

Calving Disease Prevention

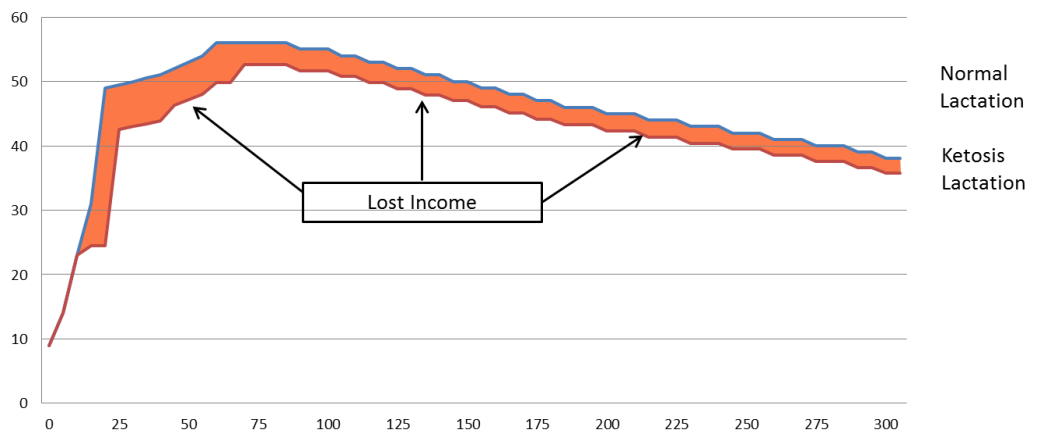
An Economic White Paper

Introduction:

With the arrival of SCR® HR™ Tags, that record both rumination and activity, it is possible to identify, diagnose, and treat calving diseases before they become acute. Early detection of calving diseases like Ketosis sharply reduces their negative economic impact.

Rumination is the most reliable sign of a happy, and more importantly, healthy cow. Cows normally ruminate for an average of 450-500 minutes per day. When rumination drops this is a clear sign that the cow is uncomfortable and probably not well. A drop in rumination minutes is often seen before any drop in production.

Ketosis occurs in between 10 -15% of all early lactation cows. Herds with higher production will see more cows with ketosis. The onset of Ketosis is not always clear and visible symptoms may not appear until much later. Cows with Ketosis will stop rising in production and may in fact fall some 30% compared to their peers. Rumination Monitoring gives an early window for diagnosis. Rumination Monitoring could be the only window for diagnosis of possible illnesses in herds where milk weights are not measured daily.

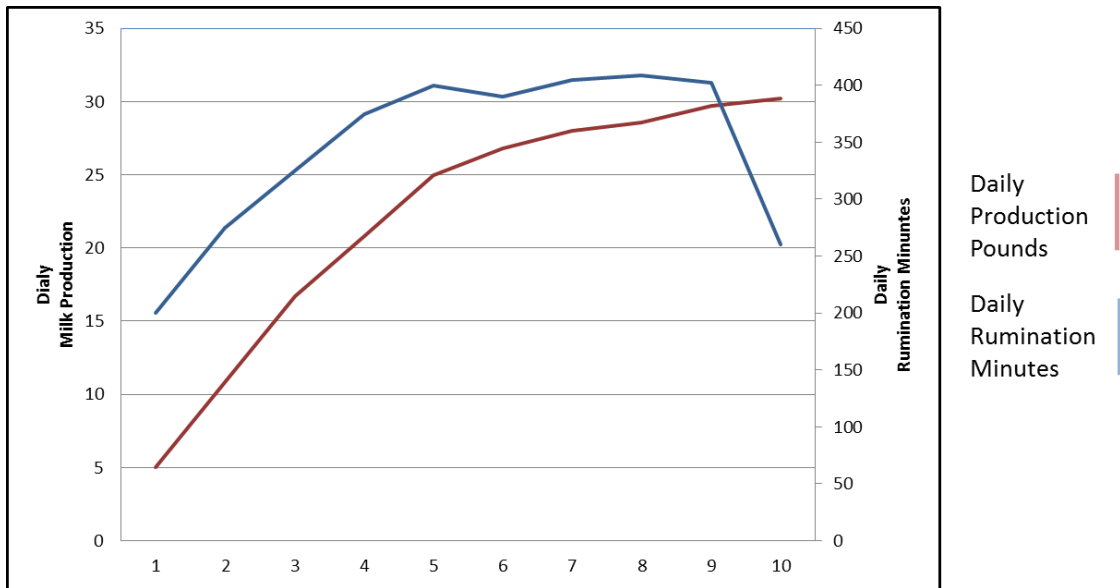


Situation:

- Day 1, 9 DIM: Cow 3742 is producing 29.7 kg of milk per day. This cow appears in the health report. Her rumination minutes over the last day are lower than usual and lower than normal at 260.

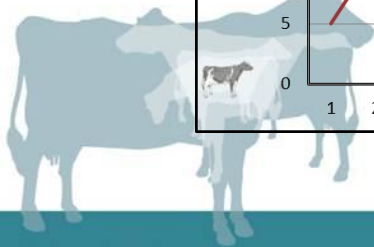
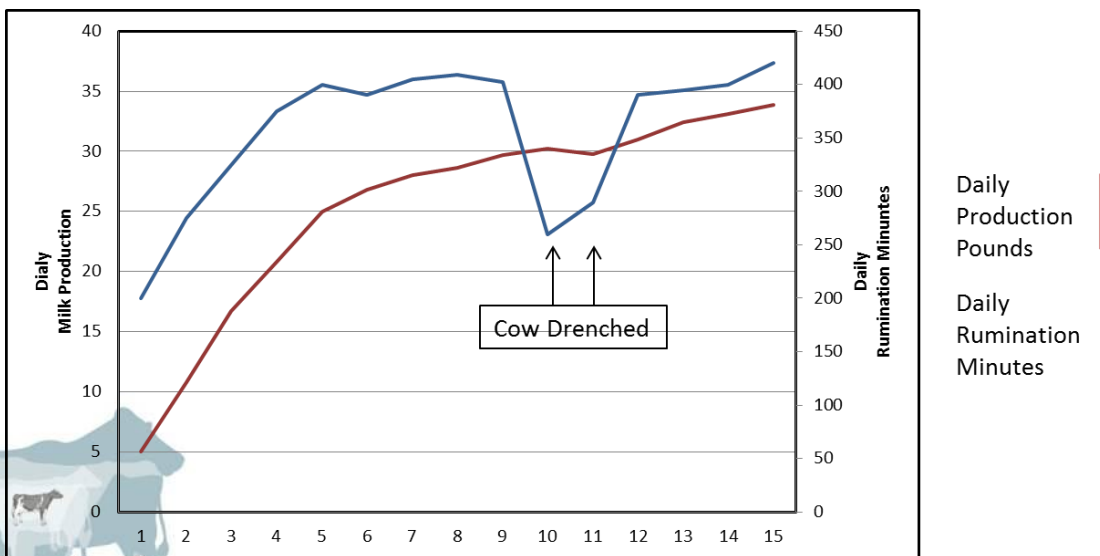


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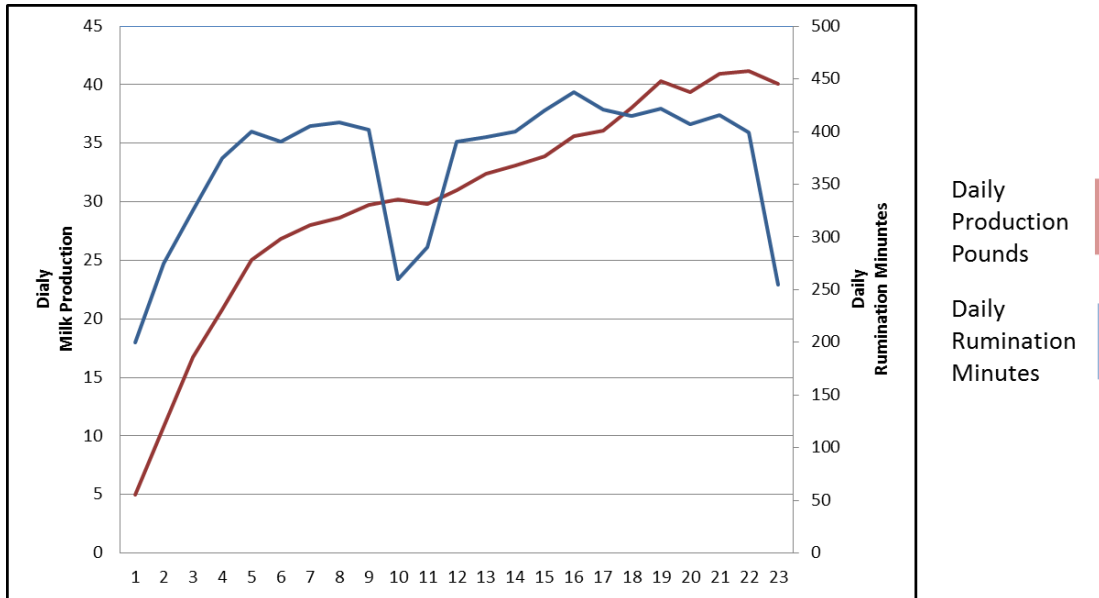
Actions Timeline:

- Now, 9 DIM: The cow is examined and found to be fever free. Fever at this point would possibly indicate Metritis or Retained Placenta. The cow was drenched with 500cc of Propylene Glycol.
- Day 2, 10 DIM: Cow 3742 appears in the Health Report. 24 hour milk is 30.2 kg; Rumination minutes up to 290. Cow is still fever free and drenched with 500cc of Propylene Glycol.
- Day 3, 11 DIM: Cow 3742 is not in the Health Report. 24 hour milk is 29.8 kg; Rumination minutes up to 390.
- Days 4-13, 12-21 DIM: Cow 3742 does not appear in the Health Report.

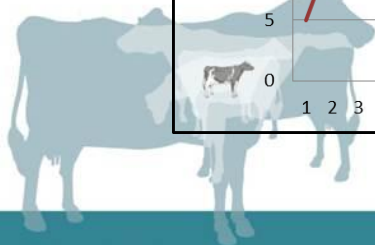
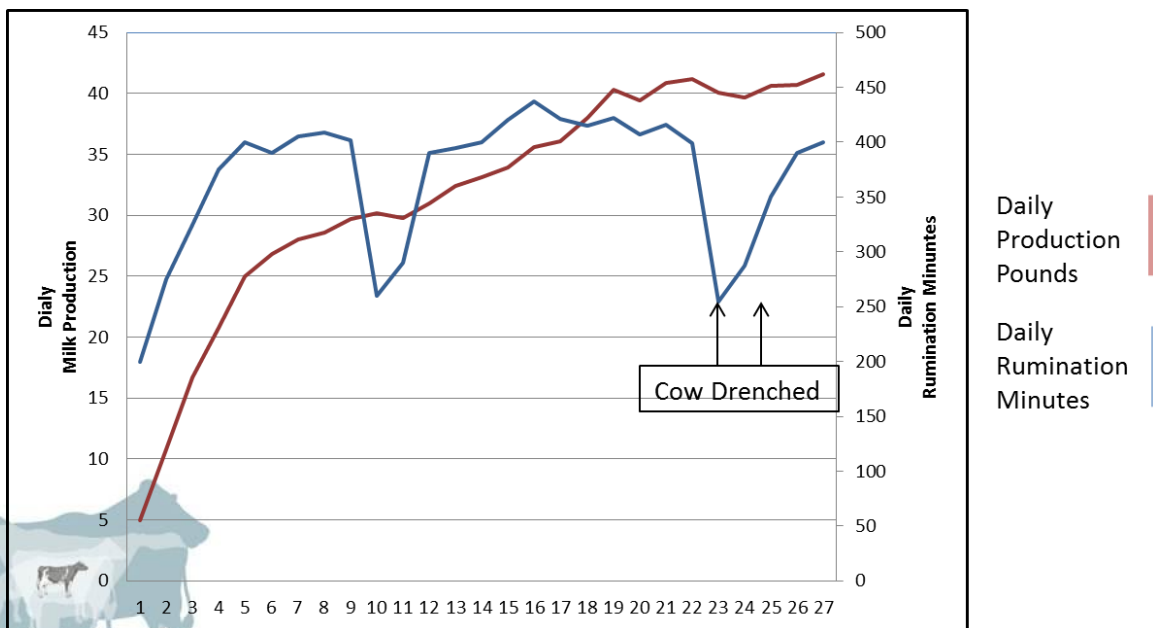


- Day 14, 22 DIM: Cow 3742 appears in the Health Report. 24 hour milk is 41.2 kg; Rumination minutes are lower than normal at 255.

The cow is examined and found to be fever free. Fever at this point would possibly indicate Metritis or Retained Placenta. The cow was drenched with 500cc of Propylene Glycol.

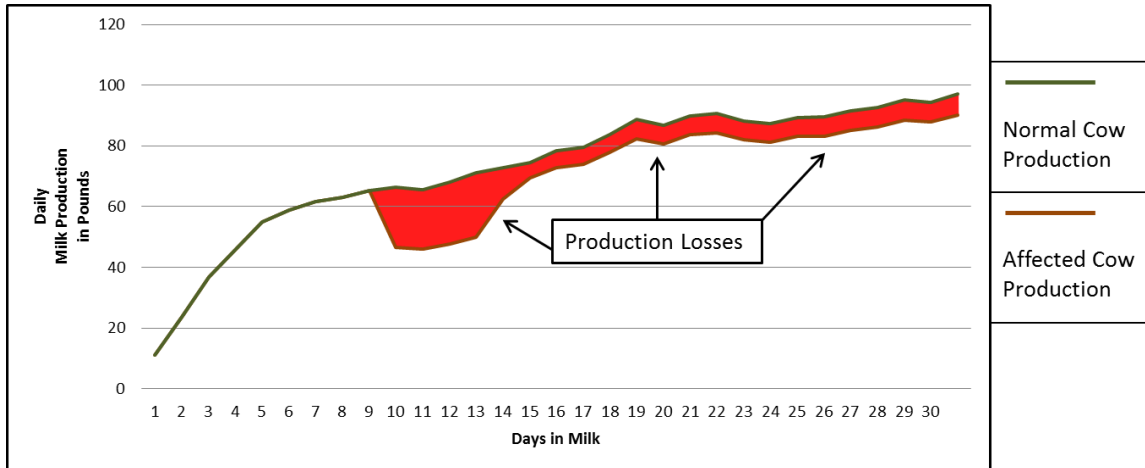


- Day 15, 23 DIM: Cow 3742 appears in the Health Report 24 hour milk is 40.1 kg Rumination minutes are lower than normal at 257. Cow is drenched with 500cc Propylene Glycol.
- Day 16, 24 DIM: Cow 3742 no longer appears in the Health Report.



Conclusion:

Ketosis costs the herd on average \$13,000 per 100 cows. Using the predictive capabilities of Ruminant Monitoring, declines in milk production can be prevented. Cows with Ketosis drop in production, remain lower in production, and achieve lower peaks than their peers. Avoiding Calving Diseases and maintaining high levels of production ensures profitability, economic stability, and longevity for the herd.



Composed by: Doron Bar PhD, Dr. Med. Vet. DVM, SCR Chief Scientist. A Bovine Health Professional since 1983, Dr. Bar earned his PhD from Cornell University in 2007. Since joining SCR Dr. Bar has been instrumental in developing and refining SCR's products and reports.

Dairy Farm Details: This Holstein herd is located in Israel and is made up of 155 Milking Cows and 110 Calves and Heifers. They are fed daily a Total Mixed Ration made up of 22 kgs dry matter of which 35% is forages and 17% is protein. Cows are milked three times a day. This herd produces 11,800 kg per cow (305 day yield.)

For more information about this SCR® Product or our other Solutions please [visit our website](#) or [contact us by E-mail](#).



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