

Supplementary Table S3: P-values for comparison of metabolite levels by two-way ANOVA. For comparisons between groups Tukey's post hoc tests were used, the results are presented in the figures in the main text.

Panel	Matrix	Metabolite	Diet effect	Access effect	Diet effect x access effect
A	Plasma	Pyridoxal	0.706	<0.001	0.322
	Plasma	Isopyridoxal	0.423	0.001	0.423
	Plasma	Arachidonoyl serotonin	<0.001	0.712	0.024
	Plasma	3-Hydroxykynurenine	<0.001	0.844	0.017
	Plasma	Picolinic acid	0.043	0.004	0.093
	Plasma	2,8-Dihydroxyquinoline-beta-D-glucuronide	0.009	0.159	0.067
	Plasma	N-Methylnicotinamide	0.131	<0.001	0.053
B	Plasma	Tryptophan	0.000	0.183	0.008
	Plasma	5-Hydroxyindoleacetic acid	<0.001	<0.001	<0.001
	Plasma	Kynurenone	<0.001	<0.001	<0.001
	Plasma	Kynurenic acid	<0.001	<0.001	<0.001
	Plasma	3-Hydroxykynurenine	0.044	0.140	0.360
	Plasma	Xanthurenic acid	<0.001	0.220	0.006
	Plasma	Picolinic acid	<0.001	0.007	0.006
	Plasma	Quinolinic acid	<0.001	0.070	<0.001
	Plasma	Nicotinamide	0.896	0.509	0.219
	Hippocampus	Tryptophan	0.123	0.749	0.212
C	Hippocampus	Kynurenone	<0.001	0.005	0.002
	Hippocampus	Xanthurenic acid	0.579	0.543	0.934
	Hippocampus	Picolinic acid	0.113	0.217	0.476
	Hippocampus	Nicotinamide	0.897	0.030	0.903