Corrigendum to “Effects of rumen-protected lysine and histidine on milk production and energy and nitrogen utilization in diets containing hydrolyzed feather meal fed to lactating Jersey cows” (J. Dairy Sci. 103:7110–7123)

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Tissue energy was calculated incorrectly. The corrected equation is listed below, as well as a corrected Table 7, with corrected tissue energy (**TE**) and NE_L values calculated using TE (corrected text shown in bold).

$$\text{Tissue energy (Mcal of } NE_L/d) = \text{positive residual energy} \times k_G/k_T \text{ or negative residual energy} \times k_T, \quad [4]$$

where k_T is the efficiency of utilizing body reserve energy for milk production, and k_G is the efficiency of utilizing ME intake for tissue gain. Values of 0.89 and 0.75 were used for k_T and k_G , respectively.

Table 7. Oxygen consumption, carbon dioxide and methane production, respiratory quotient, and energy utilization of lactating Jersey cows fed a diet containing 5% hydrolyzed feather meal and supplemented with rumen-protected (RP) Lys and His

Item ¹	Treatment ^{2,3}				SEM	P-value ⁴		
	LYS0		LYS+			L	H	L × H
	HIS0	HIS+	HIS0	HIS+				
Gases, L/d								
O ₂ consumption	4,708	4,749	4,568	4,769	181	0.61	0.30	0.49
CO ₂ production	5,061	5,064	4,874	5,083	204	0.54	0.44	0.45
CH ₄ production	453	443	408	428	28	0.06	0.75	0.33
RQ	1.07	1.07	1.07	1.07	0.006	0.36	0.19	0.32
Components, Mcal/d								
Feces	30.3	30.7	29.5	30.9	2.01	0.63	0.19	0.44
Methane	4.28	4.19	3.86	4.04	0.27	0.06	0.75	0.33
Urine	2.40	2.40	2.42	2.43	0.11	0.39	0.89	0.88
HP ⁵	23.8	24.0	23.1	24.1	0.93	0.61	0.34	0.49
Milk	19.4	19.1	19.6	20.2	1.32	0.23	0.84	0.42
TE	4.58	4.03	5.13	4.44	2.13	0.63	0.52	0.94
Fractions, Mcal/d								
GE	85.1	84.9	84.6	86.9	3.93	0.62	0.46	0.41
DE	54.7	54.2	55.0	56.1	2.40	0.35	0.82	0.51
ME	48.4	47.8	48.8	49.6	2.39	0.34	0.94	0.52
NE _L ⁶	31.7	30.9	32.7	32.6	2.10	0.19	0.66	0.71
Fractions, Mcal/kg of DM								
GE	4.62	4.62	4.62	4.62	0.024	0.24	0.67	0.06
DE	2.97	2.96	3.01	2.98	0.061	0.20	0.38	0.87
ME	2.62	2.60	2.66	2.64	0.063	0.14	0.37	0.94
NE _L ⁶	1.71	1.68	1.78	1.73	0.057	0.14	0.31	0.79
Efficiencies								
ME/DE	0.877	0.878	0.885	0.884	0.006	0.04	0.90	0.88
Milk/ME	0.402	0.405	0.405	0.410	0.031	0.76	0.78	0.95
HP/ME	0.496	0.505	0.477	0.489	0.027	0.24	0.47	0.91
NE _L /ME	0.653	0.647	0.669	0.656	0.018	0.25	0.39	0.75

¹RQ = respiratory quotient, CO₂ production/O₂ consumption (L/L); HP = heat production; GE = gross energy; DE = digestible energy; TE = tissue energy (NE_L basis).

²LYS0 = 0 g/d of RP Lys; LYS+ = 70 g/d RP of Lys; HIS0 = 0 g/d of RP His; HIS+ = 32 g/d of RP His; n = 43 for feces, urine, milk, GE, and DE, n = 42 for all other variables.

³LSM; largest SE of treatment mean is listed.

⁴L = main effect of Lys supply; H = main effect of His supply; L × H = interaction between Lys and His.

⁵HP = $3.866 \times O_2 + 1.200 \times CO_2 - 0.518 \times CH_4 - 1.431 \times N$ (Brouwer, 1965).

⁶NE_L = $0.080 \times BW^{0.75} + \text{milk energy} + TE$ (NRC, 2001).

REFERENCE

Morris, D. L., and P. J. Kononoff. 2020. Effects of rumen-protected lysine and histidine on milk production and energy and nitrogen utilization in diets containing hydrolyzed feather meal fed to lactating Jersey cows. J. Dairy Sci. 103(8):7110–7123. <https://doi.org/10.3168/jds.2020-18368>.