

Research Article



Association Between Serum Cortisol Level and Selected Immune Cell Parameters in Dairy Cows

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Supplementary Table S1: Association between serum cortisol levels and several immune cell parameters in cattle.

Animal ID	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20
Gender	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Lactation	lact	lact	lact	lact	dry	dry	dry	dry	dry	lact	lact	lact	lact	lact	dry	dry	dry	dry	dry	dry
age	4	6	5	10	5	6	6	4	6	4	5	4	6	10	5	6	6	4	4	10
Pregnancy	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Cortisol ng/mL	21	32	36	41	27	22	30	32	41	12	12	11	7	14	13	13	9	13	12	15
WBC /μL	10000	3600	6300	5500	5000	5600	4700	5200	6600	6300	7200	7000	5300	4600	4000	5000	5300	6000	3000	7000
PMN%	18.0	36.0	25.0	25.2	17.7	19.7	27.6	37.0	30.3	16.0	39.0	37.0	21.6	27.7	23.4	25.5	31.2	16.9	23.6	27.3
Eos%	6.4	1.8	4.7	1.4	10.2	15.3	4.9	12.4	9.7	4.5	3.2	1.6	2.3	4.2	5.5	10.2	4.7	3.1	7.8	10.8
L of Leuk	72.1	53.5	63.1	52.7	47.3	60.1	69.9	58.2	66.8	75.0	51.7	51.2	69.5	59.1	69.9	64.4	62.0	58.3	58.7	53.5
M of Leuk	4.6	8.1	6.5	6.7	10.8	10.2	5.8	7.4	9.3	5.0	4.7	9.9	4.9	8.2	6.9	7.6	9.4	6.4	9.5	11.5
N/L	0.2	0.7	0.4	0.5	0.4	0.3	0.4	0.6	0.5	0.2	0.8	0.7	0.3	0.5	0.3	0.4	0.5	0.3	0.4	0.5
L/M	15.6	6.6	9.7	7.8	4.4	5.9	12.1	7.9	7.2	15.1	11.0	5.2	14.2	7.2	10.1	8.4	6.6	9.1	6.2	4.7
PMN/μl	1800	1296	1575	1385	887	1102	1297	1924	2002	1008	2808	2590	1145	1274	934	1277	1656	1013	707	1911
Eos/μl	640	65	296	76	508	855	232	647	640	284	230	112	122	193	220	510	248	188	234	755
MNC/μl	7669	2216	4384	3271	2906	3936	3557	3400	5011	5041	4062	4275	3941	3096	3072	3601	3782	3880	2044	4549
MNC%	76.7	61.6	69.6	59.5	58.1	70.3	75.7	65.4	75.9	80.0	56.4	61.1	74.4	67.3	76.8	72.0	71.4	64.7	68.1	65.0
T% of MNC	25.1	27.7	37.4	42.9	30.9	28.6	36.2	55.1	43.1	14.9	26.2	23.2	36.0	36.1	29.8	37.5	44.0	26.5	35.1	42.4
WC1% of MNC	1.5	1.8	1.8	4.8	3.1	4.0	4.0	6.8	2.6	0.9	1.8	1.0	1.8	0.5	2.6	3.4	3.6	3.4	5.2	2.9
B cell% of MNC	38.0	16.6	9.2	18.5	12.3	13.2	11.7	10.9	12.6	54.5	18.8	20.3	13.6	11.6	30.5	11.5	10.4	18.3	12.7	11.5
CD4% of T	34.1	45.7	43.8	30.3	44.2	47.2	50.6	43.9	44.6	59.7	55.5	56.2	51.3	70.6	52.6	47.1	60.8	49.9	47.4	48.7
CD8% of T	31.6	29.3	32.1	34.2	22.3	13.7	18.5	20.4	27.1	12.7	15.6	18.4	24.5	13.2	17.2	22.1	13.8	15.7	16.4	20.9
CD4/CD8	1.1	1.6	1.4	0.9	2.0	3.5	2.7	2.2	1.6	4.7	3.6	3.0	2.1	5.3	3.1	2.1	4.4	3.2	2.9	2.3
T/μl	1927	614	1638	1402	897	1126	1286	1874	2158	752	1064	993	1419	1118	916	1352	1665	1028	717	1928
WC1/μl	115	40	79	157	90	156	141	231	131	45	73	43	71	15	79	124	136	133	107	130
Bcell/μl	2916	369	403	606	357	518	418	372	629	2745	764	869	537	359	937	414	395	711	259	522
CD4/μl	657	280	717	425	396	532	651	822	962	449	590	558	728	789	482	637	1012	513	340	939
CD8/μl	610	180	526	480	200	154	238	382	585	96	166	183	347	148	158	299	230	162	117	402
CD62Llow	55.1	56.5	52.2	46.9	48.5	52.4	47.6	41.0	41.0	47.4	55.1	43.0	42.1	48.2	57.5	48.6	49.1	45.4	44.7	44.4
CD4%																				
CD62Llow																				
CD8%	67.5	47.3	44.2	44.0	47.2	31.7	24.0	16.8	50.4	49.9	29.0	41.3	58.7	41.7	25.9	28.3	28.3	45.4	39.4	48.5

CD62L G	26,370	14,568	22,227	16,457	24,630	35,344	27,221	38,361	33,971	21,224	17,432	29,912	28,475	14,617	31,697	34,033	31,047	30,460	38,953	33,956
CD62LMon	6,772	11,422	20,615	15,149	23,925	23,767	20,575	25,365	25,772	6,678	17,717	16,108	17,616	15,160	23,482	26,685	26,715	20,416	22,240	23,204
LFA-1 G	29948	25252	31145	32203	33088	31129	30482			27,658	33545	34,432	31,749	32,414	30,230	27,874	29728	25861	31424	29,075
LFA-1 L	11665	7443	6868	9460	10336	8132	7314			11174	8153	7149	7837	9889	10183	7863	8649	7540	13362	8655
LFA-1 M	33463	39023	28922	33723	42006	30885	29309			26452	39500	35552	30887	41536	35030	37428	37458	24748	42515	41444
LFA-1 WC1	7483	5521	6418	7678	8191	7320	6465			6998	7791	7750	6342	6847	7885	6426	7405	5978	7552	7677
Mon/ μ l	461	290	411	370	538	569	271	384	611	314	338	693	259	377	277	382	497	384	284	804
Ly/ μ l	7208	1926	3973	2901	2367	3366	3286	3026	4409	4728	3724	3582	3682	2719	2796	3219	3285	3496	1760	3744
cM %	73.2	66.9	77.9	75.0	85.8	85.0	80.2	85.0	80.0	67.0	75.0	76.2	71.8	73.1	91.3	89.0	86.1	82.6	69.8	83.9
intM%	13.4	15.3	15.1	9.2	9.1	11.9	14.3	9.0	8.0	9.2	16.3	9.1	18.7	11.6	5.1	6.5	8.8	10.7	14.2	12.5
ncM%	4.8	10.5	2.7	7.3	1.8	1.3	2.3	5.0	5.0	12.8	3.2	6.8	3.5	7.2	1.0	1.7	3.0	3.2	10.8	1.2
cM/ μ l	337	194	320	278	462	484	217	327	489	210	253	528	186	276	253	340	427	317	198	675
intM/ μ l	62	44	62	34	49	68	39	35	49	29	55	63	48	44	14	25	44	41	40	100
ncM/ μ l	22	31	11	27	10	7	6	19	31	40	11	47	9	27	3	6	15	12	31	9
NK of Ly	6.1	5.8	1.3	3.8	1.3	2.1	2.3	2.6	6.9	1.2	2.8	3.1	2.7	3.7	1.1	4.9	1.9	0.8	1.3	1.0
NK cell/ μ L	436	112	52	110	31	71	76	79	304	58	105	112	98	101	31	158	62	28	23	37
CD163 Mon	12099	9767	11514	9852	10552	10201	17590	11873	18007	12180	11362	25995	13839	14875	11755	13881	14411	8131	10834	12147
MHC on Mon	8669	16212	20651	12308	15653	7127	14829	15614	10763	8359	15128	11297	14648	14337	14059	15735	15767	14401	15109	18562

Lact.: Lactating.