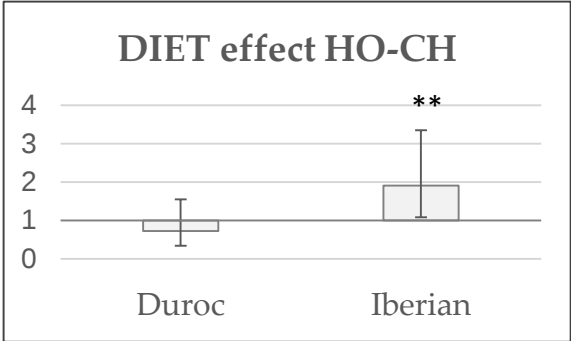
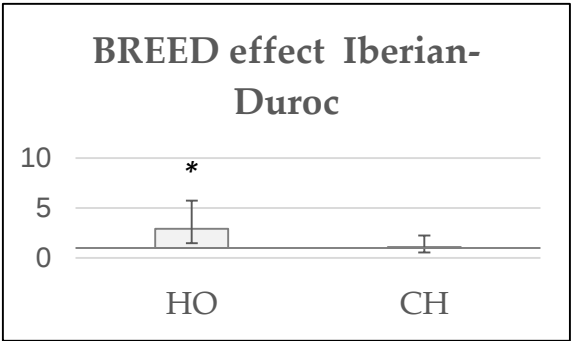


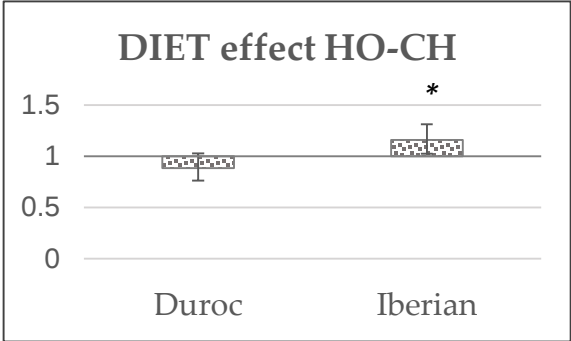
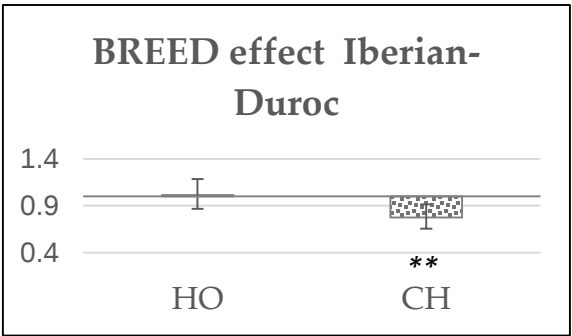
supplementary figure 1: Breed*diet interactions

ME1



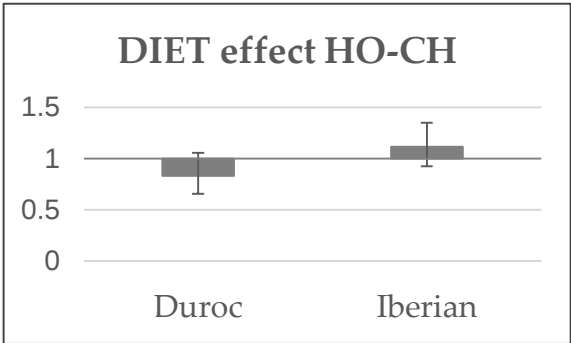
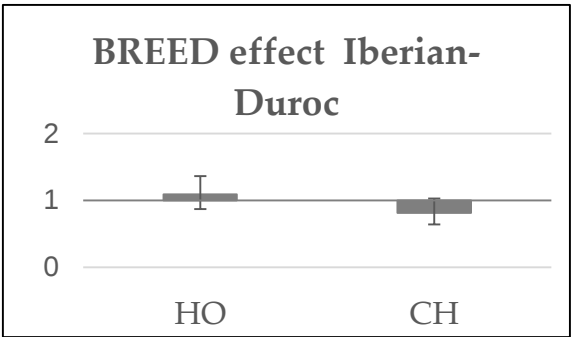
Breed*diet interaction $P<0.07$

ATGL



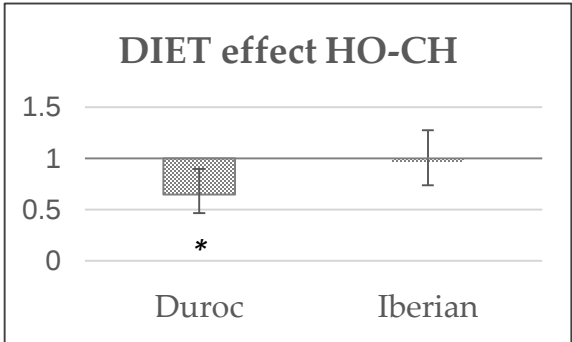
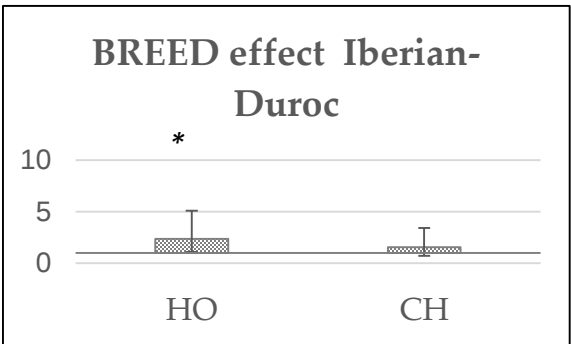
Breed*diet interaction $P<0.0006$

HSL



Breed*diet interaction $P<0.07$

PLIN1



Breed*diet interaction $P<0.08$

supplementary figure 2: Diet*status interactions

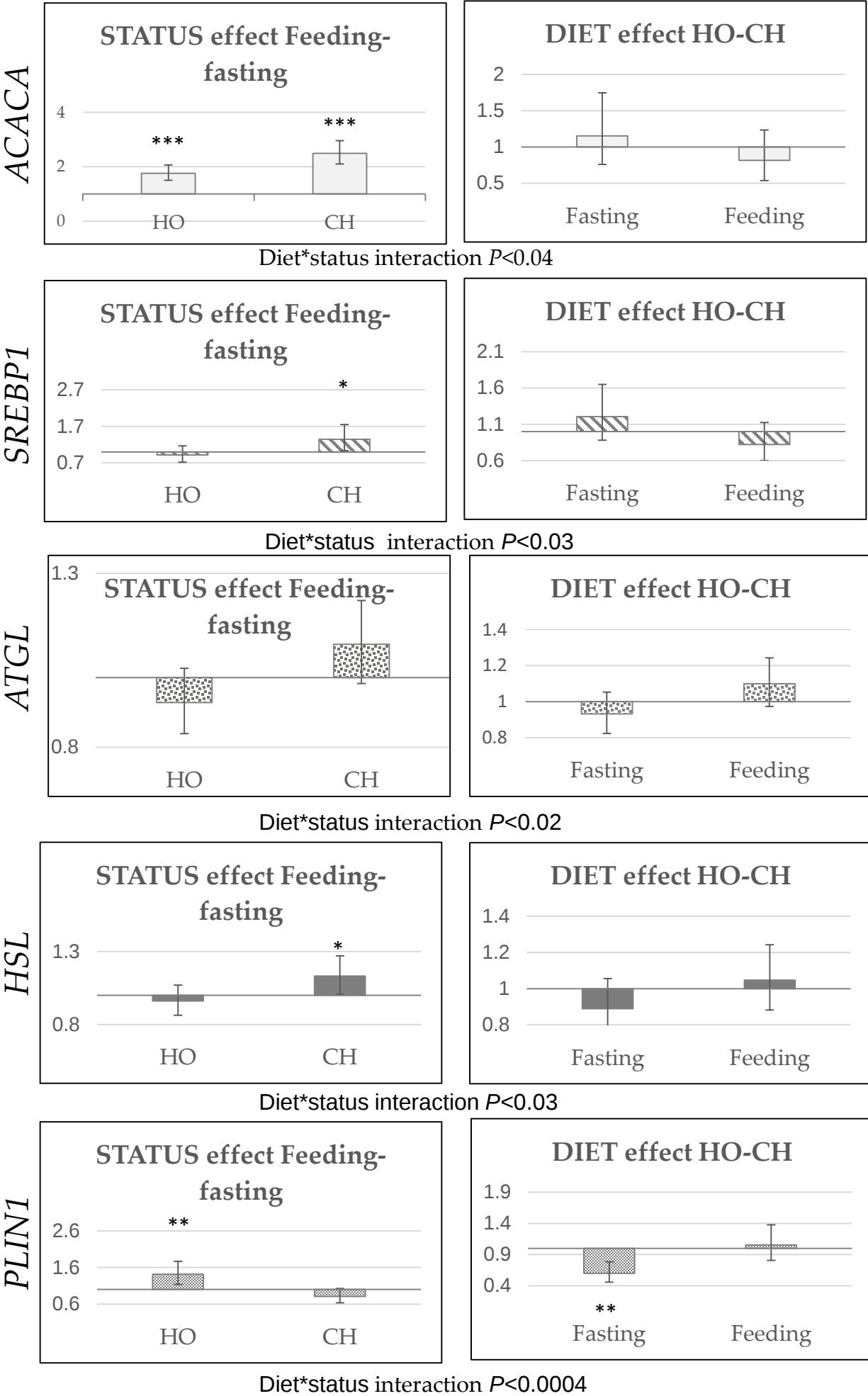


Table S1. Response Factors and Corrections Factors of Fatty acids.

	Molecular Mass (Mx)	Number of Carbon atoms (nx-1)	Response Factor FID* (Fx)	Correction Factor FID* (fx)
C14:0	242.38	14	1.44	1.02
C16:0	270.42	16	1.41	1.00
C16:1 n-7	268.41	16	1.40	0.99
C16:1 n-9	268.41	16	1.40	0.99
C17:0	284.45	17	1.39	0.99
C17:1	282.44	17	1.38	0.98
C18:0	298.47	18	1.38	0.98
C18:1 n-9	296.46	18	1.37	0.97
C18:1 n-7	296.46	18	1.37	0.97
C18:2 n-6	294.45	18	1.36	0.97
C18:3 n-3	292.43	18	1.35	0.96
C18:4 n-3	290.42	18	1.34	0.95
C20:0	326.52	20	1.36	0.97
C22:1 n-9	324.51	20	1.35	0.96
C20:2	322.50	20	1.34	0.95
C20:3	320.48	20	1.33	0.95
C20:4	318.47	20	1.33	0.94
C22:5 n-3	344.50	22	1.30	0.93
C22:6 n-3	342.49	22	1.30	0.92

* FID: Flame Ionization Detector