MULTIMIN™
Prescription Trace Mineral Injection

inject herd health

30 Zn | 25 Mn | 29 Cu | 34 Se



EASY TO ADMINISTER TRACE MINERALS TO MAXIMISE PERFORMANCE

Shaping the future of animal health

Virbac

30 Zn | 25 Mn | 29 Cu | 34 Se

Q. What is Multimin™?

A. A unique four-in-one trace mineral injection for cattle

Making supplementation **simple**

Why are the trace minerals in Multimin™ important?

Throughout the production and breeding cycles the body's demand for trace minerals fluctuates. Making sure your cattle have a good supply of these trace minerals so that their body can meet these demands when needed helps optimise health and productivity.

Multimin contains:

ZINC
Vital in the metabolism of carbohydrate and protein. It is also essential to maintain the barrier functions of skin and has an important part to play in immunity.

MANGANESE
Critical to cattle health as a component of the antioxidant pathway and is involved in the metabolism of fat, carbohydrates and energy production. Manganese is important in producing cholesterol that makes it essential for reproductive performance.

COPPER
Crucial for energy generation in ruminant tissue so is imperative for biological functions such as growth, absorption of nutrients and maintaining body condition

SELENIUM
A fundamental trace element that is required by ruminants for normal growth and fertility. It also plays an important role in the antioxidant pathway that assists in preventing other health issues such as mastitis and calf scours.



As the trace mineral status of cattle declines it is the immune and enzyme functions that are initially compromised. A reduction in growth rates and fertility follows before actual clinical deficiency is seen.[1]

Why might cattle need Multimin™?

Trace minerals are mainly provided through the diet and oral supplementation.

But there are instances where cattle may not receive their requirements through these alone.

Low/variable intake

Most production systems in the UK rely on grass and grass based forages. These can often be low in trace minerals*

Feed intakes can vary dramatically and dominant animals will consume more than submissive members of the herd

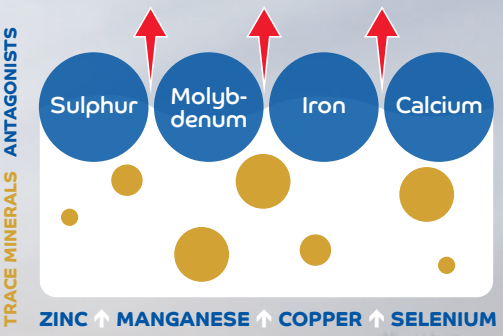
At times of stress, appetite and intake is often reduced e.g. at calving and during the transition period

*Local knowledge or testing should be considered

Poor bioavailability

Minerals such as Sulphur, Molybdenum, Iron and Calcium are often high in feed, forage and water. As antagonists, they bind minerals which reduces the absorption and availability of key trace minerals.[2]

As a result of the interactions between antagonists and antioxidants in the rumen, orally administered trace minerals are poorly absorbed.[3]



Multimin™ can be used strategically ahead of stress periods or as a top up to prepare cattle to perform at their best.

Strategic use of Multimin™ to optimise herd health

Topping up on trace minerals at strategic times during the production cycle can help prevent many common diseases[4] and boost immunity for a synergistic response to vaccines.

How Multimin can benefit the herd:

FOR IMMUNITY

- Reduction in clinical and sub-clinical mastitis[5]
- Improved response to vaccination[6,7]
- Better clinical outcome in BRD infections when supplemented alongside treatment[8]

FOR FERTILITY

- Improved conception rate and calving distribution[9]
- Increased sperm quality and progressive motility[10]

FOR PREGNANCY

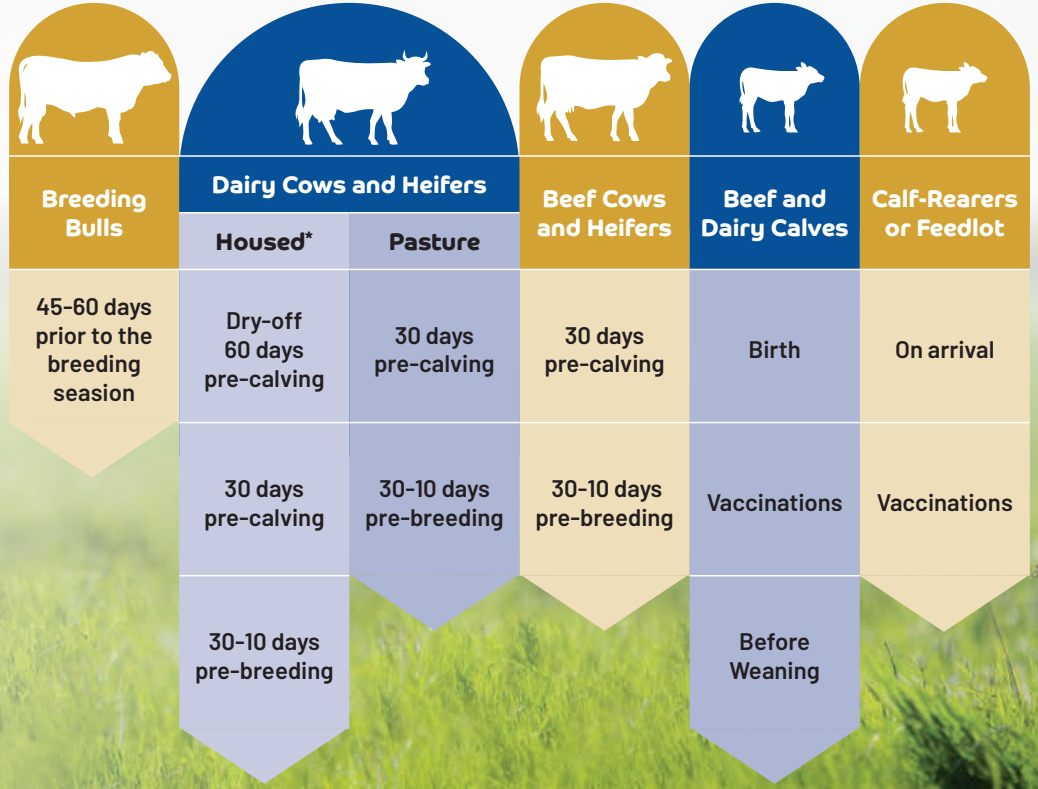
- Reduced risk of stillbirth and endometritis[5]
- Reduced incidence of metritis[11]

FOR CALVES

- Significant reduction in diarrhoea, pneumonia and otitis[12]
- Support optimum health during periods of stress such as weaning, housing and transportation

FOR PRODUCTIVITY

- Higher milk yields and increased milk protein content[11]
- Improved average daily gain (ADG)[13]



Breeding Bulls	Dairy Cows and Heifers		Beef Cows and Heifers	Beef and Dairy Calves	Calf-Rearers or Feedlot
	Housed*	Pasture			
45-60 days prior to the breeding season	Dry-off 60 days pre-calving	30 days pre-calving	30 days pre-calving	Birth	On arrival
	30 days pre-calving	30-10 days pre-breeding	30-10 days pre-breeding	Vaccinations	Vaccinations
	30-10 days pre-breeding			Before Weaning	

*Studies have shown the benefits of administering Multimin to dairy cows during the transition period. Suggested dosing points are at dry off and/or pre-calving and/or pre-breeding as illustrated[5]

How to use Multimin™

- MULTIMIN™ should be given by subcutaneous injection only. **DO NOT ADMINISTER INTRAMUSCULARLY**
- The product is HIGHLY concentrated in selenium. Due to a potential risk of selenium toxicity, care should be taken to avoid accidental self-injection.

Multimin should be administered in the area of the neck shown by the blue triangle



The maximum volume per injection site is 7ml

The dose rate of Multimin is determined by the age of the animal. Please refer to the dosing guide on the right. If dosing at the same time as a vaccination, inject Multimin below the vaccination site.

Withdrawal periods:

- Meat and offal: 28 days
- Milk: 0 hours

Weight (kg)	Up to 1 year old **1ml/50kg**	From 1-2 years **1ml/75kg**	Over 2 years **1ml/100kg**
50kg	1ml		
100kg	2ml		
150kg	3ml		
200kg	4ml		
250kg	5ml	3.3ml	
300kg	6ml	4ml	
350kg		4.6ml	
400kg		5.3ml	
450kg		6ml	
500kg		6.7ml	5ml
550kg		7.3ml	5.5ml
600kg			6ml
650kg			6.5ml
700kg			7ml*
750kg			7.5ml*



*No more than 7ml to be injected into one injection site, for all precautions please refer to the back page

Why use Multimin™?

Reduced need to bolus*

Multimin™ is a unique injectable solution to ensure essential trace mineral supply to cattle quickly and effectively. Incorrect administration of boluses can result in fatalities[14].

Administered by injection, Multimin bypasses the rumen meaning that the trace minerals are unaffected by interactions with antagonists, that can limit absorption.

Boost effect of vaccines

Vaccines administered to your herd are a significant investment. Multimin™ can help boost the immune response to vaccines, **maximising antibody levels and helping cattle of all ages combat disease[6].**

Increased productivity

The use of injectable trace minerals has been shown to reduce the incidence of diseases such as mastitis & endometritis in dairy cattle - helping to limit the production impact of these common conditions in your herds[5].

Use of Multimin™ in beef cows improved calving patterns[9]. Calves born earlier in the calving block have higher weaning weights[15], therefore providing improved performance of the herd.

Increased profitability

Each case of mastitis is estimated to cost £250 - £300 per case[16]. A reduction in the clinical mastitis rate of 5.7%, as seen in a trial supplementing cows with Multimin™ during the transition period[5], would therefore provide a **significant saving to farmers.**

Reduction in the costs associated with disease, coupled with the increased performance of cattle can mean that the use of **Multimin™ may not only improve the health but also the profitability of your herd.**

Peace of mind

Significant investments are made throughout the production year; whether it be feed, vaccinations, AI or scanning, in addition to veterinary costs in response to disease. Deficiencies in trace minerals, even sub-clinical, can lower immunity, fertility and growth.

By ensuring your herd has optimal levels of trace minerals, you can be reassured that your herd is in the best position to benefit from the investments made in production and lower the costs of animals affected by disease.



THE ESSENTIAL EDGE FOR HERD PRODUCTIVITY AND PROFITABILITY

* Seek advice from your vet about possible trace mineral deficiencies in your herd.

Notes

Notes



MULTIMIN™
Prescription Trace Mineral Injection

1. Adapted from Wikse S (1992). Beef cattle short course. In Texas A&M Vet Beef Cattle Short Course, College station, TX, USA.
2. Arthrington J (2003) Copper Antagonists in Cattle Nutrition. dairy.ifas.ufl.edu/rns/2003/Arthington.pdf https://extension.umn.edu/beefnutrition/managingsulfurbeef-cattle-feed-and-water#sulfur-sources-and-amounts-956760
3. Nutrient Requirements of Dairy Cattle, National Research Council, Seventh Revised Edition, 2001.
4. Machado VS et al (2014) The effect of injectable trace minerals (selenium, copper, zinc and manganese) on peripheral blood leukocyte activity and serum superoxide dismutase activity of lactating Holstein cows. The Veterinary Journal 200: 299-304
5. Machado VS et al. Effect of an injectable trace mineral supplement containing selenium, copper, zinc and manganese on the health and production of lactating Holstein cows. Vet J.2013 Aug;197(2):451-6
6. Arthington J, Havenga L (2012) Effect of injectable trace minerals on the humoral immune response to multivalent vaccine administration in beef calves. Journal of Animal Science 90, 1966-1971
7. Roberts SL et al. Effect of injectable trace mineral administration on health, performance and vaccine response of newly vaccinated feedlot cattle. Prof Anim Sci. 2016;32(6):842-8
8. Hong S. et al., 2024. "Impact of an Injectable Trace Mineral Supplement on the Immune Response and Outcome of MannheimiahaemolyticaInfection in Feedlot Cattle" Biological Trace Element Research. https://doi.org/10.1007/s12011-024-04251-z
9. L.R Mundell et al. (2012) Effects of prepartum and postpartum injections of trace minerals on performance of beef cows and calves grazing native range. The Professional Animal Scientist 28, 82-88
10. Preedy GW et al. Injectable trace mineral supplementation improves sperm motility and morphology of young beef bulls. Prof. Anim. Sci. 2018 Feb 1:34(1): 1-9
11. Dzermeikaite, K et al. (2025) The role of injectable trace mineral treatment in dairy cow health:impact on metritis, milk production and composition. Poster presented at: XXIV Middle European Buiatric Congress, Kosice, Slovakia, 7th-10th May 2025.
12. Texiera AG V et al. Effect of an injectable trace mineral supplement containing selenium, copper, zinc and manganese on immunity, health and growth of dairy calves. J Dairy Sci. 2014 May 15:97(7):1-11
13. Bittar JHJ et al. Effects of injectable trace minerals on the immune response to Mannheimia haemolytica and Pasteurella multocida following vaccination of dairy calves with a commercial attenuated-live bacterin vaccine. Prof Anim Sci. 2018 Feb 1;34(1):59–66.
14. Gomez DE, Desrochers A, Francoz D, Nichols S, Babkine M, Fecteau G. Pharyngeal trauma in dairy cattle: 27 cases. J Vet Intern Med. 2019;33: 1833–1839. https://doi.org/10.1111/jvim.15510
15. Funston RN, Musgrave J a., Meyer TL, Larson DM. Effect of calving distribution on beef cattle progeny performance. J. Anim Sci. 2012;90(13):5118–21.
16. AHDB Mastitis Control Plan



Ask your vet about boosting your herds' performance with Multimin™

MULTIMIN solution for injection for cattle contains selenium, copper, manganese and zinc. POM-V

Advice on the use of this medicine should be sought from your veterinary surgeon.
Prescription decisions are for the person issuing the prescription alone.

Further information on the SPC available from: Virbac Ltd. Woolpit Business Park, Windmill Avenue, Woolpit, Bury St. Edmunds, Suffolk IP30 9UP.
Tel: +44 (0) 1359 243243 UK: Email: enquiries@virbac.co.uk www.virbac.com

Use medicines responsibly www.noah.co.uk/responsible

This promotion is only intended for farmers in England, Scotland and Wales.

Shaping the future of animal health

Virbac