# TEST FOR VITAMIN D DEFICIENCY



Within 10 minutes, Test4D<sup>™</sup> lets you know if the animal is vitamin D deficient or not, with a simple yes or no response.

#### HORSES Phabdam

- Rhabdomyolysis, which is essentially a chronic muscle inflammatory condition
- Poor muscle recovery time and cramping after exercise
- Poor reaction to stress resulting from travel, training and competing
- A greater potential to develop laminitis because of the link between laminitis and insulin resistance



#### CATTLE

 In adults, lameness and pelvic fracture are a common sequelae of vitamin D deficiency. Under most circumstances 10,000 IU/day (16 IU vitamin D/kg BW) should provide adequate vitamin D for dairy cows during late gestation.



#### DOGS

 Both juvenile and older dogs can be affected by Osteoporosis.

## BIRDS

• Bent or easily fractured bones.





#### CATS

• Rickets and progressive paralysis.



#### REPTILES

 Just like other mammals, reptiles need vitamin D3 (for Ca absorption) to grow and maintain strong bones.

#### Risk factors for Vitamin D Deficiency:

- Bone disorders/development
- Rickets
- Decreased immune system function
- Susceptibility to infections because of a weakened immune system
- Insulin resistance with blood sugar issues

Vitamin D levels below 32±6ng/mL (80±15 nmol/L) are considered deficient

www.nanospeed.ca

# Vitamin D Test







Place drop of blood/serum on test strip

## Did you know...

- Vitamin D is not actually a vitamin, but a group of fat-soluble secosteroids
- In animals vitamin D is unique both because it functions as a prohormone and because when sun exposure is adequate the body can synthesize it as vitamin D3
- Is crucial in the process of calcium absorption into the bone
- According to many experts, vitamin D deficiency is not latitude dependent

#### Solution buffer is added. 10 minutes later test is complete.

Test4D<sup>™</sup> will show 2 dark lines (as pictured) if sample is vitamin D deficient. Only 1 line (control line) will appear if vitamin D levels are sufficient







NanoSpeed Diagnostics Inc. 109 9650-20ave, Edmonton, Ab , T6N 1G1 Canada 780.701.0022 www.nanospeed.ca