**Supplementary Table S1** *Number of observations for each group of individuals for all measured biochemical parameters of alpacas*

|  |  |  |  |
| --- | --- | --- | --- |
| Age | Alpacas > 6 months of age |  | Crias ≤ 6 months of age |
| Season | Summer feeding |  | Winter feeding |  | Summer feeding |
| Sex | Females | Males |  | Females | Males |  | Females | Males |
| Total protein  | 119 | 40 |  | 80 | 21 |  | 28 | 21 |
| Albumin  | 117 | 40 |  | 71 | 17 |  | 27 | 20 |
| Globulin | 117 | 40 |  | 69 | 17 |  | 27 | 20 |
| Creatinine | 114 | 39 |  | 74 | 17 |  | 27 | 18 |
| Urea | 119 | 40 |  | 81 | 21 |  | 28 | 21 |
| Triglycerides | 41 | 12 |  | 20 | 8 |  | 4 | 1 |
| Cholesterol | 115 | 38 |  | 71 | 19 |  | 26 | 19 |
| Beta-hydroxybutyrate  | 51 | 17 |  | 31 | 6 |  | 16 | 13 |
| Nonesterified fatty acids | 48 | 17 |  | 32 | 6 |  | 15 | 13 |
| Bilirubin | 116 | 39 |  | 69 | 17 |  | 27 | 20 |
| Alkaline phosphatase  | 120 | 39 |  | 78 | 21 |  | 28 | 21 |
| Alanine aminotransferase | 50 | 12 |  | 28 | 10 |  | 6 | 2 |
| Aspartate aminotransferase  | 119 | 39 |  | 76 | 19 |  | 27 | 21 |
| Gamma-glutamyl transferase | 121 | 40 |  | 80 | 21 |  | 28 | 21 |
| Creatine kinase  | 97 | 30 |  | 64 | 16 |  | 23 | 15 |
| Lactate dehydrogenase  | 46 | 12 |  | 28 | 10 |  | 6 | 2 |
| Vitamin A  | 36 | 12 |  | 16 | 2 |  | 4 | 0 |
| Vitamin E  | 36 | 11 |  | 16 | 2 |  | 4 | 0 |
| Sodium | 115 | 39 |  | 67 | 14 |  | 24 | 18 |
| Potassium | 98 | 30 |  | 54 | 9 |  | 21 | 13 |
| Calcium | 120 | 39 |  | 79 | 20 |  | 26 | 19 |
| Phosphorus | 117 | 36 |  | 74 | 21 |  | 24 | 17 |
| Chloride  | 112 | 39 |  | 68 | 17 |  | 24 | 17 |
| Magnesium | 75 | 26 |  | 40 | 13 |  | 9 | 7 |