

Table S2 Correlations between the first 5 principal components of the gene expression (geppc) and metabolite (metpc) profiles based on line and diet means.

Expression PC	Metabolite PC	Correlation	p-value
geppc1 (20.8%)	metpc2 (7.8%)	-0.270	0.015
geppc1 (20.8%)	metpc5 (3.8%)	-0.205	ns
geppc1 (20.8%)	metpc3 (4.9%)	-0.072	ns
geppc1 (20.8%)	metpc1 (9.1%)	0.068	ns
geppc1 (20.8%)	metpc4 (4.4%)	0.056	ns
geppc2 (12.5%)	metpc2 (7.8%)	0.303	0.006
geppc2 (12.5%)	metpc5 (3.8%)	-0.145	ns
geppc2 (12.5%)	metpc3 (4.9%)	-0.034	ns
geppc2 (12.5%)	metpc4 (4.4%)	-0.032	ns
geppc2 (12.5%)	metpc1 (9.1%)	-0.004	ns
geppc3 (9.8%)	metpc2 (7.8%)	-0.231	0.039
geppc3 (9.8%)	metpc5 (3.8%)	-0.085	ns
geppc3 (9.8%)	metpc3 (4.9%)	0.059	ns
geppc3 (9.8%)	metpc4 (4.4%)	0.056	ns
geppc3 (9.8%)	metpc1 (9.1%)	-0.033	ns
geppc4 (7.5%)	metpc2 (7.8%)	0.330	0.003
geppc4 (7.5%)	metpc1 (9.1%)	0.292	0.009
geppc4 (7.5%)	metpc5 (3.8%)	0.206	ns
geppc4 (7.5%)	metpc3 (4.9%)	-0.101	ns
geppc4 (7.5%)	metpc4 (4.4%)	0.026	ns
geppc5 (5.4%)	metpc5 (3.8%)	0.230	0.041
geppc5 (5.4%)	metpc1 (9.1%)	-0.197	ns
geppc5 (5.4%)	metpc3 (4.9%)	0.061	ns
geppc5 (5.4%)	metpc4 (4.4%)	0.056	ns
geppc5 (5.4%)	metpc2 (7.8%)	0.010	ns