

EnduraBol®

RANGE



Manufactured in
the UK



Cutting-edge bolus technology

Single construction

Single point erosion

Optimised active life

For further information visit your local stockist or visit

livestockbolus.com

Manufactured by
RUMBOL
PRODUCTS LTD

Distributed by
NET TEX



Cattle

Sheep

**CALF &
YOUNG
STOCK**
≈ 6 months
supply

**HIGH
IODINE**
≈ 6 months
supply

CATTLE
≈ 8 months
supply

BIOTIN
≈ 4 months
supply

ORGANIC
≈ 6 months
supply

**PRE
CALVER**
≈ 4 months
supply

**SHEEP
PLUS
COPPER**
≈ 6 months
supply

SHEEP
≈ 6 months
supply

EnduraBol® proven and trusted for over 30 years

In 1988 Rumbol Products was established by Dr Norman Ritchie, a scholar and lecturer in animal nutrition at the University of Glasgow, who produced the world's first patented sustained release bolus.

Using the same patented technology, Rumbol continues to manufacture the original innovative boluses in a state-of-the-art factory in Clydebank.

With over 35 million boluses sold globally, this proven technology is trusted by farmers globally and now known under the new brand - EnduraBol® and distributed throughout GB by Nettex.

This brings together Nettex's respected presence across the animal nutrition sector with Rumbol's technical and manufacturing expertise.



Sept 2020

Rumbol continues to manufacture original patented bolus branded "EnduraBol" by B2B Nutrition

NETTEX

1993

Rumbol became silent manufacturing partner for a global distributor



1988

Rumbol established and first patented sustained release bolus produced by Dr Norman Ritchie



July 2020

Distributor agreement replaced by joint venture with DBG to produce and sell original bolus technology



July 2022

Nettex take on GB distribution of EnduraBol®

EnduraBol® & **NETTEX**
RANGE

The original bolus continues to be manufactured by Rumbol and is now distributed by Nettex

What makes EnduraBol® unique?



Twin crystic resin coating controls the release rate, ensuring a sustained and constant supply of nutrients



Inert dissolvable iron weight ensures bolus remains in the reticulum



Single point erosion from a constant surface area



Trace element and vitamin matrix erodes, and nutrients are released to the animal

Why is single point erosion so important?

Ruminant diets are optimised by consistent supply of nutrients every day.

Rate of nutrient release depends on the surface area of the bolus exposed to the ruminal fluid.

An ideal bolus should release the same amount of trace elements consistently over its lifetime.

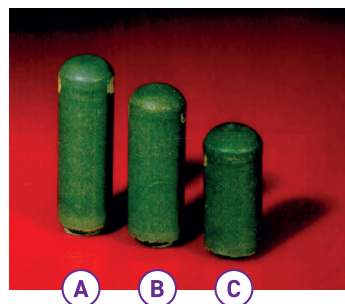
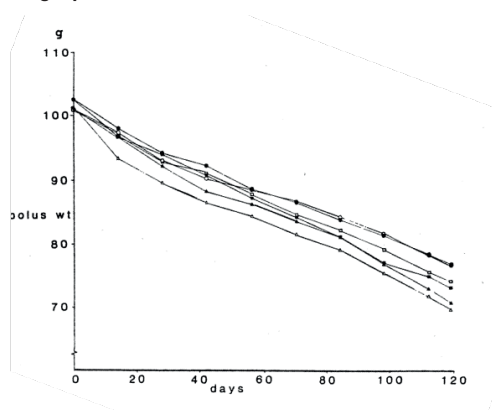
Single Point Erosion ensures limited surface area, and therefore nutrient delivery, is constant over time.



Whole Surface Erosion results in increased surface area and therefore nutrient delivery reducing over time



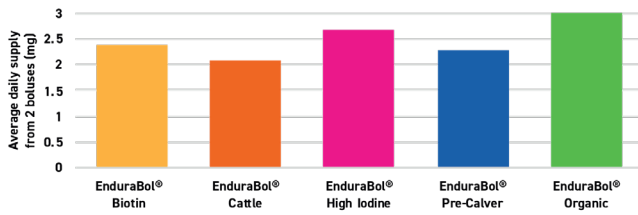
Single point erosion = Reliable Release



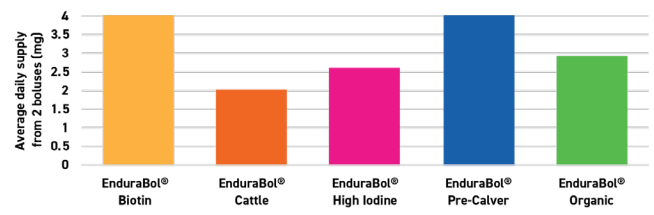
A. 42 days
B. 84 days
C. 119 days

EnduraBol® Cattle range average trace element supply

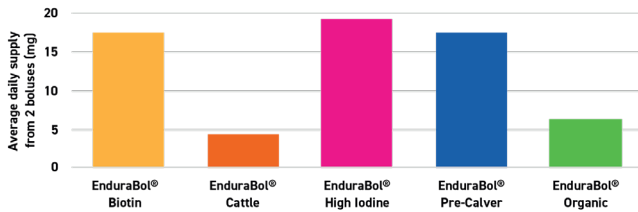
EnduraBol® Range - Average Daily Supply (from 2 boluses) of Selenium



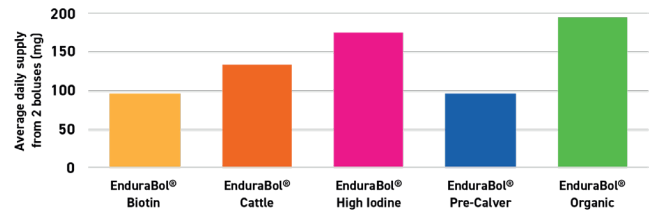
EnduraBol® Range - Average Daily Supply (from 2 boluses) of Cobalt



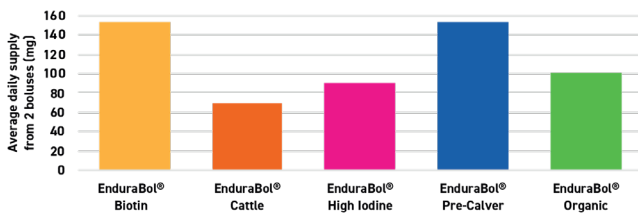
EnduraBol® Range - Average Daily Supply (from 2 boluses) of Iodine



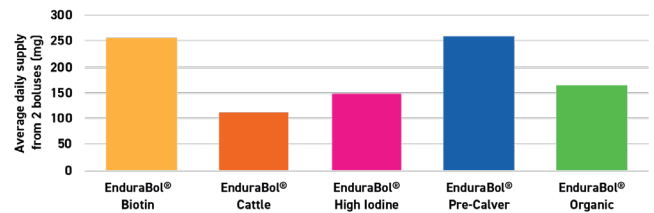
EnduraBol® Range - Average Daily Supply (from 2 boluses) of Copper



EnduraBol® Range - Average Daily Supply (from 2 boluses) of Manganese



EnduraBol® Range - Average Daily Supply (from 2 boluses) of Zinc



Every farm and group of animals is different. Levels of trace elements and vitamins available will vary with season, diets, and stage of production.

The EnduraBol® range provides varying levels of supplementation enabling the choice of bolus best suited to a herd's specific requirements.

Co Cobalt

Improves energy metabolism to help increase growth and conception rates. Also required for vitamin B12 production.

Zn Zinc

Enhances coat condition and bone strength while improving energy metabolism. Also aids in iron absorption and fertility.

E Vitamin E

Maximises muscle growth and enhances meat quality. Also essential for fertility.

Se Selenium

Enhances muscle development and acts as an antioxidant in synergy with vitamin E. Also supports calf vigour.

Cu Copper

Aids in muscle development and maximises production levels. Also improves bone structure and coat condition.

A Vitamin A

Boosts growth and development as well as energy metabolism. Also supports immune system and vision.

I Iodine

Supports a healthy immune system and growth rates. Essential for hormone production and good fertility.

Mn Manganese

Essential for enzyme systems and bone strength. Maximises growth rates and fertility levels.

D3 Vitamin D₃

Improves energy metabolism and aids in calcium and phosphorus absorption. As well as supporting the immune system.

EnduraBol® High Iodine



-  Supports calf vigour and helps reduce retained cleansings
-  Supports a healthy immune system
-  Suitable for breeding stock and replacement heifers
-  Addresses iodine deficiencies
-  Active for up to 180 days

Ideal for:

-  Pre-calving
-  Cattle with known iodine deficiency
-  Heifer Rearing

EnduraBol® Cattle



-  Balances nutrient deficiencies
-  Supports a healthy immune system
-  Supports growth, development & performance
-  Suitable for growing cattle at grass
-  Active for up to 240 days

Ideal for:

-  Cattle at Turn Out
-  Growing Cattle
-  Finishing Cattle

EnduraBol® Pre-Calver



-  Aids calf development and vigour
-  Supports a healthy immune system
-  Suitable for breeding stock and replacement heifers
-  Optimises post-calving recovery and fertility
-  Active for up to 120 days

Ideal for:

-  Supporting Cows & Heifers at calving
-  Supporting Calf Vigor
-  Optimizing fertility

EnduraBol® Biotin



-  Targeted 20mg per day of Biotin
-  Supports hoof health
-  Ideal for high yielding dairy cows
-  Supports a healthy immune system
-  Active for up to 120 days

Ideal for:

-  High yielding dairy cows
-  Herds with hoof health issues

EnduraBol® Organic



-  Approved for use in organic systems
-  Supports a healthy immune system
-  Suitable for cattle over 150kg
-  Supports growth, development & performance
-  Active for up to 180 days

EnduraBol® Calf & Youngstock



-  Formulated for grazing & forage fed calves/youngstock
-  Supports a healthy immune system
-  Balances nutrient deficiencies
-  Active for up to 180 days

The EnduraBol® range provides proven and trusted supplementation targeted to a herd's needs

EnduraBol® Sheep range

Gold standard bolus technology, providing up to 180 days [6months] supplementation of key trace elements and 3 vital vitamins.

Developed to:

- Ensure ewes and rams approach tupping in the best condition to maximise health, fertility, and productivity.
- Ensure ewes are covered over the pre-lambing period to maximise lambing success. Average Daily Supply.



Average Daily Supply		
Manganese	21	mg
Zinc	30	mg
Iodine	4.2	mg
Cobalt	1.1	mg
Selenium	0.6	mg
Vitamin A	1900	iu
Vitamin D3	378	iu
Vitamin E	3.9	iu



Average Daily Supply		
Manganese	15.8	mg
Zinc	24.7	mg
Iodine	4.2	mg
Cobalt	1.1	mg
Selenium	0.6	mg
Copper	18	mg
Vitamin A	1900	iu
Vitamin D3	378	iu
Vitamin E	3.9	iu

Co Cobalt

Important for growth and development. Deficiencies in lambs causing poor growth, appetite, and wool growth. In ewes, deficiency can have effects on the developing unborn lambs.

Se Selenium

Important role in muscle development and essential for a healthy, functional immune system. Vitamin E and selenium deficiencies can be linked to an increase in embryo loss at implantation leading to poor fertility rates in the flock.

I Iodine

Low iodine levels in sheep can lead to poor fertility, late term abortions or still births in ewes and will cause reduced daily live weight gains in lambs.

Zn Zinc

Enhances coat condition and bone strength while improving energy metabolism. Also aids in iron absorption and fertility.

Cu Copper

Essential for many processes and associated with poor fertility, ill thrift, and poor development in lambs. Swayback is a serious disease in lambs and caused by copper deficiency in the ewe during mid-late pregnancy.

Mn Manganese

Essential for enzyme systems and bone strength. Maximises growth rates and fertility levels.

E Vitamin E

Maximises muscle growth and enhances meat quality. Also essential for fertility.

A Vitamin A

Boosts growth and development as well as energy metabolism. Also supports immune system and vision.

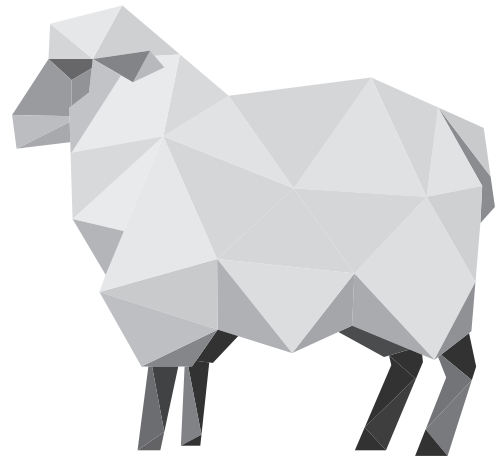
D3 Vitamin D3

Improves energy metabolism and aids in calcium and phosphorus absorption. As well as supporting the immune system.

EnduraBol® Sheep range

Featuring Microbullet™ Technology

- Each ewe gets 1 bolus and 1 Microbullet™ in one application.
- The Microbullet™ reduces the risk of calcification.
- After the lifetime of the bolus the Microbullet™ will breakdown.



EnduraBol® Sheep



-  Balanced matrix of 5 trace elements
-  Supports a healthy immune system
-  Active for up to 6 months
-  Vital vitamins

Ideal for:

-  Rams and Ewes Pre-tupping
-  Ewes Pre-lambing
-  Flock replacements

EnduraBol® Sheep + Copper



-  Balanced matrix of 6 trace elements including copper
-  Supports a healthy immune system
-  Active for up to 6 months
-  3 vital vitamins

Ideal for:

-  Rams and Ewes Pre-tupping
-  Ewes Pre-lambing
-  Flock replacements

Each pack contains:

40 boluses



40 micro-bullets



40 head supply



Suitable for sheep >40kg



Sheep Bolus Gun
(available separately)

Trial Summary - October 2021

Fermanagh, Northern Ireland

To establish if additional liveweight gain is achieved when cattle are given EnduraBol® Cattle boluses at turn out.

Ongoing trial work with the EnduraBol® range continues to re-enforce the proven track record of the patented technology incorporated into the bolus and developed over 30 years of development and use on farm.

In the summer of 2021 EnduraBol® Cattle was administered to Angus Cross steers at turn out. The cattle given the bolus outperformed the control group and gained an impressive extra 27Kg LWG per animal over the 183 days trial period.

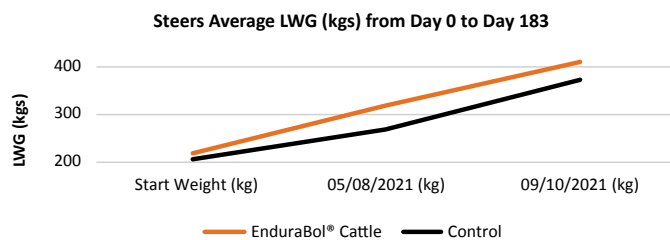


Figure 1: Steers average LWG (kgs) from Day 0 to Day 183

Figure 1 shows the average liveweight gained over the 183-day trial period of both groups. As can be seen below when the weights were taken 118 days into the trial (05/08/2021) there was a significant increase in weight gained in the trial group compared to the control group. The two groups both gained weight however the trial group had a 68% higher increase, an additional 41kgs in liveweight gained compared to the control group.

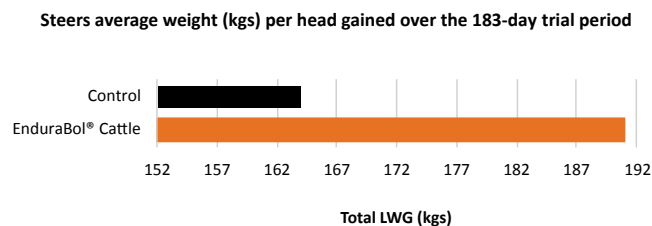


Figure 2: Steers average total weight (kg) gained per head over 183 days

Figure 2 shows the average steer total weight per head gained of both groups over the trial period. The cattle who were given the EnduraBol® Cattle boluses had a higher weight gain over the 183-days. There was a 27kg increase in the trial group compared to the control group, this is a percentage increase of 16.50%.

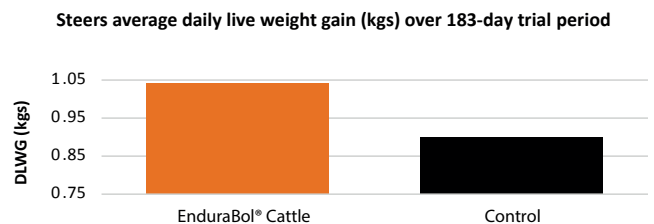


Figure 3: Steers average daily liveweight gain (kg) over 183-day trial period

Figure 3 shows the average daily liveweight gained of the steers in both groups over the trial period. The cattle with the EnduraBol® Cattle boluses had a greater daily liveweight gain over the trial, gaining an extra 140 grams per head per day, an extra 1kg a week.



Figure 4: Angus-x cattle being weighed at day the end of the trial

Conclusion

Overall, the trial has shown that the cattle given the EnduraBol® Cattle boluses outperformed the control group. There was a total increase in liveweight gain of 16.50% meaning on average the trial group gained an additional 27kg liveweight per animal over the 183-day trial period.