

Supplementary Table S1. 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 parity, 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	P	3.30 \pm 0.19 ^{Aa}	3.29 \pm 0.20 ^{Aa}	3.29 \pm 0.20 ^{Aab}	3.17 \pm 0.25 ^{Bb}	3.10 \pm 0.27 ^{Abc}	3.02 \pm 0.46 ^{Bc}
	B	3.38 \pm 0.15 ^{Aab}	3.42 \pm 0.14 ^{Aa}	3.42 \pm 0.14 ^{Aa}	3.35 \pm 0.17 ^{Aab}	3.25 \pm 0.16 ^{Ab}	3.20 \pm 0.19 ^{Ab}
	M	3.35 \pm 0.12 ^{Aa}	3.35 \pm 0.17 ^{Aa}	3.35 \pm 0.17 ^{Aa}	3.30 \pm 0.16 ^{ABa}	3.22 \pm 0.21 ^{Aa}	3.25 \pm 0.21 ^{Aa}
NEFA (mmol/L)	P	0.26 \pm 0.04 ^{Ab}	0.30 \pm 0.14 ^{Ab}	0.79 \pm 0.35 ^{Aa}	0.72 \pm 0.46 ^{Aab}	0.50 \pm 0.40 ^{Ab}	0.54 \pm 0.31 ^{Aab}
	B	0.23 \pm 0.13 ^{Ac}	0.29 \pm 0.22 ^{Ac}	0.80 \pm 0.33 ^{Aab}	0.96 \pm 0.66 ^{Aa}	0.55 \pm 0.39 ^{Abc}	0.63 \pm 0.51 ^{Ab}
	M	0.38 \pm 0.18 ^{Ab}	0.52 \pm 0.46 ^{Ab}	0.90 \pm 0.30 ^{Aa}	0.69 \pm 0.46 ^{Aab}	0.52 \pm 0.54 ^{Ab}	0.74 \pm 0.51 ^{Aab}
BHB (mmol/L)	P	0.47 \pm 0.10 ^{Ab}	0.48 \pm 0.11 ^{Ab}	0.43 \pm 0.19 ^{Ab}	0.68 \pm 0.24 ^{Aa}	0.57 \pm 0.29 ^{Aab}	0.44 \pm 0.12 ^{Bb}
	B	0.36 \pm 0.09 ^{Ab}	0.45 \pm 0.10 ^{Ab}	0.44 \pm 0.18 ^{Ab}	0.69 \pm 0.27 ^{Aa}	0.60 \pm 0.33 ^{Aab}	0.62 \pm 0.36 ^{Aab}
	M	0.36 \pm 0.13 ^{Ab}	0.43 \pm 0.15 ^{Ab}	0.48 \pm 0.10 ^{Ab}	0.64 \pm 0.23 ^{Aab}	0.46 \pm 0.22 ^{Ab}	0.69 \pm 0.56 ^{Aa}
Glucose (mmol/L)	P	2.14 \pm 1.15 ^{Ab}	3.06 \pm 0.63 ^{Ab}	6.64 \pm 2.17 ^{Aa}	3.43 \pm 0.74 ^{Ab}	3.55 \pm 0.60 ^{Ab}	3.47 \pm 0.67 ^{Ab}
	B	2.99 \pm 0.64 ^{Ab}	2.98 \pm 0.63 ^{Ab}	6.13 \pm 2.98 ^{Aa}	3.26 \pm 0.81 ^{Ab}	3.29 \pm 0.65 ^{Ab}	3.29 \pm 0.68 ^{Ab}
	M	3.05 \pm 0.45 ^{Ab}	2.98 \pm 0.37 ^{Ab}	6.12 \pm 3.04 ^{Aa}	3.52 \pm 0.75 ^{Ab}	3.58 \pm 0.92 ^{Ab}	3.10 \pm 0.92 ^{Ab}
Cholesterol (mmol/L)	P	2.54 \pm 1.10 ^{Accd}	2.55 \pm 0.47 ^{Accd}	2.32 \pm 0.41 ^{Ad}	2.87 \pm 0.68 ^{Ac}	4.03 \pm 0.79 ^{Bb}	5.77 \pm 1.32 ^{ABa}
	B	2.71 \pm 0.44 ^{Ab}	2.75 \pm 0.49 ^{Ab}	2.59 \pm 0.46 ^{Ab}	3.19 \pm 0.70 ^{Ab}	4.94 \pm 0.76 ^{Aa}	5.31 \pm 1.19 ^{Ba}
	M	2.46 \pm 0.41 ^{Ac}	2.43 \pm 0.49 ^{Ac}	2.24 \pm 0.32 ^{Ac}	2.74 \pm 0.66 ^{Ac}	4.40 \pm 1.13 ^{ABb}	6.31 \pm 1.56 ^{Aa}

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

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

P: primiparous (n = 26); B: biparous (n = 21); M: multiparous (n = 17)