**Table (4):** Effect of low dietary crude protein , metabolizable energy and ideal levels of amino acids on carcass characteristics.

Traits	Carcass		Liver		Heart		Gizzard		Abdominal fat	
Trt*	(g)	(%)	(g)	(%)	(g)	(%)	(g)	(%)	(g)	(%)
T1	1565.00°a	0.791 a	40.0	0.0202	10.0	0.0051	30.00 <sup>b</sup>	0.0152°	21.67 <sup>a</sup>	0.0109
	±59.65	±0.0097	±2.88	±0.0009	±0.00	±0.0009	±0.00	±0.0070	±3.33	±0.0015
T2	1041.67 <sup>d</sup>	0.712 <sup>b</sup>	36.7	0.0249	8.3	0.0057	33.33 <sup>ab</sup>	0.0228 <sup>a</sup>	8.33 <sup>b</sup>	0.0057
	±10.93	±0.0062	±9.28	±0.0005	±1.66	±0.0011	±1.66	±0.0009	±1.66	±0.0011
Т3	1073.33 <sup>d</sup>	0.706 b	36.7	0.0241	6.7	0.0044	30.00 <sup>b</sup>	0.0197 abc	13.33 <sup>ab</sup>	0.0088
	±40.96	±0.018	±1.66	±0.008	±1.66	±0.0011	±2.88	±0.0016	±4.40	±0.0028
<b>T4</b>	1348.33 <sup>bc</sup>	0.746 <sup>ab</sup>	40.0	0.0221	10.0	0.0055	30.00 <sup>b</sup>	0.0166 <sup>bc</sup>	11.67 <sup>ab</sup>	0.0065
	±66.47	±0.0334	±0.00	±0.0001	±2.88	±0.0016	±2.88	±0.0015	±1.66	±0.0095
Т5	1230.00 <sup>cd</sup>	0.748 <sup>ab</sup>	41.7	0.0253	8.3	0.0050	35.00 <sup>ab</sup>	0.0214 <sup>a</sup>	15.00 <sup>ab</sup>	0.0091
	±41.93	±0.011	±3.33	±0.0016	±1.66	±0.0009	±2.88	±0.0021	±0.00	±0.00018
<b>T6</b>	1465.00 <sup>ab</sup>	0.781 <sup>a</sup>	58.3	0.0286	10.0	0.0054	38.33 <sup>a</sup>	0.0205 <sup>ab</sup>	21.67 <sup>a</sup>	0.0114
	±100.04	±0.0181	±7.26	±0.0028	±0.00	±0.0002	±1.66	±0.0010	±4.40	±0.0018

 $<sup>^{\</sup>text{a-d}}$  Means have different superscripts in the same column are significantly(P $\leq$ 0.05) different.

<sup>\*</sup>T1: Fed basal diet (BD) with recommended levels of CP and ME (considered as control group), T2: Fed BD with -3% CP and -100 kcal ME. T3: Fed BD with -3% CP and recommended ME supplemented with four AAs (Lys, Met, Thr and Trp), T4: Fed BD with -3% CP and recommended ME supplemented with five AAs (Lys, Met, Thr, Trp and Val), T5: Fed BD with -3% CP -100 kcal ME supplemented with four AAs (Lys, Met, Thr and Trp), T6: Fed BD with -3% CP -100 kcal ME supplemented with five AAs (Lys, Met, Thr, Trp and Val).

**Table (5)**: Effect of low dietary crude protein, metabolizable energy and ideal levels of amino acids on plasma total protein, albumin, globulin, and A/G ratio (Liver fraction) at the end of experiment.

Treatment	Liver fraction					
groups.	TP (mg/dl)	Ab ( mg/dl )	Gb ( mg/dl)	A/G ratio (mg/dl)		
T1	3.60±0.057	$1.98^{a} \pm 0.0033$	1.62 <sup>b</sup> ±0.54	1.23 <sup>a</sup> ±0.040		
T2	3.67±0.033	1.81 <sup>b</sup> ±0.5811	1.86 a ±0.037	0.98 b ±0.050		
T3	3.76±0.066	1.93 <sup>ab</sup> ±0.0317	1.83 <sup>a</sup> ±0.665	1.06 <sup>b</sup> ±0.0432		
T4	3.70±0.577	$1.90^{ab}\pm0.0057$	1.80 a ±0.069	$1.05^{b}\pm0.0423$		
T5	3.76±0.100	1.91 <sup>ab</sup> ±0.0437	1.85 <sup>a</sup> ±0.056	1.03 <sup>b</sup> ±0.0276		
T6	3.80±0.088	$1.89^{ab}\pm0.0665$	1.91 <sup>a</sup> ±0.049	0.99 <sup>b</sup> ±0.0317		

a-b Means have different superscripts in the same column are significantly (P<0.05) different. See abbreviations in Table 4.