Sup Table.2A: A comparison between casein re-fed animals to whey re-fed animals following short-term (A) and long-term (B) experiments in all parameters (mean ± SD).

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| --- | --- | --- | --- |
|  | ***Cas-group*** | ***Whey-group*** |  |
| ***Anthropometric Parameters*** |  |  | ***p-value*** |
| Body Weight (gr) | 220±17.84 | 193.03±18.48 | *p=0.022* |
| Humerus Length (mm) | 23.5±0.51 | 23.07±0.46 | *p=0.14* |
| Epiphyseal Growth Plate (EGP) (mm) | 0.53±0.10 | 0.48±0.04 | *p=0.23* |
| ***Cortical Bone Parameters*** |  |  |  |
| AVD (%) | 53.3±2 | 46.6±2 | *p<0.01* |
| Tt.Ar (mm^2) | 4.19±0.34 | 3.66±40 | *p=0.029* |
| Ct.Ar (mm^2) | 2.83±0.19 | 2.31±0.17 | *p<0.01* |
| Ct.Ar./Tt.Ar (%) | 68±2 | 63±3 | *p=0.013* |
| Ct.Th (mm) | 0.5±0.02 | 0.43±0.01 | *p<0.01* |
| ***Three Point Bending*** |  |  |  |
| Toughness (Nm\*10-3) | 21.53±8.8 | 14.7±2. | *p=0.088* |
| Stiffness (N/mm) | 42.4±13.1 | 32.5±5.9 | p=0.106 |
| Fracture Load (N) | 33.99±5.97 | 26.22±1.92 | *p=0.019* |
| Ultimate Load (N) | 37.10±3.10 | 26.40±2.06 | *p<0.01* |
| ***Trabecular Bone Parameters*** |  |  |  |
| BV/TV (%) | 17.93±4 | 10.57±3 | *p<0.01* |
| Tb.Th (mm) | 0.084±0.01 | 0.071±0.01 | *p=0.028* |
| Tb.N (mm-1) | 1.62±0.32 | 1.26±0.15 | *p=0.025* |
| Tb.Sp (mm) | 0.70±0.12 | 0.85±0.08 | *p=0.027* |
| ***Serum Component*** |  |  |  |
| IGF-I (ng/ml) | 1101.33±88.65 | 972.61±247.35 | *p=0.193* |
| Leptin (ng/ml) | 1±0.43 | 0.82±0.3 | *P=0.5* |
| Osteocalcin (ng/ml) | 65±8.97 | 59.72±3.41 | *p=0.218* |