



Supplementary Fig. 1 The total ion chromatograms of control (1) using intestinal bacteria and medium (A), control (2) using FAI and medium (B), mixed 17 reference standards (C) by LC-Q-TOF/MS in negative ion mode.

Supplementary Table 1 Standard curve and regression equation

SCFA	Regression equation	R ²
Acetic acid	Y=29831.2x-26357.1	0.999
Propionic acid	Y=9268.3x-2682.7	0.999
Butyrate acid	Y=7712.9x-841.6	0.998