

KETOSIS.

A common problem on Irish Dairy Farms

THE STUDY¹

WHERE?



The Farms

- 5 family run
- County Tipperary
- Herd size 82-409 cows



The Cows

- 1127 spring calving cows
- Avg yield 6758 litres
- British Friesian/Jersey/Holstein X

WHEN?

SPRING
2019



WHAT? Random allocation to 2 groups

Control Group

OR

Kexxtone™ 3-4 weeks pre-calving

For all cows we measured: BCS 3-4 weeks pre-calving, Blood BHB 5-11 days post-calving, BCS again at blood sampling where BHB \geq 1.2mmol/l = positive

THE RESULTS¹

Ketosis incidence was (range 18%-36%)

27%

Ketosis reduced by

76%

in the treated group (from 18.5% control group to 4.5% Kexxtone™ group)

WHAT COULD KETOSIS BE COSTING?

Cost of Sub Clinical Ketosis per cow estimated to be **€255⁸** Made up of

REDUCED YIELD

- 1.2L less milk/day² @ 29c/L³ = 35c/day
= Up to €107 per affected cow over a 305-day lactation



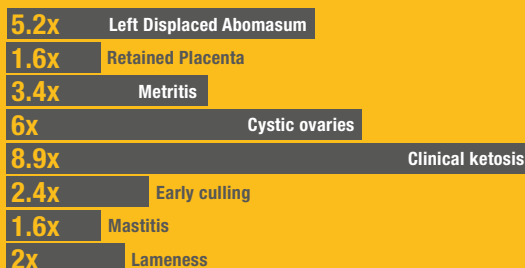
REDUCED FERTILITY

- 7% decrease in 6-week in-calf rate⁴
= €56/ketotic cow^{5,6}



REDUCED COW HEALTH

- Up to €92 in estimated disease costs due to increased risk of the following conditions⁷



WHAT IS THE RETURN ON INVESTMENT?

- For a 100 cow herd with a 30% Ketosis incidence and cost to farmer of Kexxtone™ @ €35/bolus*
- €35 x 30 at risk cows = €1050

SO ROI = €7650:€1050 =

7:1

*Illustration purposes

	Euro per 100 cows ⁸	Euro per cow ⁸
Milk	3210	107
Fertility	1680	56
Health	2760	92
Total income restoration	7650	255

References 1. Elanco Study Number ELA1800751. 2. Ospina 2010. Association between the proportion of sampled transition cows with increased nonesterified fatty acids & -hydroxybutyrate and disease incidence, pregnancy rate & milk production at the herd level. J Dairy Sci. 93:3595-3601. 3. ICMSA milk price tracker <https://icmsa.ie/farm-policy/dairy/milk-price/> 4. Compton CWR, Young L, McDougall S (2015) Subclinical ketosis in post-partum dairy cows fed a predominantly pasture-based diet: defining cut-points for diagnosis using concentrations of beta-hydroxybutyrate in blood and determining prevalence, New Zealand Veterinary Journal, 63(5):241-8. 5. Shalloo et al, (2014) Effect of fertility on the economics of pasture-based dairy systems, Animal (2014), 8:s1, pp 222-231. 6. Pat Clarke, Teagasc, 6 Tips for six-week calving, Today's Farm, January/February 2016. 7. Rabiosson et al (2015) The economic impact of subclinical ketosis at the farm level: Tackling the challenge of over-estimation due to multiple interactions. Prev Vet Med 1:122(4):417-25 and milk production at the herd level Journal of Dairy Science 2010;93: 3595-3601. 8. McArt, J. A. A., D. V. Nydam, and M. W. Overton. 2015. Hyperketonemia in early lactation dairy cattle: A deterministic estimate of component and total cost per case. J. Dairy Sci. 98:2043-2054.

Kexxtone is indicated for the reduction in the incidence of ketosis in the peri-parturient dairy cow/heifer which is expected to develop ketosis. For further information call Elanco Animal Health on +44 (0)1256 353131, or write to Elanco AH UK Limited, Form 2, Bartley Way, Bartley Wood Business Park, Hook RG27 9XA. Kexxtone contains monensin. Legal category: [POM] in IE. Information regarding the side effects, precautions, warnings and contra-indications can be found in product packaging and leaflets; further information can also be found in the Summary of Product Characteristics. Advice should be sought from the medicine prescriber prior to use. Kexxtone, Elanco and the diagonal bar logo are trademarks of Elanco or its affiliates. **Use medicines responsibly** (www.apha.ie). © 2020 Elanco or its affiliates. PM-IE-20-0387 (Date prepared December 2020)