

Supplementary Materials

**Table S1.** Chemical composition of fresh (T<sub>7</sub>) and 120-days ripened (T<sub>120</sub>) Caciocavallo cheese obtained from lactating dairy cows fed control diet (CG) and control diet supplemented with zinc (ZG), selenium (SG) and iodine (IG).

Item	T <sub>7</sub>				T <sub>120</sub>			
	Diet				Diet			
	CG	ZG	SG	IG	CG	ZG	SG	IG
DM (%)	54.51 <sup>A</sup> ± 3.64	53.72 <sup>A</sup> ± 4.02	55.37 <sup>A</sup> ± 4.97	54.66 <sup>A</sup> ± 4.12	66.59 <sup>B</sup> ± 3.86	65.28 <sup>B</sup> ± 4.43	67.11 <sup>B</sup> ± 4.25	64.39 <sup>B</sup> ± 5.06
Fat (%) <sup>1</sup>	38.93 ± 3.08	40.45 ± 3.41	41.75 ± 3.62	41.15 ± 3.22	38.71 ± 3.30	37.49 ± 3.44	39.41 ± 3.84	38.92 ± 3.08
Protein (%) <sup>1</sup>	53.98 ± 4.18	51.22 ± 3.49	52.21 ± 2.95	50.07 ± 4.84	49.68 ± 3.92	48.60 ± 4.01	50.03 ± 4.16	47.93 ± 4.48
Ash (%) <sup>1</sup>	5.09 ± 0.41	5.33 ± 0.49	4.84 ± 0.48	5.76 ± 0.51	5.55 ± 0.51	5.79 ± 0.56	5.81 ± 0.57	5.91 ± 0.63

<sup>1</sup> Data are expressed on a dry matter (DM) basis as mean percentage (%) ± Standard Deviation. <sup>A,B</sup> Means with different superscripts are significantly different by ripening time ( $p < 0.05$ ).

**Table S2.** Ingredients and chemical composition of complete diets administered to lactating dairy cows belonging to control group (CG), zinc group (ZG), selenium group (SG) and iodine group (IG).

Ingredients	
Corn silage, %	23.4
First cut, alfalfa hay, %	5.4
Corn meal, %	3.5
Soybean, meal, %	3.3
Fine bran, %	2.9
Barley, meal, %	2.0
CaCO <sub>3</sub> , %	0.2
Vitamins and minerals, %	0.5
Chemical composition	
Dry Matter, %	57.03
Crude protein, <sup>1</sup> %	15.52
Ether extract, <sup>1</sup> %	2.84
Ash, <sup>1</sup> %	5.36
Neutral detergent fiber, <sup>1</sup> %	33.62
Acid detergent fiber, <sup>1</sup> %	20.96
Starch, <sup>1</sup> %	26.88
Zinc (ZG) <sup>2</sup>	95
Selenium (SG) <sup>2</sup>	0.47
Iodine (IG) <sup>2</sup>	4.5

<sup>1</sup> On a DM basis. <sup>2</sup> Daily total amount of each microelement reported as mg/animal.