

Supplementary Table S1. Interaction effects of age groups, treatments and storage days on meat pH, color parameters (L*, a*, b*, C*, h* and ΔE) of *M. longissimus thoracis et lumborum* of buffalo bulls.

		pH	L*	a*	b*	C*	h*	ΔE
Age groups x Treatments								
Young	Marinated	5.80	47.01	16.31	6.38	17.59	21.27	2.34
	Non- Marinated	5.75	45.98	16.51	6.11	17.57	20.13	2.58
Spent	Marinated	5.60	46.54	15.82	8.03	17.93	26.84	2.73
	Non- Marinated	5.60	45.30	17.11	7.80	18.84	23.96	2.30
SE*		0.01	0.31	0.33	0.15	0.32	0.50	0.14
Treatment x Days								
Marinated	Day 0	5.64	47.74	18.37	7.91	20.41	22.44	0.77
	Day 2	5.60	47.55	15.45	7.11	17.25	24.95	2.99
	Day 4	5.69	46.86	16.01	7.05	17.57	24.02	2.44
	Day 6	5.72	46.94	15.77	7.17	17.46	24.66	2.65
	Day 8	5.75	45.74	16.09	7.34	17.74	23.65	2.71
	Day 10	5.81	45.83	14.71	6.63	16.14	24.62	3.99
Non-Marinated	Day 0	5.60	46.58	18.44	6.91	19.49	19.50	0.77
	Day 2	5.60	45.17	17.28	7.00	18.77	20.67	2.32
	Day 4	5.66	45.77	17.24	7.15	18.69	22.12	1.83
	Day 6	5.70	45.09	17.01	6.91	18.19	22.18	2.54
	Day 8	5.72	45.45	16.33	6.92	17.85	22.83	2.73
	Day 10	5.77	45.78	14.57	6.85	16.26	24.97	4.11
SE*		0.02	0.55	0.58	0.26	0.55	0.87	0.22
Age groups x Treatment x Days								
Young Marinated	Day 0	5.70	47.72	15.16	5.44	16.37	19.58	3.83
	Day 2	5.73	47.57	15.77	6.03	16.89	20.94	3.00
	Day 4	5.83	46.84	16.71	6.52	18.00	21.27	1.94
	Day 6	5.83	46.53	16.95	6.56	18.34	20.97	1.79
	Day 8	5.82	46.76	17.21	7.21	18.67	22.77	1.27
	Day 10	5.88	46.68	16.08	6.53	17.32	22.12	2.53
Young Non-Marinated	Day 0	5.70	46.43	15.00	4.72	15.63	17.02	4.39
	Day 2	5.68	46.27	15.42	5.13	16.30	18.18	3.86
	Day 4	5.78	46.52	16.94	6.41	18.14	20.64	1.88
	Day 6	5.78	45.44	17.41	6.43	18.26	20.48	2.21
	Day 8	5.75	45.33	17.98	7.20	19.37	21.80	1.89
	Day 10	5.85	45.90	16.37	6.82	17.76	22.69	2.46
Spent Marinated	Day 0	5.58	47.78	21.58	10.40	24.46	25.31	4.41
	Day 2	5.47	47.53	15.13	8.20	17.61	28.96	3.38
	Day 4	5.55	46.89	15.32	7.59	17.15	26.78	3.09
	Day 6	5.62	47.36	14.60	7.79	16.60	28.35	3.82
	Day 8	5.68	44.73	14.97	7.48	16.82	24.54	4.20
	Day 10	5.75	44.99	13.36	6.74	14.97	27.13	5.53
Spent Non-Marinated	Day 0	5.52	46.73	21.90	9.12	23.35	22.00	3.92
	Day 2	5.52	44.08	19.16	8.88	21.24	23.16	3.50
	Day 4	5.55	45.04	17.55	7.89	19.24	23.61	2.33
	Day 6	5.63	44.75	16.62	7.41	18.12	23.90	2.99
	Day 8	5.70	45.58	14.69	6.66	16.34	23.87	4.10
	Day 10	5.70	45.68	12.79	6.89	14.77	27.27	5.82
SE*		0.03	0.77	0.81	0.36	0.79	1.24	0.21

Means in the same column with different small letters (a,b,c,d,e,f) are significantly different (p<0.05). * SE: standard error.

Supplementary Table S2. Interaction effects of age groups, treatments and storage days on sensory attributes[#] (odor, flavor, texture and juiciness) of *M. longissimus thoracis et lumborum* of buffalo bulls.

		Odor	Flavor	Texture	Juiciness
Age groups x Days					
Young	Day 2	5.88	5.93	5.75	5.75
	Day 10	5.71	5.86	5.79	5.83
Spent	Day 2	6.31	6.21	5.66	5.56
	Day 10	6.26	5.90	5.78	5.70
SE		0.10	0.09	0.08	0.09

Means in the same column with different small letters (a,b,c) are significantly different ($p < 0.05$). * SE: standard error. # 1 = extremely non-beef-like odor, weak flavor, tough texture, dry in term of juiciness; 8 = extremely beef-like odor, strong flavor, tender texture, juicy.