



# *Chronically Ill Patients Want an Answer, Not a Label*

Identifying the cause of chronic illness is the first step toward achieving a favorable outcome. Integrative clinicians rely on the **Organix™ Profile** to reveal the nutritional and metabolic basis of patient symptoms, just as traditional practitioners might use a serum chemistry to establish a diagnostic baseline. The Organix Profile provides a view into the body's cellular metabolic processes and the efficiency of metabolic function. Identifying metabolic blocks that can be treated nutritionally allows individual tailoring of interventions that maximize patient responses and lead to improved patient outcomes.

Organic acids are metabolic intermediates produced in pathways of central energy production, detoxification, neurotransmitter breakdown, or intestinal microbial activity. Accumulation of specific organic acids in urine often signals a metabolic inhibition or block. This may be due to a nutrient deficiency, an inherited enzyme deficit, toxic build-up, or drug effect.

*From a single urine specimen, the Organix Profile provides important information in the areas of:*

- Vitamin and mineral insufficiencies
- Amino acid insufficiencies like carnitine and NAC
- Oxidative damage and anti-oxidant sufficiency markers
- Indicators to assess detoxification sufficiency
- The best functional markers of B-complex deficiency
- Neurotransmitter metabolites to assess CNS function
- Mitochondrial energy production assessment via citric acid cycle components
- Methylation sufficiency status
- Lipoic acid and CoQ10 sufficiency markers
- Specific dysbiosis markers for bacterial and yeast overgrowth

### *The Organix Profile features...*

- The broadest array of clinically relevant analytes, many available only in the **Organix Profile**, including:
  - Xanthurenate, a specific marker of vitamin B<sub>6</sub> deficiency
  - Formiminoglutamate (FIGLU), an indicator of folic acid insufficiency
  - Quinolinate, a highly neurotoxic L-tryptophan metabolite
  - 8-OH-deoxyguanosine, a specific product of oxidative damage to DNA
  - D-Lactate, a sensitive marker of *L. acidophilus* overgrowth and potential neurotoxin
  - D-Arabinitol, a well-documented marker of *Candida* sp. dysbiosis
- Metamatrix innovation. In the **Organix Profile**, we've replaced less accurate GC/MS methods with LC/MS/MS, assuring greater reliability.
- Metamatrix quality and reliability backed by over 20 years of experience.



**Organix™**  
*... the Starting Point*

# Organix™ Profile

## Test #0091 - Organix™ Profile

### Specimen Requirements

12 ml of overnight urine, frozen

**Method:** LC/MS-MS, Spectrophotometry

**Turnaround Time:** 8-14 days, 14 days average

### CPT Codes

CPT #	Description
82507	Citrate
82570	Creatinine
83150	Homovanillate
83497	5-Hydroxyindoleacetate
83789	LC/MS-MS, NES; quantitative: 8-Hydroxy-2'-deoxyguanosine
83605	Lactate
84210	Pyruvate
84392	Sulfate
84585	Vanilmandelate
83921x37	Organic acid, single, quantitative

### Analytes Reported

#### Fatty Acid Metabolism

Adipate  
Suberate  
Ethylmalonate

#### Carbohydrate Metabolism

Pyruvate  
Lactate  
Beta-Hydroxybutyrate

#### Energy Production (Citric Acid Cycle)

Citrate  
*cis*-Aconitate  
Isocitrate  
Alpha-Ketoglutarate  
Succinate  
Fumarate  
Malate  
Hydroxymethylglutarate

#### B-Complex Vitamin Markers

Alpha-Ketoisovalerate  
Alpha-Ketoisocaproate  
Alpha-Keto-Beta-Methylvalerate  
Xanthurenate  
Beta-Hydroxyisovalerate

#### Methylation Cofactor Markers

Methylmalonate  
Formiminoglutamate

#### Neurotransmitter

#### Metabolism Markers

Vanilmandelate  
Homovanillate  
5-Hydroxyindoleacetate  
Kynurenate  
Quinolate

#### Oxidative Damage and Antioxidant Markers

p-Hydroxyphenyllactate  
8-Hydroxy-2'-deoxyguanosine

#### Detoxification Indicators

2-Methylhippurate  
Orotate  
Glucarate  
Alpha-Hydroxybutyrate  
Pyroglutamate  
Sulfate

#### Intestinal Dysbiosis - Bacterial

Benzoate  
Hippurate  
Phenylacetate  
Phenylpropionate  
p-Hydroxybenzoate  
p-Hydroxyphenylacetate  
Indican  
Tricarballoylate

#### Intestinal Dysbiosis - L. acidophilus

D-Lactate

#### Intestinal Dysbiosis - Clostridial

Dihydroxyphenylpropionate

#### Intestinal Dysbiosis - Yeast/Fungal

D-Arabinitol



**Innovative Solutions for Integrative Clinicians<sup>SM</sup>**

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