

Table 1. The effect of maternal nutritional levels and supplementation with one-carbon metabolites¹ from day 0 to 63 of gestation on the protein expression of glucose transporter protein 1 and 3 (GLUT1 and GLUT3) at 161 days of age.

The evaluated area		Treatments ²				P-value ³			
		CON-OCM	CON+OCM	RES-OCM	RES+OCM	SEM ⁴	MNP	OCM	MNP×OCM
Villi	GLUT1 ⁵ %	15.34	10.44	14.88	11.49	1.4	0.83	0.003	0.58
	GLUT3%	13.08	13.79	18.36	14.78	1.81	0.08	0.42	0.23
Crypt	GLUT1%	1.96 ^a	1.28 ^b	2.03 ^a	1.83 ^a	0.14	0.03	0.002	0.09
	GLUT3%	1.69	1.04	1.72	1.02	0.15	0.97	<.0001	0.84
Total	GLUT1%	8.65	5.86	8.45	6.66	0.79	0.70	0.003	0.52
	GLUT3%	7.38	7.42	10.04	7.90	1.39	0.25	0.44	0.43

The data are presented as the least square mean and standard error of the mean.

¹Methionine (Smartamine, Adisseo, Beijing, China), choline (ReaShure, Balchem Inc., New Hampton, NY, USA), folate (Spectrum Chemical Mfg. Corp., New Brunswick, NJ, USA), vitamin B₁₂ (MWI Animal Health, Boise, ID, USA).

²CON-OCM = Control (0.45 kg/d) without one-carbon metabolite supplementation; CON+OCM = Control (0.45 kg/d) with one-carbon metabolite supplementation; RES-OCM = Restricted (-0.23 kg/d) without supplementation; RES+OCM = Restricted (-0.23 kg/d) with supplementation.

³MNP = Main effect of maternal nutritional plane (Trouw dairy VTM w/Optimins, Trouw Nutrition USA, Highland, IL, USA); OCM = Main effect of one-carbon metabolite supplementation; MNP×OCM = Main effect of maternal nutritional plane with one-carbon metabolite supplementation.

⁴SEM = Standard error of the mean.

⁵GLUT1 and GLUT3 positivity ratio.

Different lowercase letters indicate $P \leq 0.05$.