



Equine Metabolic Testing at PDS



Prairie Diagnostic Services Inc. (PDS) now offers Equine metabolic testing. The tests measure the levels of adrenocorticotrophic hormone (ACTH) and insulin in Equine blood samples. Both markers are critical for diagnosing pituitary pars intermedia dysfunction (PPID) and Equine metabolic syndrome (EMS).

The PDS tests' reference ranges are based on the results of a Western College of Veterinary Medicine (WCVN) project with PDS to determine a regional baseline for ACTH and Insulin in Western Canadian horses. Hormonal biomarkers can fluctuate based on season, geographical region, weather conditions and the time of day.

Western Canadian veterinarians are welcome to contact WCVN Veterinary Medical Centre's large animal internal medicine team for consultation on equine endocrine-related cases or send an email to vmc_equine_endocrine_consulting@usask.ca.

Additional resources:

Directed to veterinarians:

- <https://vmc.usask.ca/referring-veterinarians/submit-referral.php#top>
- [Equine Endocrinology Group 2022](#)
- [Equine Endocrinology Group 2021 PPID Recommendations](#)

Directed to horse owners/veterinarians:

- <https://vmc.usask.ca/services/equine.php#SpecializedServices>
- <https://vmc.usask.ca/services/medicine-large.php#ServicesOffered>
- <https://vmc.usask.ca/care/equine-health/resources/ppid.php>
- <https://vmc.usask.ca/care/equine-health/resources/ems.php>

Available Tests:

Refer to PDS website for sample requirements and shipping information (pdsinc.ca/resources/fee-guide).

- **Equine Metabolic Panel** - includes Insulin and Endogenous ACTH
For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling.
- **Equine PPID (Cushing's) Profile** - includes Insulin, Endogenous ACTH and Glucose
For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling.
- **Insulin - Serial Testing** - includes 2 or 3 Insulin tests submitted at the same time.
For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling.
For dynamic testing, please follow the recommendations provided by the equine endocrinology group ([Equine Endocrinology Group 2022](#)). For the oral sugar test, horses should be fasted 3-6 hours. The insulin tolerance test should be performed in the fed state (hay or pasture only).
- **Thyrotropin Releasing Hormone (TRH) Stim Test** - includes 2 Endogenous ACTH tests submitted at the same time.
Thyrotropin Releasing Hormone (TRH) Stim Test is available to book through WCVN Veterinary Medical Center Large Animal Clinic by calling 306-966-7178.