

The Seaweed based and Only Fresh Cow Supplement Range that:

Improves Ca Status

7x Reduction in Milk Fever Cases



Supports
Immune Response

Quicker Uterine Recovery



Improves Energy Status

Cows maintain higher body condition



Increases
Milk Production

+ 1.7 - +2.0kg/day Milk Production

For The Best Start Use Bó Start







# **CALCIUM STATUS**

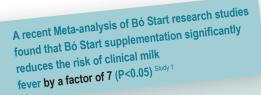
A recently published study into the effect of Bó Start supplementation in older at-risk freshly calved cows shows that cows supplemented with Bó Start maintained higher blood calcium levels compared to un-supplemented Control cows (P<0.05). Study 2

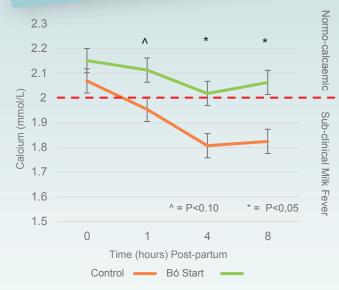
Milk Fever Incidence	CON	Bó Start
Age at calving (Lactations)	4.7	4.7
Prev. Lact. 305d Yield (Kg)	8,711	8,956
Clinical Milk Fever Incidence	15.7%	0%

In this study 40% of cows were 6th lactation and older at calving and herd production was at 50% above the national herd average, with age and higher production levels recognised as 2 key risk factors for Milk Fever.

Studies 3 & 4







The results showed that Bó Start supplemented cows remained in the normo-calcaemic range (>2.0mM/L) at 1 hour, 4 hours and 8 hours post partum, whereas non-supplemented cows dropped into the sub-clinical range (>1.5mM/l and <2.0mM/L) within an hour of calving and remained there.

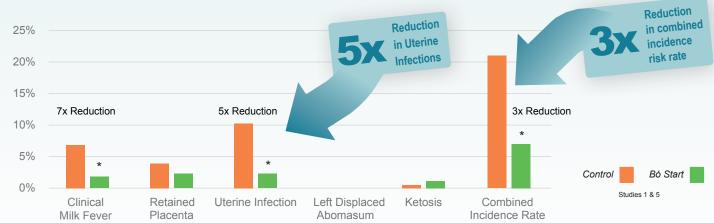
# **METABOLIC ISSUES**

A recent meta-analytical review of 4 years of Bó Start research on over 450 cows has demonstrated the role that Bó Start has played in reducing the risk of a range of the key metabolic issues in freshly calved cows.

Bó Start supports the cow's immune response by improving her calcium and energy status in combination with providing high levels of rumen protected Selenium and Vit E in order to boost her anti-oxidant status.

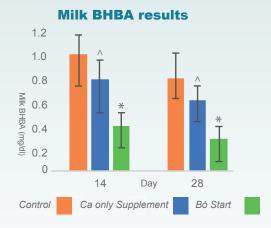
The combined incidence risk rate (including clinical milk fever cases) drops by a factor of 3 for Bó Start supplemented cows (P<0.05). There is a significant reduction in the risk of uterine infections by a factor of 5 (P<0.05) as well as numerical reduction of the risk of retained placenta by a factor of 2.

#### **Early Lactation Milk Production**



# **ENERGY STATUS**

Cows store energy in adipose fat tissue reserves, easily seen in cows with higher condition scores. In early lactation in response to negative energy balance cows mobilise this energy reserve by breaking down this fat in the liver, a process that creates ketones, such as Beta Hydroxy Butyrate (BHBA). A higher level of BHBA indicates the cow is breaking down more of her fat reserves. A lower circulating BHBA level is preferable as it indicates a cow in better energy status.



The Bó Start groups have consistently shown significantly lower milk (BHBA) scores, indicating better energy status. This leads to less body weight loss (fig 1) and quicker body condition score recovery early in lactation (fig 2). Studies 6&7



Fig 1. Bó Start cow group shows lower levels of body weight loss by week 4 in lactation and higher levels of body weight recovery by week 8 in lactation, compared to Control and Ca only Supplement.

### **Body Condition Score Change**

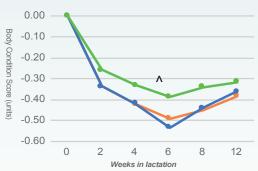


Fig 2. Bó Start cow group shows lower levels of body condition loss from week 2 in lactation through to week 12 in lactation, compared to Control and Ca only Supplement

# **MILK PRODUCTION**

15 20 25

30

10

35 40 45

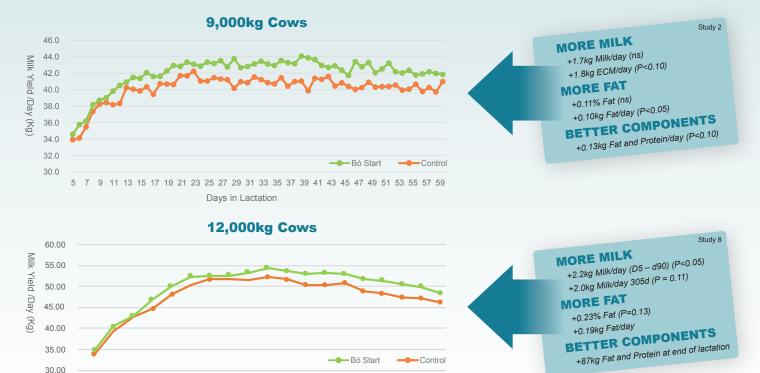
Days in lactation

50

55 60

A meta-analytical review of Bó Start research shows that no matter the production system (from 6,000kg grass based, 9,000kg mixed and up to 12,000kg intensive indoor production) Bó Start consistently increases milk production by ~4% over the full lactation.

The research results also show a consistent increase in Kgs of milk fat and protein and some studies have shown an increase in milk Fat%.



65 70 75 80

85



## **50% MORE CALCIUM**

than other boluses 60g Calcium per dose

### **SEAWEED**

Utilising unique seaweed ingredient naturally rich in fully bio-available Calcium and Magnesium



### **4G OF PHOSPHOROUS**

To support Phosphorus status of the cow post calving

#### VITAMIN D3

40,000iu of Vitamin D3 to aid calcium absorption from the small intestine

### **6G OF MAGNESIUM**

unique rumen soluble Mg source to enhance Calcium absorption

### **IMMUNE RESPONSE**

Bó Start supports the cow's immune response by providing high levels of rumen protected Selenium and Vitamin E.

#### RESEARCH

Four peer-reviewed research papers





Available as bolus or powdered drink mix

#### **RESEARCH REFERENCES**

Study 1: Fahey, A., Lawlor. J., Bó Start Research Meta-analysis, 2022

Study 2: Lawlor et al., "Effect of Cow Start Bolus Supplementation on Early Lactation Health and Performance Indicators in a Group of Older, At-Risk Dairy Cows", Animal and Veterinary Sciences, 9(5): 134-140. 2021

Study 3: Goff JP, Horst RL. Oral Administration of Calcium Salts for Treatment of Hypocalcaemia in Cattle. Journal of Dairy Science 1993; 76(1), 101-108

Study 4: Rossi et al, "Effects of a supplemental calcareous marine algae bolus on blood calcium concentration in dairy heifers", Journal of Animal and Feed Sciences, 2022

. Study 5: Spears JW1, Weiss WP. Role of antioxidants and trace elements in health and immunity of transition dairy cows. Vet J. 2008 Apr;176(1):70-6.

Study 6: J. Lawlor, A. Fahey, E. Neville, A. Stack, and F. Mulligan, "On-farm Safety and Efficacy Trial of Cow Start Calcium Bolus," Anim. Vet. Sci., vol. 7, no. 6, pp. 121–126, 2019.

Study 7: Lawlor, J., Fahey, A., Neville, E., Stack, A., and Mulligan, F. "Effect of Cow Start Calcium Bolus on Metabolic Status and Milk Production in Early Lactation", Anim Vet Sci., vol. 8, no. 6, pp. 124-132, 2020.

Study 8: Lawlor, J. Fahey A.. "Effect of Cow Start Supplementation on health, fertility and production performance of extremely high production Holstein cows" Anchor Life Science White Paper, 2020



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