

Table S4. Results of one-way ANOVA (p-values) and Tukey's HSD post hoc test with 95% confidence interval (p-values adjusted) calculated in R. ^(a) compounds solely present in MM, (b) chemicals found in MM and bacterial supernatants with no statistically significant difference in their concentrations, and (c) exo-metabolites not detected in MM.

Molecules	p-values	p-values adjusted				
		MM/CFN299	MM/CIAT899	MM/CFNEI156	MM/CFN42	MM/CH24-10
Glutamate	5.48 x 10 ⁻¹⁰	2.80 x 10 ⁻¹⁰	4.60 x 10 ⁻⁰⁶	1.78 x 10 ⁻⁰³	4.26 x 10 ⁻⁰⁴	1.07 x 10 ⁻⁰³
Sucrose	2.04 x 10 ⁻⁰⁷	9.51 x 10 ⁻⁰⁸	1.88 x 10 ⁻⁰⁶	1.62 x 10 ⁻⁰³	3.82 x 10 ⁻⁰⁵	4.13 x 10 ⁻⁰⁴
3-Hydroxyisovalerate	1.77 x 10 ⁻⁰³	7.88 x 10 ⁻⁰¹	9.99 x 10 ⁻⁰¹	9.20 x 10 ⁻⁰¹	1.58 x 10 ⁻⁰³	7.90 x 10 ⁻⁰¹
2-Oxoglutarate	4.20 x 10 ⁻⁰⁷	1.45 x 10 ⁻⁰³	7.14 x 10 ⁻⁰¹	1.64 x 10 ⁻⁰²	7.00 x 10 ⁻⁰⁷	1.54 x 10 ⁻⁰²
Homoserine	9.78 x 10 ⁻¹⁰	9.15 x 10 ⁻⁰⁹	6.45 x 10 ⁻⁰¹	2.81 x 10 ⁻⁰¹	1.37 x 10 ⁻⁰²	3.83 x 10 ⁻⁰⁴
Glucose	1.79 x 10 ⁻⁰⁹	3.04 x 10 ⁻⁰⁸	1.75 x 10 ⁻⁰⁷	3.61 x 10 ⁻⁰¹	3.04 x 10 ⁻⁰⁸	9.30 x 10 ⁻⁰⁸
Formate	8.47 x 10 ⁻⁰⁴	2.99 x 10 ⁻⁰³	1.30 x 10 ⁻⁰³	1.06 x 10 ⁻⁰²	5.49 x 10 ⁻⁰¹	2.29 x 10 ⁻⁰¹
Acetate	8.46 x 10 ⁻⁰⁴	8.49 x 10 ⁻⁰¹	8.73 x 10 ⁻⁰⁴	1.97 x 10 ⁻⁰¹	2.23 x 10 ⁻⁰²	9.89 x 10 ⁻⁰¹
Threonine ^(a)	2.37 x 10 ⁻¹¹	-	-	-	-	-
Alanine ^(a)	5.87 x 10 ⁻¹³	-	-	-	-	-
Valine ^(a)	3.77 x 10 ⁻¹⁰	-	-	-	-	-
Ethanol ^(b)	1.58 x 10 ⁻⁰¹	-	-	-	-	-
N,N-Dimethylglycine ^(b)	7.38 x 10 ⁻⁰²	-	-	-	-	-
Pyroglutamate ^(b)	1.44 x 10 ⁻⁰¹	-	-	-	-	-
Trehalose ^(c)	3.90 x 10 ⁻²³	-	-	-	-	-

3-Hydroxy-3-methylglutarate ^(c)	1.16×10^{-20}	-	-	-	-	-	-
Maltose ^(c)	1.87×10^{-14}	-	-	-	-	-	-
Malonate ^(c)	5.41×10^{-12}	-	-	-	-	-	-
Glucose-1-phosphate ^(c)	3.57×10^{-11}	-	-	-	-	-	-
Aspartate ^(c)	4.69×10^{-11}	-	-	-	-	-	-
3-Methylglutarate ^(c)	4.03×10^{-08}	-	-	-	-	-	-
Tartrate ^(c)	3.06×10^{-07}	-	-	-	-	-	-
Gluconate ^(c)	5.50×10^{-07}	-	-	-	-	-	-
S-Adenosylhomocysteine ^(c)	9.50×10^{-07}	-	-	-	-	-	-
Methanol ^(c)	2.60×10^{-06}	-	-	-	-	-	-
3-Hydroxybutyrate ^(c)	4.38×10^{-06}	-	-	-	-	-	-
Ornithine ^(c)	8.97×10^{-06}	-	-	-	-	-	-
Methionine ^(c)	1.78×10^{-05}	-	-	-	-	-	-
Dimethyl sulfone ^(c)	1.97×10^{-05}	-	-	-	-	-	-
Caprylate ^(c)	2.39×10^{-05}	-	-	-	-	-	-
Acetone ^(c)	1.47×10^{-03}	-	-	-	-	-	-
Lactate ^(c)	2.13×10^{-02}	-	-	-	-	-	-