Table S3. Microbiota (P42 and P180) at several taxonomic levels correlated with fatty acid profiles in erythrocytes, liver and hippocampus (P42 and P180 respectively). Correlations with 0.7 < rho < -0.7 are displayed.

Hippocampus	Taxonomic level	C14:0	C16:0	C18:1n-7	C18:1n-9	C20:1n-9	C18:2n-6 LA	C20:4n-6 AA	C22:4n-6	C22:5n-6 DPA	∑ n-6	C18:3n-3 ALA	C20:5n-3 EPA	C22:5n-3	C22:gn DHA	∑ n-3	∑ PUFA	∑ LCP	∑ LA_ALA	n6/n3ratio
P42 timepoint																				
Actinobacteria	Phylum																			
Bifidobacteriales	Order				-0,71			0,75									0,76	0,82		
Bifidobacteriaceae	Family				-0,71			0,75									0,76	0,82		
Bifidobacterium	Genus				-0,71			0,75									0,76	0,82		
Atopobium	Genus	0,79																		
Coriobacteriaceae; Other	Genus	0,82																		
Bacteroidetes	Phylum																			
Alistipes	Genus			-0,74																
Firmicutes	Phylum																			
Streptococcus	Genus			-0,70																
Marvinbryantia	Genus	-0,70																		
Peptococcus	Genus	-0,80																		
Peptostreptococcaceae	Genus			-0,73	0,80		0,80	-0,77			-0,75					0,70				-0,74
Deferribacteres	Phylum												0,73							
Deferribacterales	Order												0,73							
Deferribacteraceae	family												0,73							
Mucispirillum	Genus												0,73							
Candidate division TM7	Phylum																			
Unknown Order	Order	-0,72																		
Unknown Family	Family	-0,72																		
Candidatus Saccharimonas	Genus	-0,72																		
P180 timepoint																				
Firmicutes	Phylum																			
Peptostreptococcaceae unc.	Family			0,73																
Peptostreptococcaceae	Genus			0,73																

Liver		C14:0	C16:0	C18:1n-7	C18:1n-9	C20:1n-9	C18:2n-6 LA	C20:4n-6 AA	C22:4n-6	C22:5n-6 DPA	∑ n-6	C18:3n-3 ALA	C20:5n-3 EPA	C22:5n-3	C22:gn DHA	∑ n-3	∑ PUFA	∑ LCP	∑ LA_ALA	n6/n3ratio
P42 timepoint																				
Actinobacteria	Phylum																			
Bifidobacteriales	Order		-0,77			0,73														
Bifidobacteriaceae	Family		-0,77			0,73														
Bifidobacterium	Genus		-0,77			0,73														
Firmicutes	Phylum																			
Lactobacillaceae	Family																		0,73	
Lactobacillus	Genus																		0,73	
Peptostreptococcaceae	Family								-0,75	-0,81			0,79	0,74	0,83	0,84	0,74			-0,78
Peptostreptococcaceae unc.	Genus								-0,75	-0,81			0,79	0,74	0,83	0,84	0,74			-0,78
Family XIII	Genus				-0,72															

Erythrocytes	Taxonomic level	C14:0	C16:0	C18:1n-7	C18:1n-9	C20:1n-9	C18:2n-6 LA	C20:4n-6 AA	C22:4n-6	C22:5n-6 DPA	∑ n-6	C18:3n-3 ALA	C20:5n-3 EPA	C22:5n-3	C22:gn DHA	∑ n-3	∑ PUFA	∑ LCP	∑ LA_ALA	n6/n3ratio
P42 timepoint																				
Firmicutes	Phylum																			
Lactobacillaceae	Family																		0,73	
Lactobacillus	Genus																		0,73	
Peptostreptococcaceae	Family					-0,78						0,73	0,74	0,72		0,71				-0,71
Peptostreptococcaceae	Genus					-0,78						0,73	0,74	0,72		0,71				-0,71
P180 timepoint																				
Tenericutes	Phylum																			
Mycoplasmatales	Order								-0,73											
Mycoplasmataceae	Family								-0,73											
Ureaplasma	Genus								-0,73											