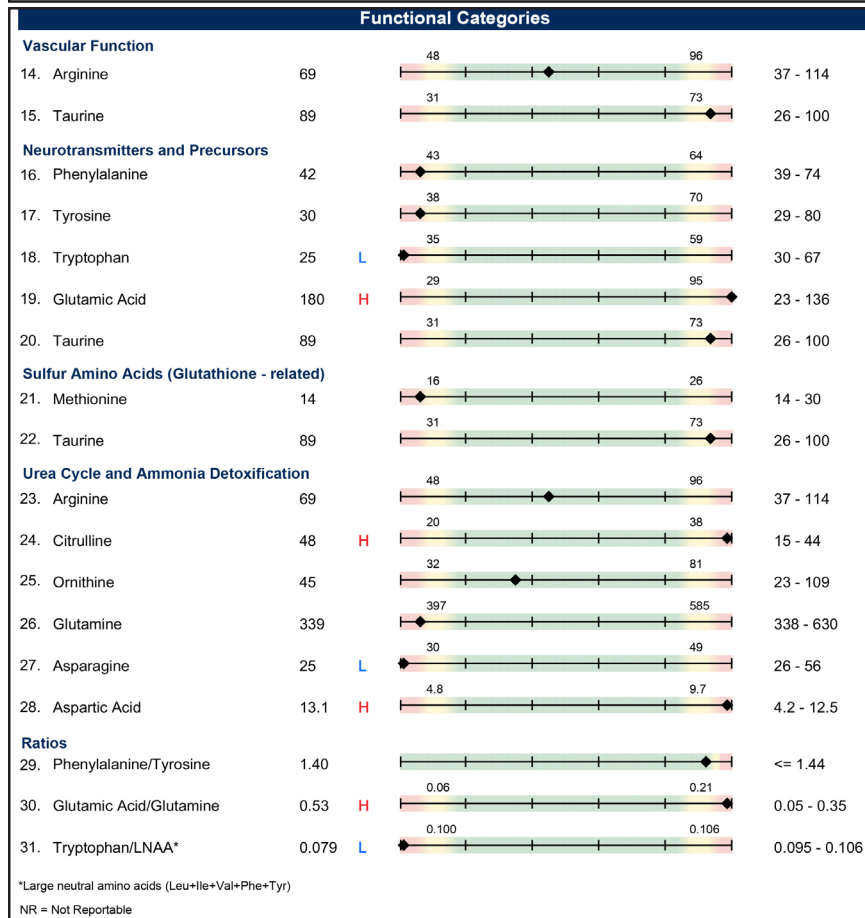
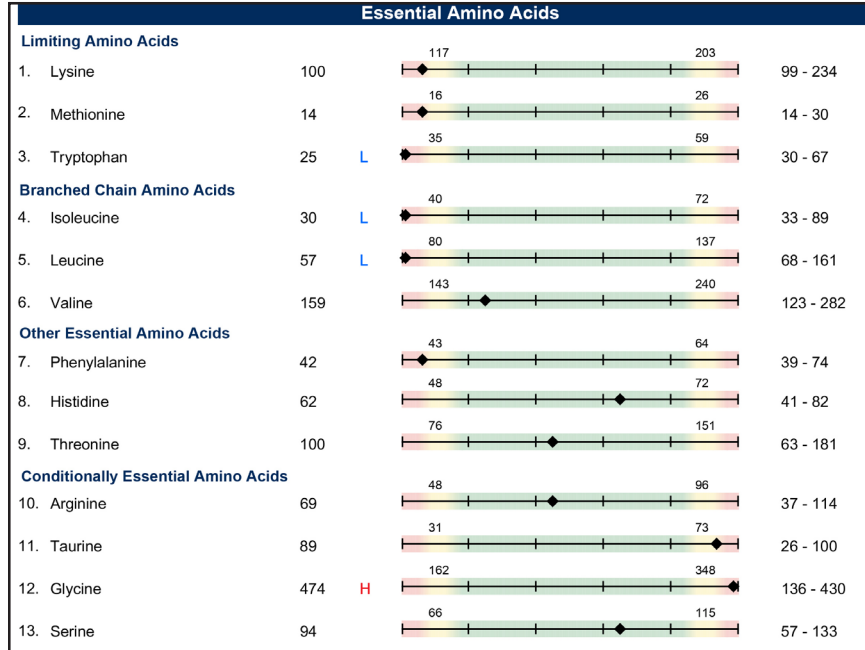
WEIGHT ISSUES



IMPAIRED NUTRITIONAL STATUS

READER-FRIENDLY REPORTS

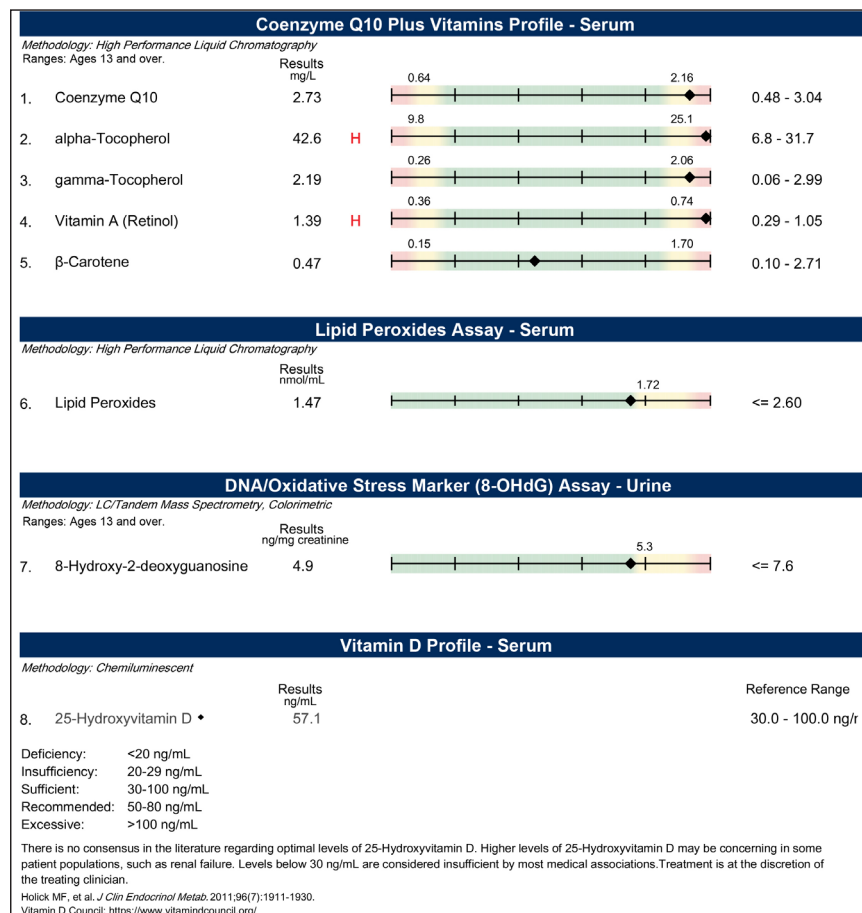
Amino Acids



Nutrient & Toxic Elements



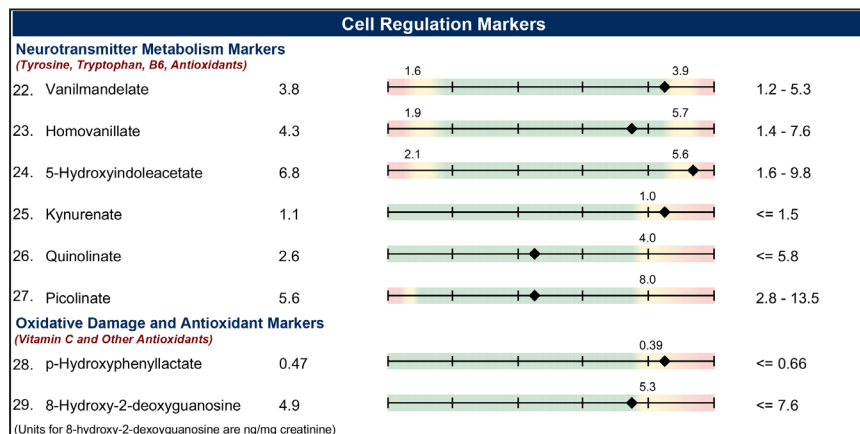
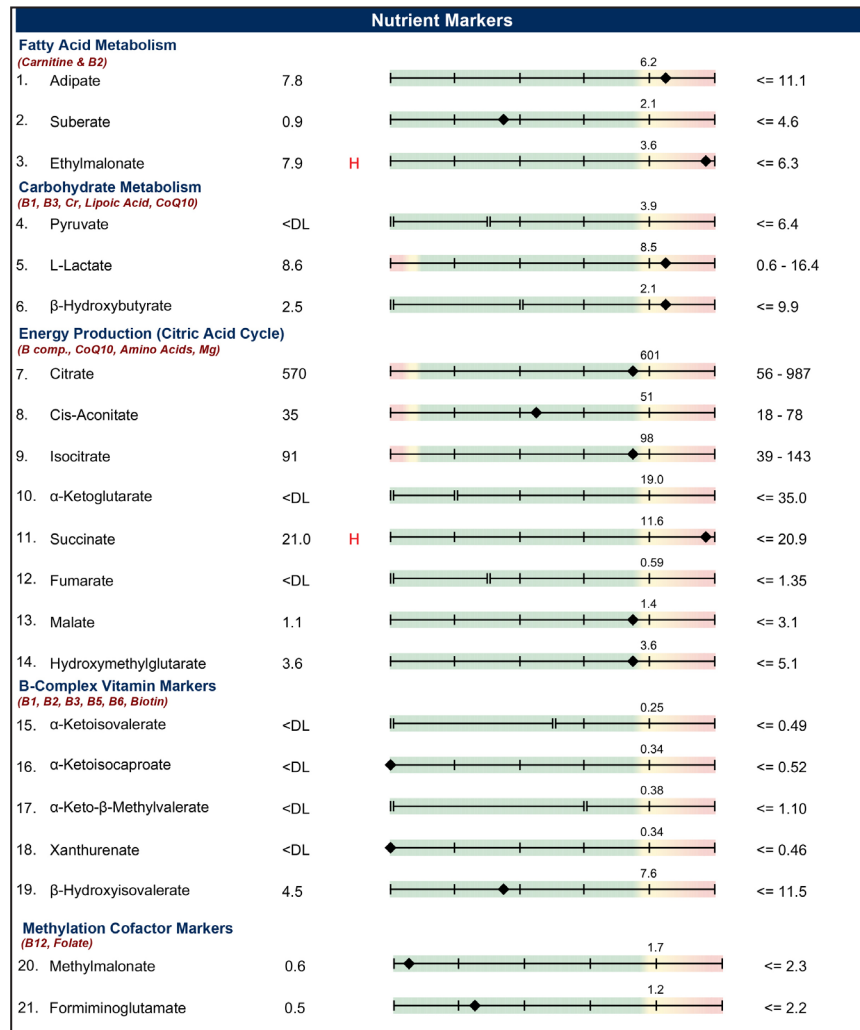
Coenzyme Q10 Plus Vitamins



READER-FRIENDLY REPORTS

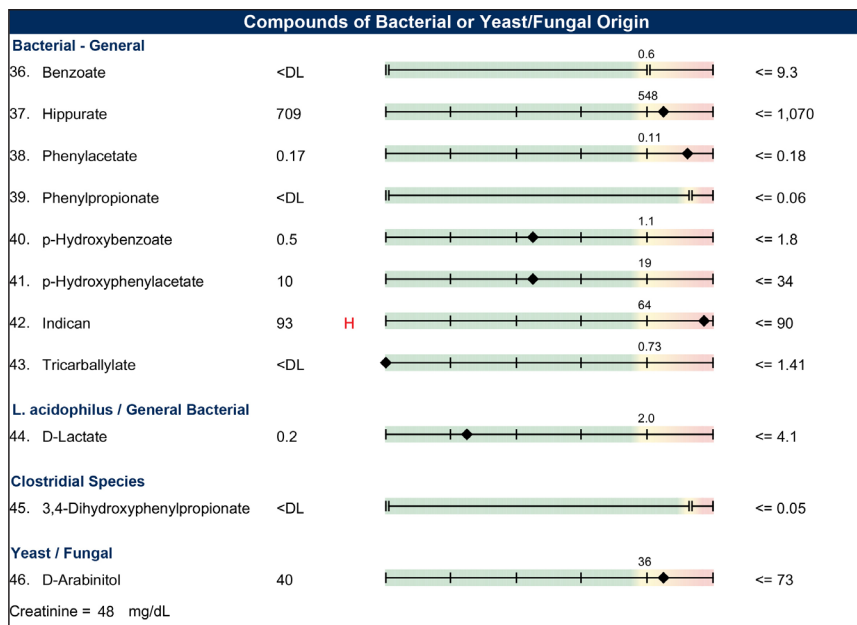
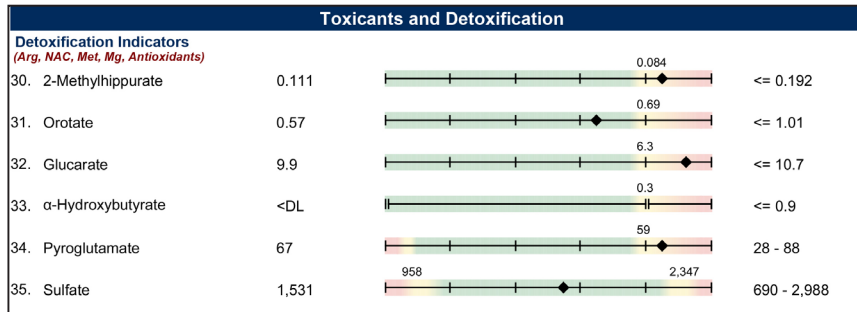
Fatty Acids





READER-FRIENDLY REPORTS

● Organic Acids Continued



● Supplement Recommendation Summaries

Customized Vitamin, Mineral, Amino Acid Formulations

Nutrient	Nutrient Need	Clinician Recommendations
Vitamin C	Low: 250-500 mg	
Vitamin B-1 (Thiamin)	Optional: 0-10 mg	
Vitamin B-2 (Riboflavin)	Low: 10-25 mg	
Vitamin B-3 (Niacin)	Optional: 0-10 mg	
Vitamin B-5 (Pantothenic Acid)	Optional: 0-10 mg	
Vitamin B-6 (Pyridoxine)	Moderate: 25-50 mg	
Vitamin B-12 (Cobalamin)	Moderate: 250-500 mcg	
Folic Acid	Low: 250-500 mcg	
Magnesium	Moderate: 200-300 mg	
Zinc	Optional: 0-10 mg	
Black Currant Oil/Evening Primrose Oil	Optional	
Carnitine	Low: 100-250 mg	
Coenzyme Q10	Moderate: 60-100 mg	
Lipoic Acid	Optional: 0-100 mg	
N-Acetylcysteine	Optional: 0-200 mg	
Need for other antioxidants	Optional	
L-Glutamine	Low: 500-1000 mg	
L-Isoleucine	Moderate: 500-750 mg	
L-Leucine	Moderate: 1000-2000 mg	
L-Lysine	Low: 500-1000 mg	
L-Methionine	Low: 250-500 mg	
L-Phenylalanine	Low: 250-500 mg	
L-Tryptophan	Moderate: 500-1000 mg	
L-Tyrosine	Low: 250-500 mg	

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ION Profile – Analytes

Analyte Groups	ION Profile/ ION Profile NY	ION w/ Amino Acids 40/ ION w/ Amino Acids 40 NY
#0010 and #0011 AMINO ACIDS – PLASMA		
Limiting Amino Acids	√	√
Branched Chain Amino Acids	√	√
Other Essential Amino Acids	√	√
Conditionally Essential Amino Acids	√	√
Vascular Function	√	√
Neurotransmitters and Precursors	√	√
Sulfur Amino Acids (Glutathione - related)	√	√
Urea Cycle and Ammonia Detoxification	√	√
Ratios	√	√
Vitamin B6 Status Markers		√
Glycine, Serine and Related Amino Acids		√
Collagen - Related Amino Acids		√
DNA (Thymine) Degradation		√
β-Amino Acids and Derivatives		√
Muscle-Specific Amino Acids		√
#0093 HOMOCYSTEINE – SERUM	√	√
#0091 ORGANIX – URINE†		
Nutrient Markers	√	√
Cell Regulation Markers	√	√
Toxicants And Detoxification	√	√
Compounds Of Bacterial Or Yeast/Fungal Origin	√	√
#0040 FATTY ACIDS – PLASMA		
Polyunsaturated Omega-3	√	√
Polyunsaturated Omega-6	√	√
Polyunsaturated Omega-9	√	√
Monounsaturated	√	√
Saturated	√	√
Odd Chain	√	√
Trans	√	√
Ratios	√	√
#0022 NUTRIENT AND TOXIC ELEMENTS – RBC, PLASMA, URINE		
Nutrient Elements	√	√
Toxic Elements†	√	√
#0033 COQ10 PLUS VITAMINS – SERUM†	√	√
#0032 VITAMIN D – SERUM	√	√
#0051 LIPID PEROXIDES – SERUM	√	√
#0087 8-HYDROXY-2 DEOXYGUANOSINE – URINE†	√	√

† D-Arabinitol, Lead, Gamma tocopherol, L-Lactate, D-Lactate, Picolinate and 8OHDG are not available in New York

● ION Profile – Blood & Urine

- #0090 ION Profile
- #0190 ION Profile NY
- #0090 ION Pediatric Profile
- #0190 ION Pediatric Profile NY
- #0490 ION Profile with Amino Acids 40
- #0590 ION Profile with Amino Acids 40 NY

● Add-on Tests Available for the ION Profile

- #0068 Chemistries
- #0088 Neopterin/Biopterin Profile
- #0031 Vitamin K Assay

● ION Pediatric Profile

The ION Profile is also available in a pediatric format with modified specimen collection procedures. For more information on Pediatric Profiles please visit our website at: www.gdx.net



● Specimen Requirements

- Serum, ~9 ml total (3 tubes, 3 ml each), frozen
- Plasma, 2.5–3 ml, frozen
- Whole Blood, room temperature
- Overnight Urine, 12 ml, frozen

● Value-added Services:

- Medical Education Consultations
- Online Resources
- Educational Webinars
- Convenient Billing Options

