

Profile of gut microbiota and serum metabolites associated with metabolic syndrome in a remote island most afflicted by obesity in Japan

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Supplementary figure legends

Figure S1 Concentration of plasma short chain fatty acids (SCFAs) in NO and OB subjects. **a-d.** SCFA concentrations of acetate, propionate, butyrate, and valerate. **e.** Total concentration of plasma SCFAs. NO; non-obese (blue) (n = 81) and OB; obese (red) (n = 59). Data are shown as median and 25th – 75th percentiles. Data were analyzed using Mann-Whitney *U* test to compare groups.

Figure S2 Concentration of plasma SCFAs in MHO and MUO subjects. **a-d.** SCFA concentrations of acetate, propionate, butyrate, and valerate. **e.** Total concentration of plasma SCFAs. MHO; metabolically healthy obese (light blue) (n = 54) and MUO; metabolically unhealthy obese (orange) (n = 21). Data are shown as median and 25th – 75th percentiles. Data were analyzed using Mann-Whitney *U* test to compare groups.

Figure S3 Correlations between gut microbiota and selected metabolites in subjects with abdominal obesity (n=75) showing Spearman's correlation between gut microbiome (x axis) and metabolites (y axis). Dots represent each individual subject.

Table S1 Measurement conditions of CE-TOFMS

Figure S1

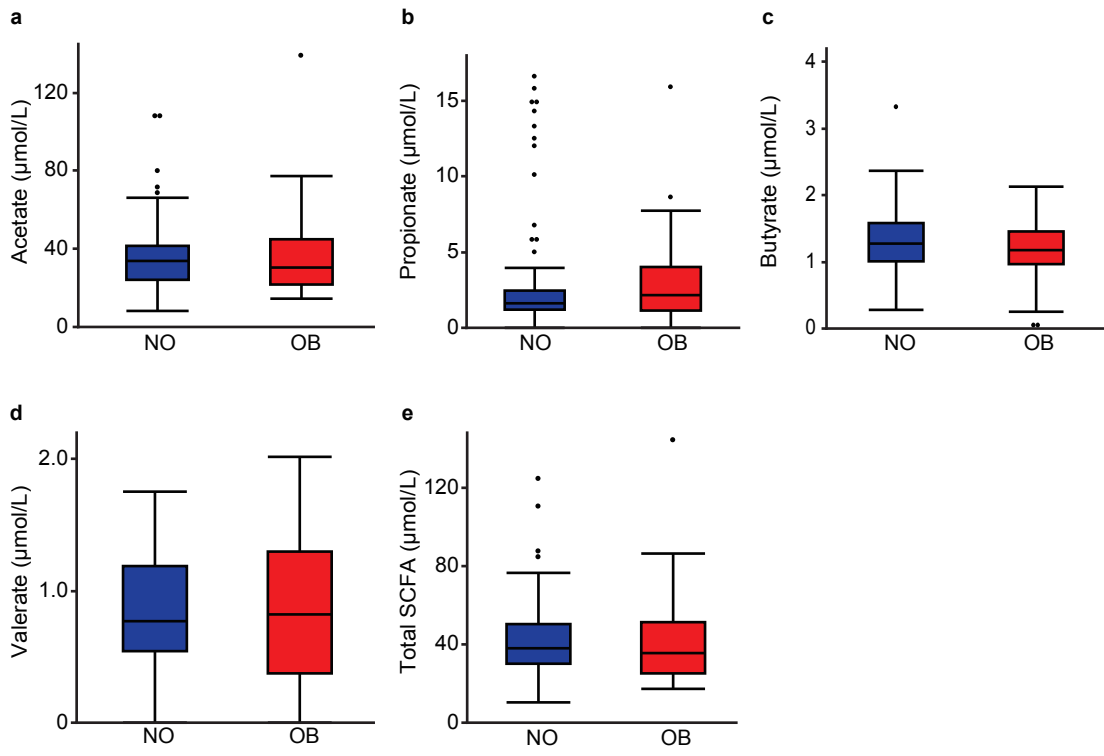


Figure S2

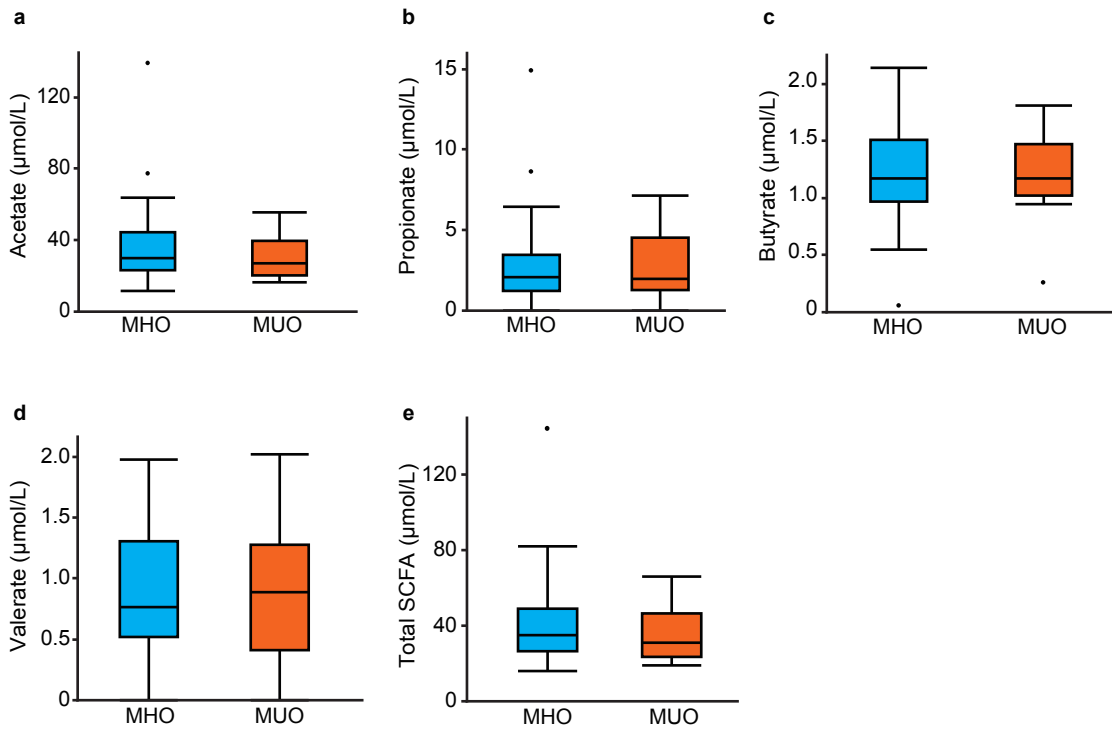


Figure S3

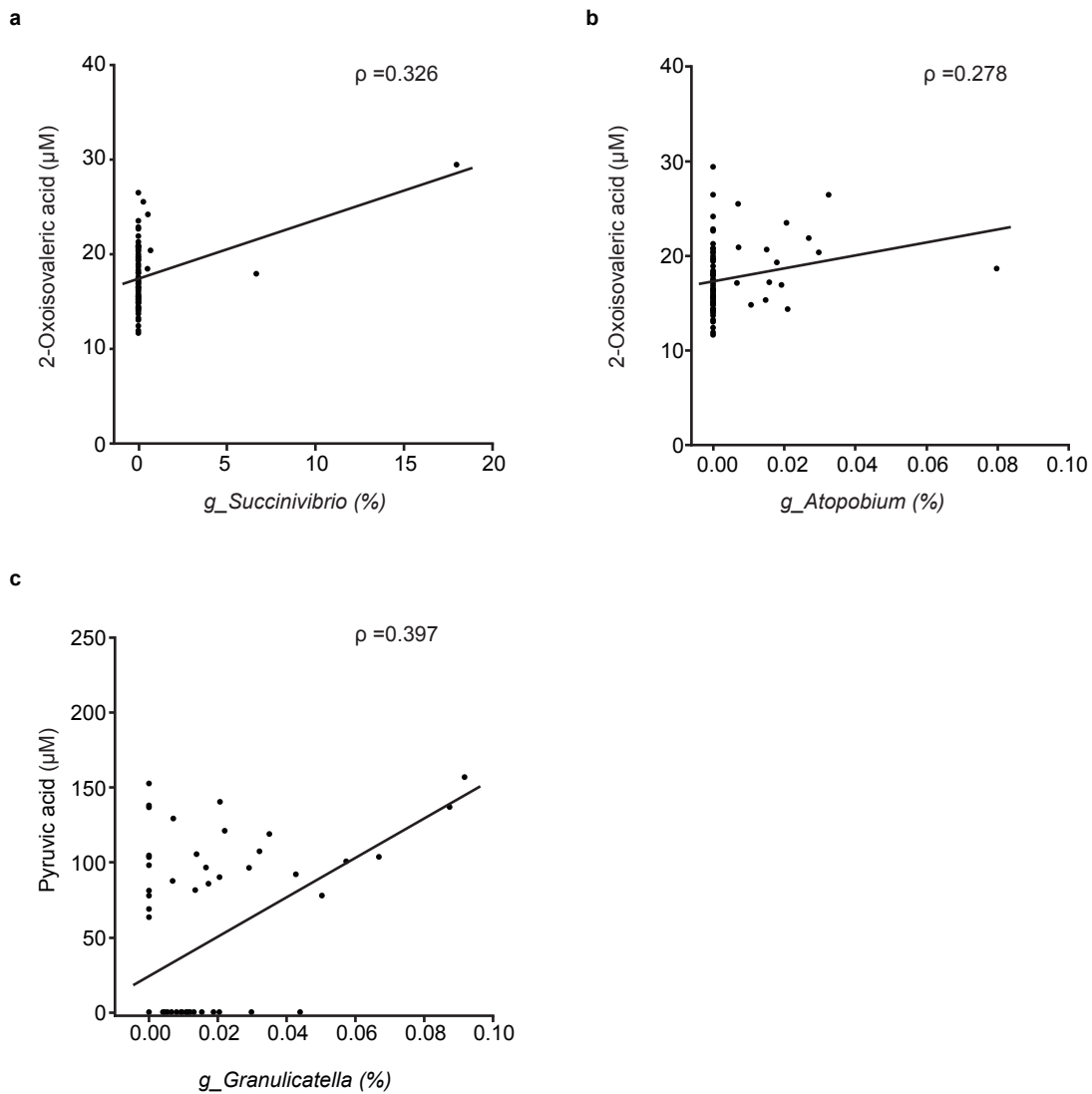


Table S1; Mesuring conditions of CE-TOFMS

	cation	anion
Run buffer	Cation Buffer Solution (p/n :H3301-1001)	Ation Buffer Solution (p/n :I3302-1023)
Rinse buffer	Cation Buffer Solution (p/n :H3301-1001)	Ation Buffer Solution (p/n :I3302-1023)
Sample injection	Pressure injection 50 mbar, 5 sec	Pressure injection 50 mbar, 10 sec
CE voltage	Positive, 30kV	Positive, 30kV
MS ionization	ESI Positive	ESI Negative
MS capillary voltage	4,000V	3,500V
MS scan range	m/z 50-1,000	m/z 50-1,000
Sheath liquid	HMT Sheath Liquid (p/n :H3301-1020)	HMT Sheath Liquid (p/n :H3301-1020)