

Biochemistry Reference Intervals

| Test | Bovine Dairy | Bovine Beef | Equine | Ovine | Caprine | Llama | Alpaca | Canine | Feline | Porcine |
|-----------------------------|--------------|-------------|-----------|----------|----------|-----------|----------|----------|----------|----------|
| Albumin, g/dl | 3.2-4.1 | 3.1-4.1 | 2.9-3.8 | 2.5-3.9 | 2.3-4.0 | 3.0-4.2 | 3.5-4.9 | 2.3-4.0 | 2.6-4.0 | 2.4-3.8 |
| Alk phos, IU/L | | | 80-240 | 10-70 | 50-200 | 12-97 | | 10-84 | 10-70 | 110-400 |
| Amylase, IU/L* | 0-34 | 0-28 | 0-35 | 1-30 | 1-30 | 420-1200 | | 500-1500 | 500-1500 | 271-1198 |
| ALT (SGPT), IU/L | | | | | | | | 5-65 | 5-65 | 31-58 |
| Anion Gap | 16-22 | 17-26 | 10-21 | | | 2-18 | 15-27 | | | |
| AST (SGOT), IU/L | 46-189 | 51-114 | 212-453 | 60-110 | 30-80 | 66-235 | 127-298 | | | 30-90 |
| b-Hbutyrate, mg/dl | 3.24-7.62 | 1.55-5.96 | | | | 0.12-0.75 | | | | |
| B.acids (fast), mEq/L | | | 0-28 | | | 1.1-22.9 | | 0-10 | 0-5 | |
| B.acids (post-prand), mEq/L | | | | | | | | 0-20 | 0-10 | |
| Bili., total, mg/dl | 0.1-0.3 | 0.1-0.5 | 0.8-2.6 | 0.0-0.5 | 0.0-0.5 | 0.0-0.3 | 0.1-0.4 | 0.0-0.5 | 0.0-0.5 | 0-0.5 |
| Bili., direct, mg/dl | 0-0.2 | 0-0.2 | 0-0.4 | 0.0-0.2 | 0.0-0.2 | | | 0.0-0.2 | 0.0-0.2 | 0.0-0.2 |
| BUN, mg/dl | 8-27 | 2-18 | 8-23 | 10-35 | 10-20 | 24-44 | 13-28 | 10-30 | 10-35 | 10-30 |
| Calcium, mg/dl | 8.2-10.0 | 8.7-10.9 | 11.5-13.3 | 8.5-12.0 | 9.0-12.0 | 8.4-10.8 | 8.4-10.4 | 8.0-12.0 | 8.0-12.0 | 7-11.5 |
| Chloride, mEq/L | 96-110 | 91-109 | 94-105 | 95-112 | 100-115 | 109-125 | 100-115 | 100-115 | 117-128 | 94-110 |
| Cholesterol, mg/dl | 43-331 | 54-237 | 75-130 | 40-76 | 80-130 | 13.3-52.4 | | 150-275 | 75-175 | 80-150 |
| CK, IU/L | 69-268 | 47-303 | 145-633 | 50-150 | 50-150 | 0-552 | 43-750 | 50-300 | 50-300 | 60-200 |
| Creatinine, mg/dl | 0.5-1.4 | 1-2 | 0.9-1.7 | 0.9-2.0 | 1.0-2.0 | 1.5-2.7 | 0.9-1.7 | 1.0-2.0 | 1.0-2.0 | 1.0-2.7 |
| GGT, IU/L | 12-49 | 1-31 | 7-25 | 30-94 | 5-15 | 16-46 | 10-37 | 2-10 | 1-8 | 29-39 |
| Glucose, mg/dl | 51-77 | 37-103 | 79-109 | 50-85 | 50-75 | 89-132 | 88-151 | 65-130 | 70-125 | 85-150 |
| Lipase, IU/L* | 30-200 | 30-400 | 400-1000 | 1-71 | | | | 200-1800 | 100-1400 | 10-44 |
| Magnesium mg/dl | 2.0-3.9 | 1.6-2.5 | 1.7-2.9 | 2.2-2.8 | 2.8-3.6 | 1.6-4.9 | 1.4-2.2 | 1.8-2.4 | 2.0-2.5 | 2.7-3.7 |

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|------------------------------|---------------------|--------------------|---------------|--------------|----------------|--------------|---------------|---------------|---------------|----------------|
| NEFA, mEq/L | 0.04-0.34 | < 0.91 | | | | 0-0.24 | | | | |
| Phosphorus, mg/dl | 5.2-7.9 | 5.3-10.3 | 1.9-4.1 | 5.0-7.5 | 3.6-9.0 | 1.3-10.1 | 5.1-11.5 | 3.0-7.0 | 3.5-6.1 | 5.3-9.6 |
| Potassium, mEq/L | 3.8-5.2 | 3.5-5.6 | 2.5-4.7 | 4.5-6.0 | 3.5-6.5 | 3.8-7.3 | 4.1-6.3 | 4.0-5.7 | 4.0-5.8 | 4.4-6.5 |
| Protein (total), g/dl | 6.3-8.7 | 6-8.4 | 5.9-7.6 | 5.5-7.5 | 6.4-7.0 | 5.3-7.3 | 5.1-6.9 | 5.4-7.6 | 6.0-8.1 | 5.5-6.5 |
| Sodium, mEq/L | 137-148 | 141-150 | 133-142 | 145-155 | 140-155 | 146-156 | 142-154 | 140-158 | 145-160 | 135-150 |
| SDH, IU/L | 6.4-58.8 | 0-50 | 2.4-7.2 | 6-27 | 14-24 | 0-22 | 1.5-15.7 | | <22 | 1.0-5.8 |
| tCO2, mEq/L | 21-30 | 22-35 | 21-30 | 21-28 | 22-30 | 19-29 | 23-33 | 18-26 | 17-24 | 22-30 |
| Total T4, ug/dl | | | | | | | | 1-4 | 1.8-4.5 | |
| Triglycerides, mg/dl | 9-38 | 14-46 | | | | 8.3-55.8 | | | 44-105 | |