

Supplemental material Agriculture

Table S1. Mineral contents of experimental dietary treatments for cattle feeding.

Minerals	Feed Ingredients						Diets				SEM
	1	2	3	4	5	6	D1	D2	D3	D4	
Macro minerals, g/kg DM											
Phosphorous	0.12	0.16	0.30	0.72	0.14	0.80	0.26	0.25	0.28	0.28	0.04
Potassium	1.03	1.77	0.39	2.38	2.10	1.92	0.71	0.83	1.08	0.67	1.02
Calcium	0.25	0.80	0.05	0.21	10.5	2.35	0.27	0.74	1.33	0.29	1.04
Magnesium	0.10	0.29	0.12	0.30	2.24	0.40	0.14	0.32	0.47	0.14	0.10
Micro minerals, mg/kg DM											
Sodium	176	624	0.01	37.0	113	1919	3378	1379	1720	1962	5.04
Iron	98.4	85.6	37.0	86.4	430	909	202	273	275	321	3.04
Manganese	61.1	26.1	5.00	36.6	756	276	48.0	91.1	141	58.0	2.36
Copper	4.00	7.77	2.00	11.3	7.44	86.4	7.72	10.8	14.9	10.6	1.34
Zinc	17.6	25.8	21.0	50.3	56.7	248	39.7	39.9	51.4	46.0	2.97
Boron	4.09	25.7	0.00	46.9	37.0	4.86	4.14	9.05	13.9	4.08	1.91
Aluminium	82.0	51.0	0.00	15.0	510	700	120	170	220	100	2.98

Feed Ingredients: **1** = Grass hay (*E. tef*); **2** = Lucerne (*M. sativa*); **3** = Yellow maize; **4** = Soy bean (OCM); **5** = Cactus; **6**= Molasses. **D1** = Control diet with no commercial ingredients; **D2** =10% Cactus diet (natural pasture hay + irrigated pasture hay + crop-based energy and protein supplements + 10% Cactus); **D3** = 20% Cactus diet (natural pasture hay + irrigated pasture hay + crop-based energy and protein supplements + 20% Cactus); **D4** = Commercial diet.

DM = Dry matter.

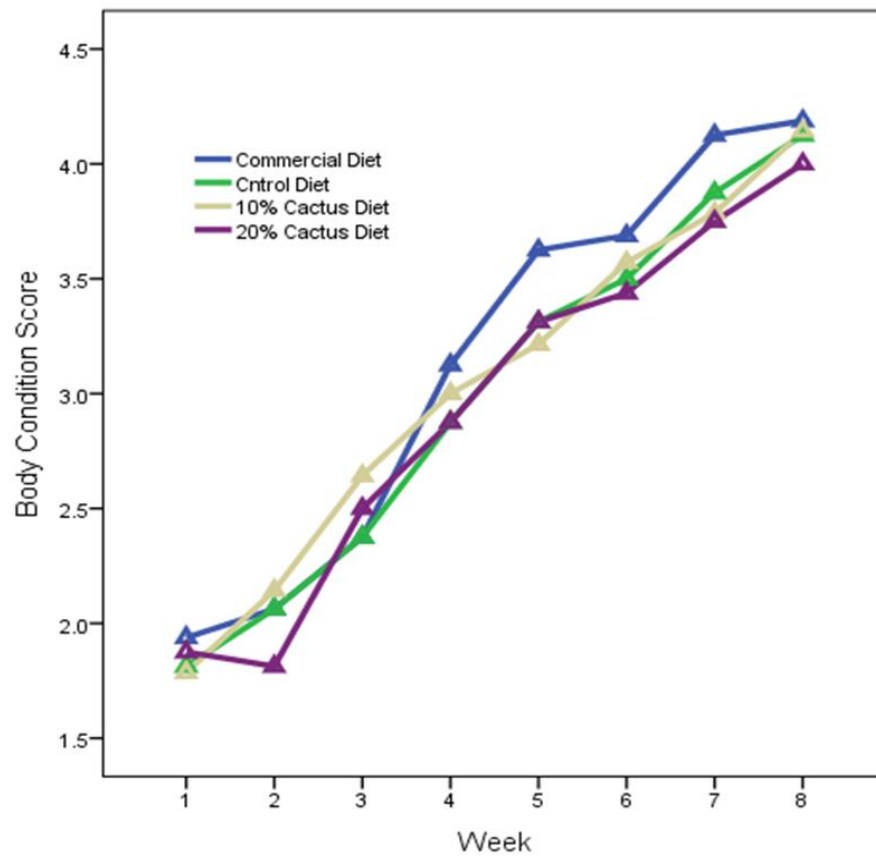


Figure S1: Body condition score over time of cattle fed cactus and non-cactus diets