



Unit : Hypocalcemia In Cattle

Lesson : 1

Introduction to Milk Fever – Parturient Paresis

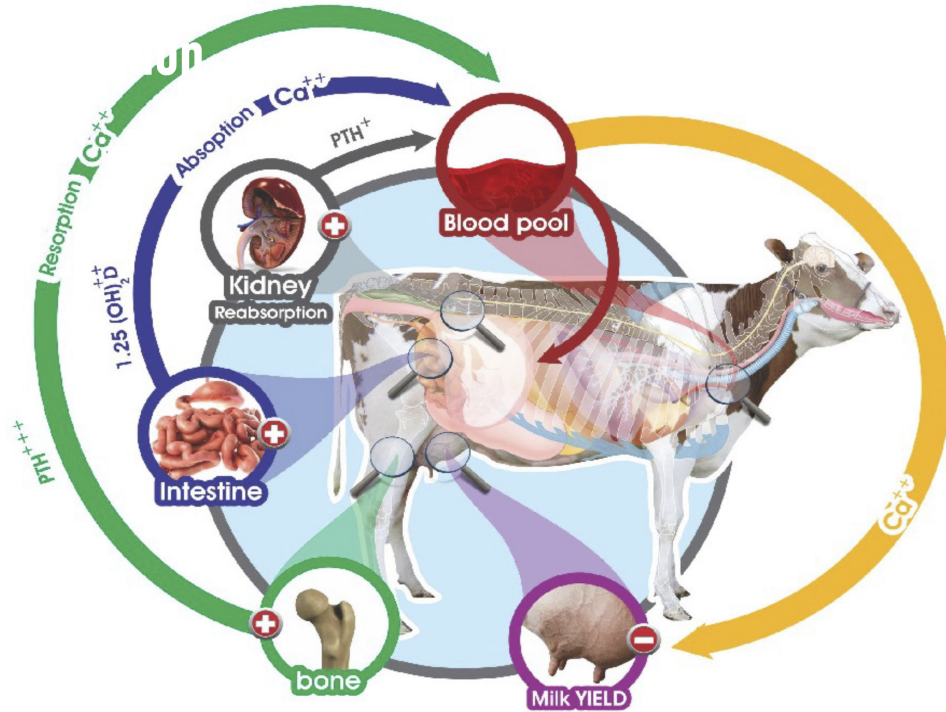
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Introduction

- Parturient paresis is most commonly seen in dairy cattle and may affect -10% of all adult dairy cows.
- Subclinical Hypocalcemia – 50% Multiparous periparturient cow
- Jerseys having a higher incidence of disease than other dairy breeds.
- Occurrence - 75% -within 24 hours of calving
12% - 24-48 hours after calving
6% at the time of calving
- Reduction of ionized calcium - extracellular space and plasma







Risk factors

- **Animal risk factors**
 - a. Excessive loss of calcium in the colostrum
 - b. Impairment of absorption of calcium
 - c. Marked reduction in the mobilization of calcium
 - d. High body condition score (BCS) 4/5
- **Dietary and environmental risk factors**
 - a. Dietary calcium
 - b. Dietary phosphorus
 - c. Dietary cation-anion difference (DCAD)



Dietary And Environmental Risk Factor



More than 100 g of calcium daily during the dry period- increases incidence

Dietary Calcium

High potassium concentrations (>2% of the ingested dry matter)

Dietary Potassium



Dietary Phosphorus

Dietary Magnesium

Prepartum diets high in phosphorus (P; > 80 g P/d) -greatly increase the and the severity



Deficiency during late gestation -release PTH from the parathyroid glands and furthermore influences the tissue sensitivity to PTH

Economic Importance

- Milk fever relapses
- Downer cow complications
- Dystocia and reproductive disease
- Retained placenta
- Metritis
- Milk production
- Mastitis
- Displacement of abomasum
- Ketosis
- Culling





Thank you