

Supplementary Table S4. Variation (mean \pm SD) of body condition score (BCS), serum concentrations of non-esterified fatty acids (NEFA), beta-hydroxybutyrate (BHB), and cholesterol, and plasma glucose concentrations in high-producing Gyr cows grouped according to BCS at calving, on different days relative to calving (0 d), throughout the transition period.

Variable	Group	-21 d	-7 d	0 d	7 d	21 d	42 d
BCS	HBCS	4.10 \pm 0.30 ^{Aa}	4.04 \pm 0.24 ^{Aa}	4.04 \pm 0.24 ^{Aa}	3.71 \pm 0.28 ^{Ab}	3.51 \pm 0.21 ^{Ac}	3.38 \pm 0.35 ^{Ac}
	NBCS	3.35 \pm 0.12 ^{Ba}	3.35 \pm 0.16 ^{Ba}	3.35 \pm 0.16 ^{Ba}	3.31 \pm 0.15 ^{Ba}	3.22 \pm 0.19 ^{Ba}	3.26 \pm 0.20 ^{Aa}
NEFA (mmol/L)	HBCS	0.28 \pm 0.18 ^{Ab}	0.49 \pm 0.43 ^{Ab}	0.90 \pm 0.36 ^{Aa}	0.84 \pm 0.61 ^{Aab}	0.54 \pm 0.32 ^{Ab}	1.09 \pm 0.73 ^{Aa}
	NBCS	0.36 \pm 0.17 ^{Ac}	0.49 \pm 0.44 ^{Abc}	0.91 \pm 0.30 ^{Aa}	0.77 \pm 0.47 ^{Aab}	0.50 \pm 0.33 ^{Abc}	0.69 \pm 0.49 ^{Babc}
BHB (mmol/L)	HBCS	0.34 \pm 0.12 ^{Ab}	0.44 \pm 0.10 ^{Ab}	0.47 \pm 0.14 ^{Ab}	0.69 \pm 0.25 ^{Aab}	0.55 \pm 0.22 ^{Ab}	0.86 \pm 0.57 ^{Aa}
	NBCS	0.36 \pm 0.13 ^{Ab}	0.44 \pm 0.14 ^{Ab}	0.50 \pm 0.10 ^{Aab}	0.68 \pm 0.24 ^{Aa}	0.46 \pm 0.20 ^{Aab}	0.66 \pm 0.52 ^{Bab}
Glucose (mmol/L)	HBCS	3.09 \pm 0.45 ^{Ab}	2.96 \pm 0.53 ^{Ab}	6.74 \pm 3.46 ^{Aa}	3.24 \pm 0.65 ^{Ab}	3.38 \pm 0.79 ^{Ab}	3.09 \pm 0.78 ^{Ab}
	NBCS	3.08 \pm 0.47 ^{Ab}	3.04 \pm 0.49 ^{Ab}	6.30 \pm 3.38 ^{Aa}	3.52 \pm 0.71 ^{Ab}	3.54 \pm 0.85 ^{Ab}	3.12 \pm 0.85 ^{Ab}
Cholesterol (mmol/L)	HBCS	2.67 \pm 0.44 ^{Ac}	2.61 \pm 0.51 ^{Ac}	2.46 \pm 0.42 ^{Ac}	2.94 \pm 0.73 ^{Ac}	4.77 \pm 1.15 ^{Ab}	6.69 \pm 1.43 ^{Aa}
	NBCS	2.55 \pm 0.47 ^{Ac}	2.54 \pm 0.55 ^{Ac}	2.34 \pm 0.42 ^{Ac}	2.86 \pm 0.42 ^{Ac}	4.65 \pm 1.20 ^{Ab}	6.38 \pm 1.49 ^{Aa}

^{A,B} different letters represent differences between groups ($P < 0.05$).

^{a,b,c} different letters represent differences between moments ($P < 0.05$).

HBCS: high body condition score (>3.5 ; $n = 21$); NBCS: normal body condition score (3.0-3.5; $n = 20$)