

ESI Table 1. Fecal microbial metabolite concentrations and Spearman correlation ( $\rho$ ) with dietary intake variables.<sup>a</sup>

Variable	Acetate	Propionate	Butyrate	SCFA	<i>iso</i> -Butyrate	<i>iso</i> -Valerate	BCFA
Fecal metabolite concentrations (mmol/kg)							
Mean	89.4	15.4	16.0	121	2.15	2.98	5.13
SD	20.1	5.8	4.5	28	0.90	1.58	2.33
Median	89.7	13.9	16.6	117	2.07	2.67	4.49
Minimum	58.3	6.0	8.9	82	1.04	1.22	2.25
Maximum	135	31.5	28.0	195	4.71	7.78	12.5
Nutrients and other compounds (Spearman $\rho$ )							
Cholesterol	0.12	0.23	0.61*	0.23	0.07	-0.04	0.11
Fructose	0.24	0.27	-0.01	0.26	0.52*	-0.16	0.33
Cu	-0.14	-0.31	0.15	-0.11	0.30	0.54*	0.51*
Food categories (Spearman $\rho$ )							
Whole grain	-0.40	-0.45	-0.51*	-0.42	0.10	-0.13	-0.09
Total vegetable	-0.24	-0.35	-0.07	-0.29	0.02	0.52*	0.26
Starchy vegetables not potato	0.01	-0.27	-0.01	-0.04	0.47	0.48	0.58*
Other vegetable	-0.08	-0.22	-0.16	-0.17	0.21	0.54*	0.38
Total fruit	-0.10	0.08	-0.25	-0.02	0.36	-0.55*	-0.16
Eggs	0.15	0.25	0.60*	0.24	0.14	-0.05	0.11
Soy products	0.41	0.25	0.59*	0.40	-0.25	0.35	0.11
Nuts and seeds	0.35	0.19	0.33	0.33	0.38	0.48	0.63**

<sup>a</sup> SCFA, short chain fatty acids; BCFA, branched chain fatty acids; for the correlations, only nutrients and food categories with at least one significant correlation are shown (\* $p<0.05$ ; N=18); other nutrients and food categories analyzed included: energy, total fat, saturated fat, trans fat, monounsaturated fat, omega-3 fatty acids, total carbohydrates, sugars, added sugar, sucrose, starch, dietary fiber, soluble fiber, insoluble fiber, protein, animal protein, plant protein, betaine, phytic acid, oxalic acid, alcohol, caffeine, vitamin A, vitamin D, vitamin E, vitamin K, thiamin, riboflavin, niacin, pantothenic acid, vitamin B-6, folate, vitamin B-12, vitamin C, Ca, Fe, K, Mg, Mn, Na, P, Se, Zn, total grains, refined grain, dark green vegetables, orange and yellow vegetables, potatoes, tomatoes, other vegetables, total fruit, citrus melon and berries, other fruit, total dairy, fluid milk, yogurt, cheese, meat poultry and fish, beef pork veal lamb and game, fish high in omega-3 fatty acids, fish low in omega-3 fatty acids, dry beans and peas, alcoholic beverages.