

Review

Unveiling Metabolic Phenotype Alterations in Anorexia Nervosa through Metabolomics

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SUPPLEMENTARY INFORMATION

Supplementary Table S1. Metabolites altered in human samples of individuals with AN.

Metabolite	Sample	Sign of the alteration	Reference
Glutamine	Plasma/serum	Altered*	[47,48,51]
Glycine	Plasma/serum	Altered*	[47,48,51,55]
Histidine	Plasma/serum	Altered*	[47,48,51]
Leucine	Plasma/serum	Altered*	[47,48,51]
Methionine	Plasma/serum	Altered*	[47–49,51]
Ornithine	Serum	Altered*	[47,48]
Phenylalanine	Plasma/serum & Feces	Altered*	[47,48,51,57,58]
Serine	Plasma/serum & feces	Altered*	[47,48,51,55,58]
Tryptophan	Plasma/serum	Altered*	[47,48,51]
Alanine	Plasma/serum	Altered*	[51,55]
Asparagine	Serum	Altered*	[51]
Betaine	Plasma/serum	Altered*	[49,51]
Allo-isoleucine	Serum	Decreased	[51]
Isoleucine	Serum & feces	Altered*	[37,51]
Proline	Plasma/serum	Altered*	[47,48,51,55]
Taurine	Serum	Altered*	[51]
Tyrosine	Serum & feces	Altered*	[37,51]
Arginine	Plasma/serum	Altered*	[47,48,51]
Aspartate	Serum & feces	Decreased	[51,58]
Valine	Serum & feces	Decreased	[37,51]
Threonine	Serum & feces	Altered*	[37,47,48]
Glutamate	Serum & feces	Altered*	[51, 37]
PC	Plasma	Increased	[47,48]
LPC	Plasma	Increased	[47,48]
SM	Plasma	Increased	[47,48]
Carnitines	Plasma	Altered*	[47,48,51]
FFA	Plasma & feces	Increased	[52,53,56,57]
7 β -Hydroxy-dehydro-epi-androsterone	Plasma	Decreased	[50]
5-androstene-3 β ,7 β ,17 β -triol	Plasma	Decreased	[50]
Pregnenolone sulfate	Plasma	Increased	[50]
20 α -dihydro-pregnenolone sulfate	Plasma	Increased	[50]
Glycerol	Feces	Decreased	[37]
Palmitate	Feces	Decreased	[37]
Glucose	Serum	Decreased	[55]
Hexoses	Serum	Altered*	[47,48]

Allose	Feces	Decreased	[37,58]
Arabinose	Feces	Decreased	[37,58]
Lactose	Feces	Decreased	[37]
Rhamnose	Feces	Decreased	[37,57,58]
Scylloinositol	Feces	Decreased	[37,57,58]
Xylose	Feces	Decreased	[37]
Sorbose	Feces	Decreased	[37]
Tagatose	Feces	Decreased	[37,58]
Fucose	Feces	Decreased	[57,58]
Citrate	Serum	Decreased	[51]
Malate	Serum & feces	Decreased	[37,51]
Succinate	Serum & feces	Altered*	[37,51]
Cis-aconitate	Serum	Decreased	[51]
Hippurate	Serum	Increased	[51]
P-Cresyl sulfate	Serum	Increased	[51]
Indoxyl sulfate	Serum	Increased	[51]
Indole-3-acetate	Serum	Increased	[51]
Phenylacetate	Serum	Increased	[51]
Phenyl sulfate	Serum	Increased	[51]
Guanidinosuccinate	Serum	Increased	[51]
N2-phenylacetylglutamine	Serum	Increased	[51]
Butyrate	Feces	Decreased	[37,54,57,58]
Propionate	Feces	Increased	[37,54,57,58]
Acetate	Feces	Decreased	[37,54,57,58]
GABA	Feces	Decreased	[37,54]
Dopamine	Feces	Decreased	[54]
Serotonin	Feces	Decreased	[54]

**Altered* refers to metabolites that have been found significant, but with different variation: increased in some studies, decreased in others.