

Milk metabolites, proteins and oxidative stress markers in dairy cows suffering from *Staphylococcus aureus* subclinical mastitis with or without spontaneous cure

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SUPPLEMENTARY FILE

Table 1. The results (mean \pm SE) of milk acute phase proteins, enzymes, proteins, electrolytes, and oxidative stress markers in *S. aureus* subclinical mastitis cows with or without spontaneous cure at different times.

	Healthy cows(time of diagnosis)	Cows with spontaneous cure (time of diagnosis)	Cows without spontaneous cure (time of diagnosis)	Healthy cows(day 14 after diagnosis)	Cows with spontaneous cure (day 14 after diagnosis)	Cows without spontaneous cure (day 14 after diagnosis)
Haptoglobin ($\mu\text{g}/\text{mL}^{-1}$)	23.49 \pm 0.85 ^a	131.39 \pm 38.29 ^a	248.29 \pm 39.64 ^b	25.37 \pm 0.66 ^A	42.56 \pm 10.48 ^A	229.05 \pm 37.33 ^B
M-SAA ($\mu\text{g mL}^{-1}$)	3.93 \pm 2.17	3.21 \pm 0.51	4.79 \pm 0.41	3.82 \pm 2.11	2.18 \pm 0.36	4.69 \pm 0.36
ALP (IU L ⁻¹)	64.2 \pm 2.89 ^a	89.3 \pm 4.65 ^b	110.1 \pm 5.64 ^c	62.1 \pm 4.66 ^A	61.9 \pm 2.20 ^A	103.7 \pm 5.31 ^B
LDH (IU L ⁻¹)	82.7 \pm 10.5	80.4 \pm 11.3	87.5 \pm 8.4	80.7 \pm 11.1	70.9 \pm 8.8	82.0 \pm 9.5
MDA (nmol L ⁻¹)	0.18 \pm 0.01 ^a	0.18 \pm 0.04 ^a	0.09 \pm 0.01 ^b	0.12 \pm 0.02 ^A	0.08 \pm 0.01 ^A	0.22 \pm 0.01 ^B
FRAP (mmol L ⁻¹)	0.79 \pm 0.05	0.70 \pm 0.06	0.65 \pm 0.05	0.77 \pm 0.06 ^{AB}	0.67 \pm 0.07 ^B	0.92 \pm 0.06 ^A
Total protein (g/dL ⁻¹)	1.7 \pm 0.2	1.6 \pm 0.2	1.7 \pm 0.2	1.4 \pm 0.2	1.2 \pm 0.1	1.1 \pm 0.1
Albumin (g dL ⁻¹)	0.77 \pm 0.65	0.72 \pm 0.44	0.70 \pm 0.35	0.65 \pm 0.41	0.55 \pm 0.35	0.62 \pm 0.33
α -lactalbumin (g/dL ⁻¹)	0.41 \pm 0.08	0.34 \pm 0.06	0.31 \pm 0.03	0.31 \pm 0.05	0.30 \pm 0.03	0.23 \pm 0.02
β -lactoglobulin(g dL ⁻¹)	0.32 \pm 0.05	0.24 \pm 0.05	0.31 \pm 0.06	0.24 \pm 0.04	0.17 \pm 0.03	0.18 \pm 0.02
Immunoglobulin (g dL ⁻¹)	0.22 \pm 0.04	0.19 \pm 0.04	0.29 \pm 0.05	0.22 \pm 0.04	0.19 \pm 0.02	0.20 \pm 0.03
MUN (mg dL ⁻¹)	30.5 \pm 1.5	30.2 \pm 1.8	30.5 \pm 1.2	28.7 \pm 1.4	27.1 \pm 1.3	27.0 \pm 1.2
K (mmol L ⁻¹)	28.1 \pm 1.2	27.6 \pm 1.1	27.2 \pm 0.8	27.8 \pm 0.8	28.2 \pm 0.7	27.3 \pm 0.6
Cl (mmol L ⁻¹)	67.1 \pm 1.0	64.6 \pm 1.5	67.2 \pm 1.2	65.8 \pm 1.2	64.5 \pm 1.9	66.2 \pm 1.3

In each row, parameters with different lowercase superscripts a, b, c are significantly different at the time of diagnosis ($P < 0.05$).

In each row, parameters with different uppercase superscript letters A, B, are significantly different on day 14 after diagnosis ($P < 0.05$).

M-SAA, milk-serum amyloid A; ALP, alkaline phosphatase; LDH, lactate dehydrogenase; MDA, malondialdehyde; FRAP, ferric reducing antioxidant power; MUN, milk urea nitrogen.