

## **BOLUS TECHNOLOGY**

SELENIUM Muscle development

120 days of core strength for lambs

### COBALT

Efficient weight gain

#### IODINE

Better lamb vitality



Sustained Release Bolu



# Why trace elements are essential for your lambs?

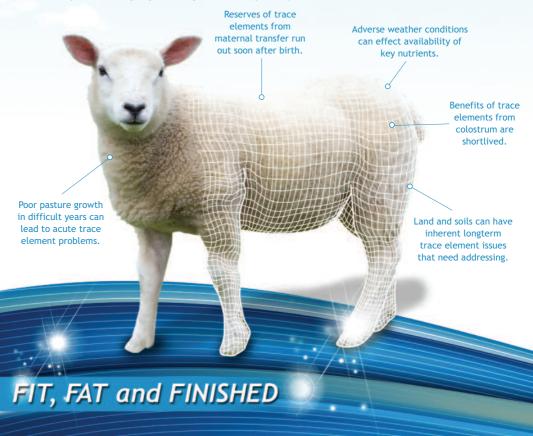
Over recent years we have learnt a lot about how the correct balance of trace elements is essential for ruminant animals to achieve their full performance.

Nutritionists, veterinary surgeons and ruminant advisors have seen major quantifiable improvements in fertility, health and growth from ensuring animals have the precise quantities of vital trace elements they need at key stages of their production cycle.

In modern efficient sheep production systems, trace elements are best managed from conception, progressing through pregnancy to birth with lambs benefiting from maternal transfer of nutrients during pregnancy and then in the colostrum and milk at birth.

As lambs grow, the effect of this support diminishes and the lamb has to meet its own metabolic needs through its own nutrition.

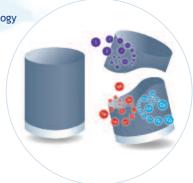
Furthermore, lambs are particularly vulnerable to nutritional stress resulting from weaning and changes in the quality of grazing together with adverse weather conditions. This often shows itself in terms of poor liveweight gain and greater susceptibility to illness.



# What are Agrimin 24•7 Smartrace Lamb boluses?

Developed by the Agrimin technical team and researched extensively in New Zealand, Agrimin 24•7 Smartrace technology is a 'best practice' precision nutrient delivery system designed and manufactured in the UK.

Agrimin 24•7 Smartrace Lamb boluses are a specifically developed product for the growing lamb using our latest sustained release concept and designed to deliver precise levels of key trace elements at all times.



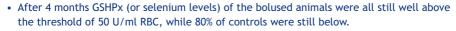
#### Evidence on sustained release

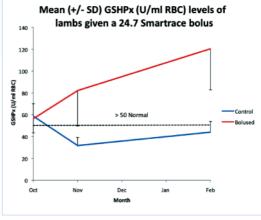
Trials carried out in the autumn of 2014 show the efficiency of delivery of trace elements with Agrimin 24•7 Smartrace Lamb boluses.

The trials involved several groups of lambs. Half the animals were given the Agrimin 24.7 Smartrace Lamb bolus at the start of October and the remainder acted as controls. Although the boluses contained cobalt, iodine and selenium, selenium (GSHPx) levels were used as the marker to assess bolus performance with these measured at the start of November and end of February. For optimum animal performance the aim is to keep the GSHPx above 50 U/ml RBC which indicates normal selenium status.









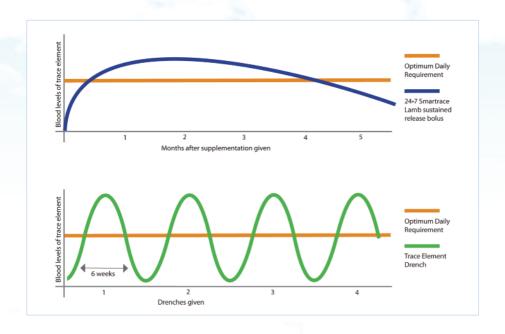
## Sustained Release explained

Agrimin 24.7 Smartrace controlled erosion technology is the only trace element delivery system scientifically proven to maintain blood levels at the correct levels for 120 days.

24•7 Smartrace Lamb boluses are given orally by a special applicator and settle in the reticulum of the rumen. Once there they erode in a measured and controlled manner providing just the right levels of trace elements your lambs need over a full 120 day period.

Other bolus technologies give nowhere near this level of consistency or duration. Furthermore, one application lasts 16 weeks which is about five times longer than most trace element drenches.

Agrimin 24.7 Smartrace Lamb boluses can be administered to all growing lambs with a minimum liveweight of 25kg and a fully functioning rumen.





# Agrimin 24•7 Smartrace Lamb boluses contain the most important trace elements required for health and growth



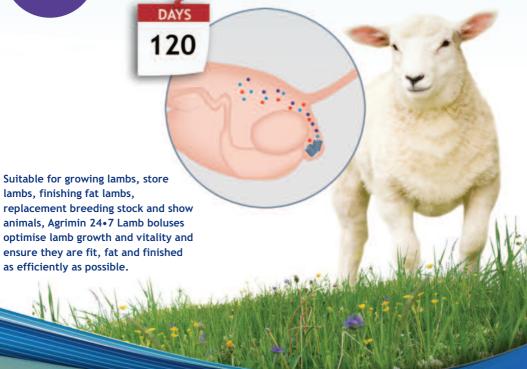
Selenium promotes growth by improving the correct functioning of muscles and vital organs such as the liver. The anti-oxidant function of selenium means that it is associated closely with Vitamin E. Lack of selenium causes poor growth, muscle weakness and white muscle disease. Selenium plays an important role in promoting a healthy immune system.



A good supply of cobalt in the rumen is essential for a lamb's growth and development. Rumen micro-organisms need a constant supply of cobalt in order to produce Vitamin B12, which is essential in the breaking down of feed and a more efficient conversion to liveweight. A lack of cobalt can cause listlessness, loss of appetite and impaired growth rate.

IODINE

lodine is incorporated into the hormones produced by the thyroid gland. A healthy functioning thyroid means more efficient weight gain. The feeding of rape, roots or other brassicas can inhibit the absorption of iodine into the body.





Welsh sheep producer John Yeomans has used Agrimin 24•7 Smartrace Lamb boluses with very encouraging results.

"You've only got to lose a kilogram of liveweight gain or add an extra week or two to finishing times to realise just how easily health issues from trace element problems can eat into your profits.

Agrimin 24•7 Smartrace boluses are standard issue for our ewes and beef animals. No other system has really worked for us and delivered the type of results Smartrace has.

Blood tests have shown the efficiency of 24•7 Smartrace Sheep in supporting optimum levels of key trace elements in our ewes and our lambs - initially through transfer in the blood and then the colostrum. But we have been really surprised how quickly issues develop after weaning.

We've compared the blood tests of lambs given the bolus with those not. Virtually all the lambs with the bolus maintain optimum trace element status, whilst the majority of non bolused animals quickly developed shortfalls that would certainly cause health and growth issues.

Cost-wise it's a no-brainer. It's such a small investment to make to ensure all your hard work isn't going to be wasted through simple, easily-resolved trace element problems."

FIT, FAT and FINISHED

Agrimin 24•7 Smartrace Lamb is just part of the full Smartrace trace element

support system for your breeding flock

## AGRIMIN 24•7 SMARTRACE FOR BREEDING EWES

Agrimin 24•7 Smartrace Sheep boluses should be administered 3 weeks pre tupping and again pre lambing. They can also be used mid pregnancy.



#### **AGRIMIN 24•7 SMARTRACE FOR LAMBS**

Agrimin 24•7 Smartrace Lamb boluses should be administered to lambs with a minimum 25kg liveweight and a fully functioning rumen.

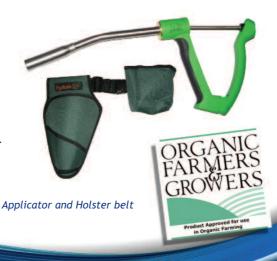
Active Composition		Average daily supply over 120 days from two 6g boluses
Cobalt (Cobalt Carbonate)	8,333 mg/kg	0.8 mg
Iodine (Calcium Iodate)	8,333 mg/kg	0.8 mg
Selenium (Sodium Selenate)	1,666 mg/kg	0.2 mg



Ingredients:Minerals, zinc powder and wax. All figures expressed as a proportion of total bolus weight.

#### FOR OVINE USE ONLY

- Boluses are suitable for use in lambs over 25kg liveweight.
- Give two boluses to each animal using Agrimin Lamb bolus applicator.
- Agrimin 24·7 Smartrace Lamb boluses have an active life of 120 days.
- Agrimin 24·7 Smartrace boluses are available in packs of 200 boluses - enough for 100 lambs.
- Product approved for use in organically reared animals.



# The Leaders in Ruminant Trace Element Technology

Agrimin specialises in developing and marketing sustained release trace element, vitamin and mineral boluses for ruminants. Over the years, we have gained a reputation as the technology leader in this area.

Our bolus products are scientifically proven and sold throughout the UK by the animal health supply trade, veterinary surgeons and in over 30 countries worldwide.

With a range encompassing different technologies, all of which are designed to deliver controlled quantities of nutrients, we have products suitable for all ruminant production systems - Sheep, Beef and Dairy.

All of our products are designed to achieve three key objectives:

- Deliver a Consistent Supply every animal receives a consistent and sustained supply of nutrients lasting the active life of the product, completely removing the variation of intake with other delivery systems.
- Save Labour simple application and once administered there is nothing else to do, saving labour, reducing worry and negating constant checking of free access materials.
- Be Highly Cost Effective long lasting with minimum waste, our boluses are the most cost-effective way of guaranteeing optimum trace element delivery.







