

**Supplementary Table 1.** Assessment of myoglobin content in the model feeds, with or without the addition of meat and bone meal using this ELISA .  
Comparison of the ELISA A450 values between the threshold reference and model feed extracts, using Dunnett's test.

Model feed	$A_{450}$			Mean	SD	Difference of mean		95% confidence level of the difference	
	Experiment 1	Experiment 2	Experiment 3			$A_{450}$ Threshold	$p$	Lower limit	Upper limit
Threshold control	0.1066	0.1058	0.1071	0.1065	0.0007	0	-	-	-
Assorted feed	0.0157	0.021	0.0213	0.0193	0.0032	-0.0872*	0.0000	-0.0919	-0.0824
+ 0.05% MBM*	0.127	0.1225	0.146	0.1318	0.0125	0.0253	0.0558	-0.0005	0.0512
+ 0.1% MBM	0.1897	0.2057	0.247	0.2141	0.0296	0.1076*	0.0002	0.0551	0.1601
A 4:1 mixture of assorted feed and skimmed milk	0.0187	0.0203	0.02	0.0197	0.0009	-0.0868*	0.0000	-0.0916	-0.0821
+ 0.05% MBM	0.0865	0.094	0.112	0.0975	0.0131	-0.009	0.8097	-0.0349	0.0169
+ 0.1% MBM	0.1547	0.1627	0.1973	0.1716	0.0227	0.0651*	0.0135	0.0125	0.1176
Fish meal	0.025	0.0277	0.0273	0.0267	0.0015	-0.0798*	0.0000	-0.0846	-0.0751
+ 0.05% MBM	0.0985	0.1	0.116	0.1048	0.0097	-0.0017	1.0000	-0.0275	0.0242
+ 0.1% MBM	0.1917	0.2027	0.2393	0.2112	0.025	0.1047*	0.0002	0.0522	0.1572
Pork meal	0.0433	0.043	0.0473	0.0446	0.0024	-0.0619*	0.0000	-0.0667	-0.0572
+ 0.05% MBM	0.114	0.107	0.139	0.12	0.0168	0.0135	0.4841	-0.0124	0.0394
+ 0.1% MBM	0.182	0.184	0.221	0.1957	0.022	0.0892*	0.0011	0.0366	0.1417
Pork/chicken meal (1)	0.0323	0.0343	0.037	0.0346	0.0023	-0.0719*	0.0000	-0.0767	-0.0672
+ 0.05% MBM	0.1195	0.123	0.1355	0.126	0.0084	0.0195	0.1777	-0.0064	0.0454
+ 0.1% MBM	0.1937	0.2067	0.238	0.2128	0.0228	0.1063*	0.0002	0.0538	0.1588
Pork/chicken meal (2)	0.0213	0.0233	0.0247	0.0231	0.0017	-0.0834*	0.0000	-0.0881	-0.0787
+ 0.05% MBM	0.0825	0.0815	0.0945	0.0862	0.0072	-0.0203	0.1518	-0.0462	0.0055
+ 0.1% MBM	0.1813	0.1907	0.2197	0.1972	0.02	0.0907*	0.0009	0.0382	0.1432

\*MBM: meal and bone meal