

**Table S2.** Cecal microbiota: indicator phyla. Indicator taxa were identified as those the abundance of which differed significantly in  $\geq 2$  groups. Relative abundances are presented as the mean  $\pm$  SD. and p values were adjusted for multiple testing. n=15/16 per group. F/B: Firmicutes/Bacteroidetes.

Phylum	% of relative abundance			Adjusted p values		
	ND	HFD	HFD-T070 5%	ND vs HFD	ND vs HFD-T070 5%	HFD vs HFD T070 5%
Actinobacteria	0.49 $\pm$ 0.21	0.21 $\pm$ 0.07	0.22 $\pm$ 0.09	p=0.0018	p =0.0019	p =0.5651
Elusimicrobia	0.06 $\pm$ 0.06	0.17 $\pm$ 0.17	0.19 $\pm$ 0.17	p=0.0591	p =0.0129	p =0.5970
Firmicutes	49.46 $\pm$ 5.15	42.14 $\pm$ 5.56	32.55 $\pm$ 4.33	p =0.0018	p =0.0001	p =0.0194
Campilobacterota	0.17 $\pm$ 0.15	0.53 $\pm$ 0.45	0.85 $\pm$ 0.76	p =0.0455	p =0.0001	p =0.3344
Deferribacteres	0.26 $\pm$ 0.15	0.58 $\pm$ 0.33	0.90 $\pm$ 0.53	p =0.0107	p =0.0001	p =0.1000
Proteobacteria	10.23 $\pm$ 2.24	14.74 $\pm$ 2.70	14.54 $\pm$ 1.52	p =0.0018	p =0.0001	p =0.5651
Bacteroidetes	34.63 $\pm$ 3.75	34.94 $\pm$ 5.15	42.90 $\pm$ 4.76	p =0.6353	p =0.0002	p =0.0004
uncl. Bacteria	3.99 $\pm$ 1.11	4.55 $\pm$ 1.20	6.83 $\pm$ 1.99	p =0.4956	p =0.0001	p =0.0023
F/B ratio	1.46 $\pm$ 0.32	1.24 $\pm$ 0.29	0.78 $\pm$ 0.19	p =0.0753	p =0.0000	p =0.0001