

Non- Parturient hypocalcemia in Dairy Cows

In the last 2 weeks we have seen several cases of hypocalcemia in dairy cows. Some of the cows were autumn calvers, however, others are in late pregnancy before and after drying off. Factors that can precipitate hypocalcemia outside of the immediate post-partum period include:

- (1) Zinc overdosing during facial eczema season
- (2) Conditions that decreases food intake for 12-16h (e.g. recent oestrus, inclement weather)
- (3) Lush green pasture /nutritional diarrhoea
- (4) Intake of oxalate containing plants (Spurrey/Yarr (Spergula arvensis), New Zealand spinach (Tetragonia tetragonioides), Rhubarb, Fathen, Sheep's sorrel, Arums)
- (5) High level of grain feeding (low calcium content), especially in absence of calcium supplementation

Factors which predispose to hypocalcaemia include metabolic alkalosis, high potassium concentrations in the diet (post fertilizer application), high ruminal urea secondary to high protein diets, and both high and low dietary phosphate.

A case of atypical hypocalcemia has also been reported in cows following feeding of discarded cooking oil.

