ORGANIC ACIDS IN URINE

In this test, abnormalities in metabolism of organic acids are measured. The test provides information about metabolites of neurotransmitters, amino acids, fatty acids, energy production (citric acid cycle) and the functioning of certain vitamins and minerals. Besides metabolites of human origin, also certain toxic metabolites of pathogenic micro-organisms that live in the human gut are measured (e.g., candida and clostridia). The following metabolites are determined (only as a panel):

Yeast/ Fungal markers
Citramalic
5-hydroxymethyl-2 furoic
3-oxoglutaric
Furan -2,5-dicarboxylic
Furancarboxylglycine
Tartaric
Arabinose
Carboxycitrnic

Malabsorption and bacterial markers
2-hydroxyphenylacetic
4-hydroxyphenylacetic
Hippuric
3-indoleacetic
HPHPA (Clostridia marker)

Oxalate metabolites
Glyceric
Glycolic
Glycolytic cycle metabolites
Lactic
Pyruvic
2-hydroxybutyric

Krebs Cycle metabolites
Succinic
Fumaric
Malic

Neurotransmitter metabolites
2-hydroxyphenylacetic (5-HIAA)

Pyrimidine metabolites
Uracil
Thymine

Ketone and fatty acid oxidation
Acetoacetic
3-hydroxybutyric

Ethylmalonic
Methylsuccinic

Nutritional markers
Methylmalonic (vitamin B12 marker)

Pyridoxic (vitamin B6)

Indicators of detoxification
Pyroglutamic
Orotic

2-hydroxyhippuric

Amino acid metabolites
2-hydroxyisovaleric
2-oxoisovaleric
3-methyl-2-oxovaleric
2-hydroxyisocaptoic
2-oxoisocaptoic
2-oxo-4-methylbutyric
Mandelic

Phenyllactic

Phenylpyruvic
Homogentisic

4-hydroxyphenyllactic
N-acetylaspartic
Malonic

3-methylglutaric

TEST INDICATIONS
Unexplained severe, unusual or recurrent clinical symptoms
Unexplained birth defects and SIDS (sudden infants death syndrome)
Physical and/or developmental retardation
Frequent infections
Immunodeficiency

Alopecia and/or severe dermatitis
Neurological symptoms
Unexplained periods of nausea and vomiting
Peculiar body odor or urine odor or abnormally colored urine
Psychosis, Autism and other severely abnormal Behavior

COMPLEMENTARY TESTS:
Amino acids (in urine or blood)
Neurotransmitters (in platelets or urine)
Faeces test

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