

FREQUENTLY ASKED QUESTIONS



What is MULTIMIN®?

MULTIMIN® is an injectable source of zinc, copper, selenium and manganese. It safely and rapidly boosts the levels of these trace elements in cattle and deer, and is best administered prior to high demand periods.



What's a high demand period?

There are times when the requirements for trace elements rapidly increase, often coinciding with reduced feed intake. When this occurs even well-supplemented stock can temporarily dip into a slight deficiency. Because trace elements have essential roles in immunity, reproduction and growth, these high demand periods often lead to higher levels of disease, and sometimes short-term drops in production, growth or fertility. Calving/fawning, mating, weaning, transport, velveting or early life are all examples of periods where trace element demand increases. Injectable trace elements provide rapid, targeted and sustained increases, so are more suitable for use prior to high demand periods.

Isn't supplementing trace elements normally associated with improving growth rates and milk production?

While we've traditionally focussed on improving growth rates and milk production through supplementation, we now understand that trace elements have roles throughout multiple body systems, and are more important than previously thought. The focus is now on the less obvious (but equally important) gains in fertility and immunity that can be achieved. Most importantly, we have the confidence of local research with MULTIMIN®, to put numbers behind how much of an effect on health and fertility can be expected on NZ farms.

I know I need selenium and copper, but why would I include zinc and manganese?

These are the four trace elements that are most critical for both immunity and fertility, and are used in large quantities during reproduction and when the body is under stress and the immune system is working harder. There are highly specific roles within the immune and reproductive systems for all four of these trace elements. For example, copper and zinc work together in enzymes to protect cells from damage, manganese protects the developing egg within the ovary, zinc helps to produce a healthy uterine lining and selenium has multiple immune roles including helping to protect a growing embryo.



My stock receive trace element supplementation via feed, water and/or boluses, and blood tests have shown normal levels. Why would I treat them with MULTIMIN® as well?

MULTIMIN® is a complement to oral supplementation, rather than a replacement for it. Oral supplementation can be very effective for maintenance, but when demand increases animals often have decreased appetite, resulting in less feed intake which means reduced trace element intake. Injecting at high demand periods means the effects of reduced oral intakes are minimised. Think of oral supplementation as the way to get trace elements for normal activities, and MULTIMIN® as the intervention for higher intensity activities.

Has MULTIMIN® been researched in New Zealand?

MULTIMIN® has been scientifically proven in New Zealand conditions, with initial research conducted in 2007, and the most recent in 2020. This research^{1,2,3,4} has demonstrated improved heifer and cow reproductive performance and immunity, and enhanced calf health and survival. MULTIMIN® has also been extensively researched around the world, including in Australia, the US and Europe.



I don't usually have many scouring calves. Why would I use MULTIMIN®?

Local research showed that disease and death rates in calves were halved, even from a low base. The effect was consistent across scours, navel ill and sick calves without a specific diagnosis. So there will almost certainly be some effect, even if your level of disease is already low.

Is injecting new-born calves safe?

The concept of injecting new-born calves was new to the farms involved in the 2018 trial, where farmers injected calves on the first day they arrived in the shed, which easily fitted into their daily routine. In this trial, almost 1,000 calves were treated, with no adverse events reported, indicating that it is a safe method of enhancing the immunity of calves in early life. In fact, the increase in survival rates means calves are actually safer if they are injected than not.



As a result of this trial, there are a significant number of farms on which this is now common practise, with a number of calf rearers across the country also adopting it as routine. To minimise any risk we recommend dosing at 1 ml/50 kg as closely as possible to the weight of the calf. In the study we used a set dose of 0.75 ml/calf, based on an assumed weight of 35-40 kg for newborn crossbred heifer calves. This can be adjusted up or down for larger or smaller breeds.

We've seen the results in calves; will it also reduce disease in adults?

The biggest peak of disease in dairy cows is around calving, as the immune system is compromised by the stress of this period. A recently completed study looked at the effect of MULTIMIN® given 2-4 weeks pre-calving. We saw a halving of clinical mastitis, which is a similar response to the effect on disease in calves. There was also a 25% reduction in subclinical mastitis (cows over 150,000 at first herd test).

↓52%

REDUCTION IN CLINICAL MASTITIS

I think I do a good job of my repro, and there are plenty of products telling me they will get my cows in calf earlier. Why should I use MULTIMIN®?

There's good science behind the four trace elements in MULTIMIN®, backed up by research in local conditions. The original study showed that using MULTIMIN® in herds already performing well and with normal trace element levels lowered empty rates by nearly 3%. This has been repeated in thousands of cows in different regions – most recently a 2% increase in 6 week in-calf rate was seen.

It's true that there are many options to improve in-calf rates. Which makes following the evidence and using products and sources of information that you and your vet can trust even more important.

With studies showing a benefit in NZ conditions for both pre-calving and pre-mating use, which option should we be using?

Both studies showed a good return for the investment in MULTIMIN®, with the reduction in mastitis from a pre-calving injection returning about \$4.00 for every dollar spent. The pre-mating numbers are actually even stronger, with an estimated return of over 5:1.

At face value the pre-mating injection makes a better financial case. However there are some intangible benefits from reduced mastitis, such as lower antibiotic use and less time spent on handling sick mobs.

There is good justification for both options, so the decision on which to use comes down to where you most want to make a difference.

Is MULTIMIN® for herds with high empty rates and lots of mastitis?

In fact, we've found the opposite in our studies. The best outcomes are seen in well-managed herds that have low levels of disease and good mating results, with normal trace element levels. The herds with major problems would most likely get more benefit from spending their money on consultancy and changing management practices.



Based on the evidence from local research, the main targets are farms that are already doing most things well, and are looking for further improvement.

Can I use MULTIMIN® at the same time as a copper injection?

MULTIMIN® should not be used at the same time as other forms of copper supplementation; nor selenium products, such as injections, drenches or fertilisers, without consulting a veterinarian.

Is it safe to use MULTIMIN® at the same time as other treatments, such as vaccines?

MULTIMIN® can be administered at the same time as vaccines in cattle, with research indicating that MULTIMIN® assists cattle with mounting a faster and more effective immune response. Because the safety of MULTIMIN® when given at the same as other treatments such as drenches or vaccines has not been established in deer, this should be avoided. See the product packaging for more information.

How do I use MULTIMIN®?

MULTIMIN® should be administered to cattle and deer by subcutaneous injection only, at the below dosage recommendations.

No milk or meat withholding periods are required when used as directed.

- **Calves (up to 1 year):** 1 ml/50 kg.
- **Cattle (1-2 years):** 1 ml/75 kg.
- **Cattle (over 2 years):** 1 ml/100 kg.
- **Deer:** 1 ml/100 kg.



TO LEARN MORE ABOUT USING MULTIMIN® ASK YOUR VET, OR VISIT [PERFORMANCEREADY.CO.NZ](https://www.performanceready.co.nz)