Metabolites	Sex	Normal diet		HFD		Two-way ANOVA		
		Wild type **Mean ±** SEM	**Negr1-/-** **Mean ±** SEM	**Wild type** **Mean ±** SEM	**Negr1-/-** **Mean ±** SEM		**F**	**p**
Malate	Male	9.9 ± 1.2	19.9 ± 3.7	7.1 ± 1.5	15.7 ± 2.8	**Diet**	2.1	0.1574
						Genotype	14.8	0.0007
						Interaction	0.08	0.7834
	Female	11.5 ± 2.8	17.1 ± 3.7	12.5 ± 2.3	9.7 ± 1.0	**Diet**	1.72	0.2023
						Genotype	0.34	0.5658
						Interaction	2.93	0.0998
Succinate	Male	9.6 ± 0.8	16.9 ± 2.9	8.5 ± 1.6	17.5 ± 2.7	**Diet**	0.01	0.9126
						Genotype	14.6	0.0007
						Interaction	0.15	0.7001
	Female	13.6 ± 2.6	16.1 ± 4.7	14.5 ± 2.4	10.6 ± 1.1	**Diet**	0.81	0.3781
						Genotype	0.07	0.7971
						Interaction	1.54	0.2272
Citrate	Male	168.5 ± 52.3	422.6 ± 168.1	112.3 ± 25.2	283.7 ± 83.5	**Diet**	1.16	0.2889
						Genotype	5.56	0.0256
						Interaction	0.21	0.6501
	Female	145.6 ± 42.2	377.6 ± 129.0	140.8 ± 65.1	206.5 ± 81.2	**Diet**	1.16	0.2918
						Genotype	3.32	0.0808
						Interaction	1.04	0.3183
Pyruvate	Male	47.0 ± 7.0	75.4 ± 7.0	41.0 ± 3.4	58.1 ± 8.1	**Diet**	2.97	0.0963
						Genotype	11.4	0.0022
						Interaction	0.70	0.4088
	Female	64.0 ± 11.6	55.0 ± 15.8	56.5 ± 11.5	48.7 ± 4.3	**Diet**	0.39	0.5407
						Genotype	0.58	0.4533
						Interaction	0.003	0.9562
AKG	Male	9.0 ± 1.5	17.0 ± 2.2	4.3 ± 0.6	10.5 ± 1.7	**Diet**	13.21	0.0012
						Genotype	21.59	0.0001
						Interaction	0.34	0.5639
	Female	9.7 ± 2.1	10.9 ± 2.3	9.1 ± 2.0	6.7 ± 0.7	**Diet**	1.58	0.2212
						Genotype	0.12	0.7283
						Interaction	0.91	0.3506
Lactate	Male	9.0 ± 1.5	14.6 ± 3.0	4.3 ± 0.6	10.5 ± 1.7	**Diet**	5.78	0.0233
						Genotype	10.61	0.0030
						Interaction	0.03	0.8709
	Female	9.7 ± 2.1	10.9 ± 2.3	9.1 ± 2.0	6.7 ± 0.7	**Diet**	1.58	0.2212
						Genotype	0.12	0.7283
						Interaction	0.91	0.3506
Oxaloacetate	Male	2.4 ± 0.3	4.3 ± 0.9	1.3 ± 0.4	4.1 ± 1.8	**Diet**	0.42	0.5224
						Genotype	4.95	0.0346
						Interaction	0.15	0.7003
	Female	6.0 ± 1.5	7.0 ± 2.6	4.6 ± 1.3	2.2 ± 0.3	**Diet**	5.02	0.0346
						Genotype	0.24	0.6258
						Interaction	1.45	0.2402

Beta-hydroxybutyrate	Male	38.4 ± 5.4	71.0 ± 13.9	26.0 ± 1.9	53.6 ± 8.0	**Diet**	3.50	0.0717
						Genotype	14.28	0.0007
						Interaction	0.10	0.7500
	Female	87.0 ± 11.0	72.4 ± 21.3	58.9 ± 12.6	59.5 ± 14.3	**Diet**	1.87	0.1843
						Genotype	0.22	0.6455
						Interaction	0.26	0.6159