



ENDOCRINOLOGY REFERENCE RANGES

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CANINE

ACTH	19.0 - 67.0	pg/mL
Aldosterone, pre	14 - 957	pmol/L
Aldosterone, 1H & 2H post ACTH	197 - 2103	pmol/L
Calcium, ionized (at pH 7.4)	1.25 - 1.45	mmol/L
Cortisol, pre	15 - 110	nmol/L
2H & 4H post high dose dex (0.1mg/kg)	< 30	nmol/L
1H & 2H post ACTH	220 - 550	nmol/L
6H & 8H post low dose dex (0.01mg/kg)	< 30	nmol/L
Gastrin, fasting	10 - 40	ng/L
15M post feed	30 - 180	ng/L
30M post feed	40 - 170	ng/L
45M post feed	20 - 170	ng/L
60M post feed	30 - 100	ng/L
Insulin	Insulin uIU/mL	Glucose mg/dL
Fasting	8.1 - 31.9	81 - 118
IV Glucose Tolerance Test (IVGTT)		0.11-0.33
15M post glucose	18.3 - 83.3	218 - 382
30M post glucose	14.9 - 69.7	95 - 218
45M post glucose	11.4 - 28.6	64 - 155
60M post glucose	11.4 - 21.7	55 - 115
Insulin-like Growth Factor-I (IGF-I)	4 - 95	nmol/L
Insulin autoantibodies	< 20	%
Parathyroid hormone (PTH)	1.1 - 10.6	pmol/L
PTH Related Protein (PTHrP)	< 1.0	pmol/L
Phenobarbital	68 - 147	umol/L
Progesterone, anestrus	< 3	nmol/L
Post estrus 15 days	64 - 95	nmol/L
Post estrus 30 days	25 - 51	nmol/L
Post estrus 60 days	3 - 10	nmol/L
Testosterone, pre, male	2.6 - 13.9	nmol/L
1H post HCG/GnRH	13.0 - 17.3	nmol/L
2H post HCG/GnRH	3.5 - 20.8	nmol/L
Castrate or female	< 0.7	nmol/L
Total thyroxine (TT4)	9 - 52	nmol/L
Total tri-iodothyronine (TT3)	0.8 - 2.1	nmol/L
Free thyroxine (FT4)	9 - 39	pmol/L
Thyroid stimulating hormone (TSH)	0 - 0.58	ng/mL
Free T4 by Dialysis (FT4d)	6 - 42	pmol/L
T4 antibody index (T4AA)	0 - 20	%
T3 antibody index (T3AA)	0 - 10	%
Thyroglobulin antibody (TgAA)	0 - 35	%
Urinary cortisol:creatinine	≤ 34	(ratio)
Vitamin D, 25-Hydroxy-	109 - 423	nmol/L
1,25-Dihydroxyvitamin D (Calcitriol)	164 - 523	pmol/L

BOVINE

Cortisol, pre	8 - 55	nmol/L
2H post ACTH	110 - 275	nmol/L
Progesterone, anestrus/estrus	0 - 2	nmol/L
Luteal	13 - 64	nmol/L
Vitamin D, 25-Hydroxy-	Unavailable	nmol/L

FERRET

Insulin	7.1 - 30.8	uIU/mL
Urinary cortisol:creatinine	< 3	(ratio)

FELINE

Aldosterone, pre	194 - 388	pmol/L
Aldosterone, post ACTH	277 - 721	pmol/L
Calcium, ionized (at pH 7.4)	1.0 - 1.4	mmol/L
Cortisol, pre	15 - 97	nmol/L
2H post dexamethasone	< 30	nmol/L
1H post ACTH	97 - 207	nmol/L
2H post ACTH	110 - 276	nmol/L
Insulin, fasting	10.0 - 81.3	uIU/mL
Insulin-like Growth Factor (IGF-I)	12 - 92	nmol/L
Insulin autoantibodies	< 20	%
Phenobarbital	68 - 147	umol/L
Parathyroid hormone (PTH)	0.7 - 3.4	pmol/L
PTH Related Protein (PTHrP)	< 1.0	pmol/L
Progesterone, no corpora lutea	< 3	nmol/L
CL active and/or pregnant	> 6	nmol/L
Testosterone, castrate or female	< 0.7	nmol/L
Total thyroxine (TT4)	9 - 46	nmol/L
Total tri-iodothyronine (TT3)	0.6 - 1.4	nmol/L
Free thyroxine (FT4)	10 - 53	pmol/L
Thyroid stimulating hormone (TSH)	0 - 0.38	ng/mL
Free T4 by Dialysis (FT4d)	10 - 50	pmol/L
Vitamin D, 25-Hydroxy-	127 - 335	nmol/L

EQUINE

ACTH	< 30.0	pg/mL
Calcium, ionized (at pH 7.6)	1.58 - 1.90	mmol/L
Cortisol, pre	85 - 180	nmol/L
> 8H post dexamethasone	< 30	nmol/L
Gastrin	40 - 140	ng/L
Insulin	Insulin uIU/mL	Glucose mg/dL
Fasting	< 20.0	77 - 105
Oral Sugar Test		
60M post glucose	< 45.0	< 125
75M post glucose	< 45.0	< 125
90M post glucose	< 45.0	< 125
Total thyroxine (TT4)	7 - 27	nmol/L
Total tri-iodothyronine (TT3)	0.7 - 2.5	nmol/L
Free thyroxine (FT4)	8 - 39	pmol/L
Free T4 by Dialysis (FT4d)	8 - 39	pmol/L
Parathyroid Hormone (PTH)	1.3 - 15.0	pmol/L
Progesterone, anestrus/estrus	0.6 - 2	nmol/L
Luteal	13 - 48	nmol/L
Testosterone, pre, stallion	0.7 - 3.4	nmol/L
Post HCG 30M	3.8 - 6.1	nmol/L
Post HCG 1H&2H	5.1 - 8.1	nmol/L
Castrate or Female	< 0.7	nmol/L
Insulin-like Growth Factor-I (IGF-I)	12 - 41	nmol/L
Vitamin D, 25-Hydroxy-	13 - 40	nmol/L

LLAMA

Progesterone, no CL, not pregnant	< 3	nmol/L
CL active and/or pregnant	> 6	nmol/L
Vitamin D, 25-Hydroxy-	Unavailable	nmol/L