

**Supplemental Table 1.** Organic acids profiled by GC/MS. Acids in italics were not detected in any subject and were thus excluded from the statistical analysis.

**Organic Acids Analyzed**

2-Ethyl-3-hydroxypropionic	4-Hydroxybutyric	Lactic
2-Keto-3-methylvaleric	4-Hydroxycyclohexylacetic	Malic
2-Ketoadipic	<i>4-Hydroxyisovaleric</i>	Malonic
2-Ketoglutaric	4-Hydroxyphenylacetic	Methylcitric
2-Ketoisocaproic	4-Hydroxyphenyllactic	Methylmalonic
2-Ketoisovaleric	4-Hydroxyphenylpyruvic	Methylsuccinic
2-Methyl-3-hydroxybutyric	5-Hydroxyhexanoic	<i>Mevalonic</i>
<i>2-Methyl-3-hydroxyvaleric</i>	5-Oxoproline	<i>Mevalonolactone</i>
<i>2-Methylacetoacetic</i>	Acetoacetic	N-acetylaspatic
<i>2-Methylbutyrylglycine</i>	Aconitic	<i>N-acetyltyrosine</i>
<i>2-Hydroxy-3-methylvaleric</i>	Adipic	Octanoic
2-Hydroxyadipic	Azelaic	Orotic
2-Hydroxybutyric	Benzoic	Oxalic
2-Hydroxyglutaric	<i>Butyrylglycine</i>	Phenylacetic
<i>2-Hydroxyisocaproic</i>	Citric	Phenyllactic
2-Hydroxyisovaleric	<i>Decanoic</i>	<i>Phenylpropionylglycine</i>
2-Hydroxyphenylacetic	Ethylmalonic	Phenylpyruvic
3-Methyladipic	Fumaric	Pimelic
<i>3-Methylcrotonylglycine</i>	Glutaconic	Propionylglycine
3-Methylglutaconic	Glutaric	Pyruvic
3-Methylglutaric	Glyceric	Sebacic
3-Hydroxy-3-methylglutaric	Glycolic	Suberic
3-Hydroxyadipic	Glyoxilic	<i>Suberylglycine</i>
3-Hydroxybutyric	<i>Hexanoic</i>	Succinic
3-Hydroxydecanedioic	Hexonylglycine	<i>Succinylacetone</i>
3-Hydroxyglutaric	Hippuric	<i>Thymine</i>
3-Hydroxyisobutyric	<i>Homogenetic</i>	<i>Tigylglycine</i>
3-Hydroxyisovaleric	Homovanillic	Uracil
<i>3-Hydroxyoctanoic</i>	Isobutyrylglycine	Vanillylmandelic
3-Hydroxypropionic	Isocitric	
<i>3-Hydroxyvaleric</i>	Isovalerylglycine	