

# Veterinary applications

The usefulness of salivary steroid assay in veterinary medicine is mainly due to 2 factors: all the steroids molecule in saliva are absolutely identical in any mammalian and there is no significant difference in the protein content of saliva from different species.

Confinement stress and environmental preferences have been studied in a variety of farm animals: particular attention has been applied to horses and dogs.

Horses enjoy a superior standard of care that they have been largely overlooked in stress research. While horses are generally housed and managed under what would be considered superior conditions to farm animals, it is debatable whether such conditions are optimal for the horse.

The effects of long- or even short-term isolation and confinement include distress.

In sheep, pigs, and cattle, isolation stress results in increased plasma cortisol concentrations and disrupted behavior.

The invasive sampling procedures required for plasma cortisol assessment are often counterproductive in stress research, as the procedure of venipuncture itself can lead to significant hypothalamic-pituitary-adrenal activation.

The advent of biochemical assays capable of measuring cortisol reliably in the lower nanomolar range have enabled the noninvasive assessment of "free" cortisol in saliva.

The steroid assay in saliva sample is also useful for artificial insemination condition assessment. Lower serum steroid concentrations have numerous potential physiological consequences that may compromise reproduction in lactating cows.



## References:

- The effect of estrus synchronization treatment on somatic cell count of transitional-anestrus local-Damascus cross breed goats' milk. A. Q. Talafha , S. Q. Lafi and M. M. Ababneh. Tropical Animal Health and Production September 20, 2007.
- Rat Brown Adipose Tissue Thermogenic Features are Altered During Mid-Pregnancy. M.Frontera, E.Pujol, S.Rodríguez-Cuenca, A.Català-Niell, P. Roca, F. J. García-Palmer and M. Gianotti. Cell Physiol Biochem 2005;15:203-210
- Behavioral and Physiological Responses to Stabling in Naive Horses. E. J. Harewood, C. M. McGowan. Journal of Equine Veterinary Science April 2005

# Saliva Kits

- Non invasive tests
- The most complete range of analytes
- One step procedure
- Calibration curve and Specific Reference Controls (three levels)
- Standardized sample collection

## **Recommended for:**

- Stress assessment
- Occupational medicine
- Sports medicine
- Veterinary applications

### **Immunoenzymatic determinations (ELISA) in saliva.**

<b>Code</b>	<b>Description</b>
DKO020	Cortisol saliva
DKO021	Testosterone saliva
DKO022	Estradiol saliva
DKO023	17 OH-Progesterone saliva
DKO024	DHEA-S saliva
DKO025	Progesterone saliva
DKO026	Estriol saliva
DKO027	Androstenedione saliva
DKO063	Saliva collection devices
DKO067	Saliva controls (3 levels)
DKO075	Amylase
DKO078	IgA saliva

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***[www.diametra.com](http://www.diametra.com)***

*to find information about our Kits for plasmatic tests*

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