

Table S1. Estimates of Pearson correlation coefficients between lamb birth weight and maternal milk yield in mature ewes stratified by single *vs.* multiple pregnancies and by BCS score at different stages of pregnancy.

Stage of pregnancy of mature ewes					
Lambs born to: ↓	n	Month of conception (YDIMc)	Second month of pregnancy	Third month of pregnancy	Conception to drying off (YDIMd)
All mature ewes	340	0.115 *	N/S	N/S	N/S
Single pregnancy	83	N/S	N/S	N/S	N/S
Multiple pregnancy	257	0.198 ****	N/S	N/S	0.128 *
Maternal BCS at mid-pregnancy †					
Thin (BCS ≤2)	68	N/S	N/S	N/S	N/S
Average (3 > BCS > 2)	180	N/S	N/S	N/S	N/S
Fat-BCS ≥3	92	0.290 ***	0.277 **	0.313 ***	0.337 ****
Maternal BCS at mid-pregnancy ‡					
Thin (BCS ≤2)	26	N/S	N/S	N/S	N/S
Average (3 > BCS > 2)	133	0.226 **	N/S	N/S	0.175 *
Fat-BCS ≥3	181	N/S	N/S	N/S	N/S

† 75 ± 5 d of pregnancy

‡ 142 ± 4 d of pregnancy

BCS, body condition score; YDIMc, Yield per day in milk during the month of conception; YDIMd, Yield per day in milk from conception to drying off; N/S, not significant.

**** $p < 0.001$; *** $p < 0.005$; ** $p < 0.01$; * $p < 0.05$

Table S2. Estimates of Pearson correlation coefficients between lamb birth weight and maternal metabolite levels at mid-pregnancy (above) or late pregnancy (below) in mature ewes showing low, average, or high milk yield.

Mid-pregnancy (75 ± 5d of pregnancy)								
Maternal milk yield ↓	n	GLU	LAC	CHO	TGL	β-OHB	NEFA	UR
L-TMY	80	-0.192 †	N/S	N/S	N/S	N/S	N/S	N/S
A-TMY	129	0.176 *	N/S	N/S	N/S	N/S	N/S	N/S
H-TMY	129	N/S	0.160 †	0.182 *	-0.176 *	N/S	N/S	N/S
L-YDIMd	79	N/S	0.240 *	N/S	0.245 *	N/S	N/S	N/S
A-YDIMd	136	N/S	N/S	N/S	N/S	N/S	N/S	N/S
H-YDIMd	123	N/S	N/S	N/S	N/S	N/S	N/S	N/S
L-YDIMc	89	N/S	N/S	N/S	0.202 †	N/S	N/S	N/S
A-YDIMc	130	N/S	N/S	N/S	N/S	N/S	N/S	N/S
H-YDIMc	119	N/S	N/S	N/S	N/S	N/S	0.233 **	N/S
Late-pregnancy (142 ± 4d of pregnancy)								
Maternal milk yield ↓	n	GLU	LAC	CHO	TGL	β-OHB	NEFA	UR
L-TMY	80	-0.292 **	N/S	N/S	N/S	N/S	N/S	N/S
A-TMY	129	0.215 **	N/S	N/S	N/S	-0.200 *	-0.163 †	N/S
H-TMY	129	N/S	N/S	N/S	N/S	-0.250 **	-0.214 *	N/S
L-YDIMd	79	N/S	N/S	N/S	N/S	-0.200 †	N/S	N/S
A-YDIMd	136	N/S	-0.191 *	N/S	N/S	-0.146 †	-0.248 **	N/S
H-YDIMd	123	N/S	N/S	0.173 *	N/S	-0.299 ***	N/S	N/S
L-YDIMc	89	0.238 *	N/S	0.220 *	N/S	-0.248 *	-0.181 †	N/S
A-YDIMc	130	N/S	N/S	N/S	N/S	N/S	-0.187 *	N/S
H-YDIMc	119	N/S	N/S	N/S	N/S	N/S	N/S	N/S

β-OHB, β-hydroxybutyrate; CHO, Cholesterol; GLU, Glucose; LAC, Lactate; NEFA, non-esterified fatty acids; TGL, Triglycerides; UR, Urea; TMY, Total milk yield; YDIMd, Yield per day in milk from conception to drying off; YDIMc, Yield per day in milk during the month of conception; N/S, not significant. *** $p < 0.005$; ** $p < 0.01$; * $p < 0.05$; † $0.09 < p > 0.05$.

Table S3. Estimates of Pearson correlation coefficients between milk yield during concurrent gestation and lactation and milk yield during the subsequent lactation in mature ewes with single or multiple pregnancies.

	n	r	
Pregnancy rank			
Single	86	0.662*	
Multiple	132	0.604*	
Gender of offspring			
Single	Male	40	0.705*
	Female	46	0.599*
	Male + Female	75	0.581*
Multiple	Female + Female	36	0.596*
	Male + Male	21	0.638*

* $p < 0.0001$



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