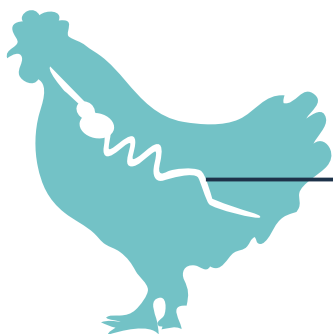




Effective antimicrobial peptides for a new generation of farming



Antimicrobial Solutions That Work.

Microtide is a new antimicrobial peptide that has been designed to combat gram-negative bacteria such as *E. coli* and salmonella.

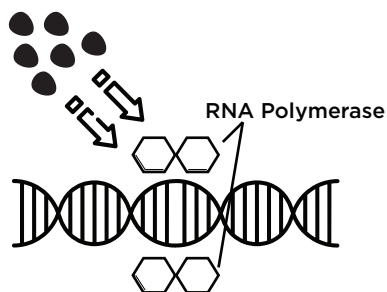
It contains microcin ST19R22, an antimicrobial agent that has been optimized for efficacy and safety. Its unique mechanism allows it to kill gram-negative bacteria effectively with low potential for resistance.

Microtide has a highly favorable safety profile, with no toxicity and minimal risk of adverse effects. It represents a significant advancement in the fight against gram-negative bacterial infections and is an important new treatment option for livestock.

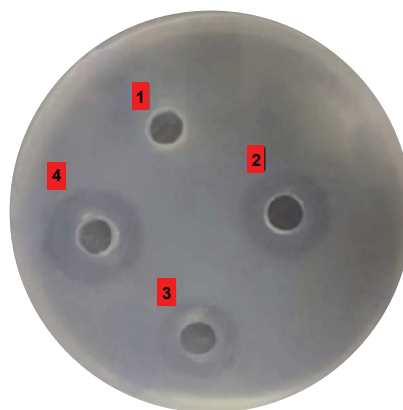
Antimicrobial Peptides: Bacterial control without antibiotics

Microtide attacks the RNA polymerase, disrupting DNA transcription

Microtide



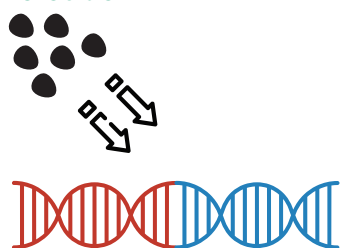
Microtide, a new solution for pathogen control.



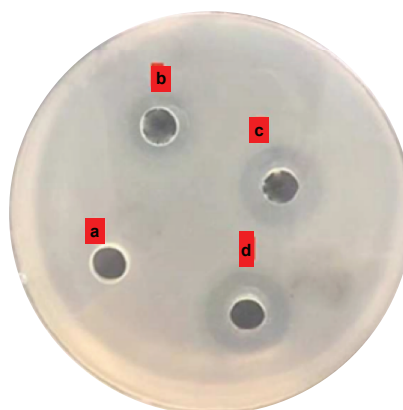
- 1: Control - Blank
- 2: *E. coli* ATCC25922 - Microtide treated 0.05% conc.
- 3: *E. coli* CVCC1515 - Microtide treated 0.05% conc.
- 4: *E. coli* CVCC1522 - Microtide treated 0.05% conc.

Microtide attacks the DNA directly

Microtide



Bacteria DNA



- a: Control - Blank
- b: *Salmonella enterica* CDC 6516-60 - Microtide treated 0.05% conc.
- c: *Salmonella enterica* LRA 03 05 73 - Microtide treated 0.05% conc.
- d: *Shigella flexneri* CMCC51571 - Microtide treated 0.05% conc.



Microtide

The real future of antimicrobials.

Usage and administration

Indicative dosage and application		Prevention	Treatment
Broiler	Broiler starter	200g per tonne feed	250g per tonne feed
	Broiler grower/finisher	150g per tonne feed	250g per tonne feed
Pullet - Layer/breeder	Pullet (1 - 14 weeks)	100g per tonne feed	200g per tonne feed
	Pullet (14 - 18 weeks)	100g per tonne feed	200g per tonne feed
	Pullet (> 18 weeks)	100g per tonne feed	200g per tonne feed
Nursery Pigs	Week (1 - 14 weeks)	300g per tonne feed	500g per tonne feed
	> 4 weeks	300g per tonne feed	500g per tonne feed
Grower Pigs	< 6 week after weaning	100g per tonne feed	300g per tonne feed
	> 6 week after weaning	100g per tonne feed	300g per tonne feed
Sow		200g per tonne feed	400g per tonne feed

Key Benefits of Microtide:

Heat-stable

Antimicrobial activity remains >90% at 150°C for 30 minutes.

0 day Withdrawal

No withdrawal period for meat, egg or byproducts.

Acid-stable

Not affected by acidic pH or contact with acidifiers.

In Vivo and In Vitro Effective

Sustainable

Production and usage does not damage the environment.

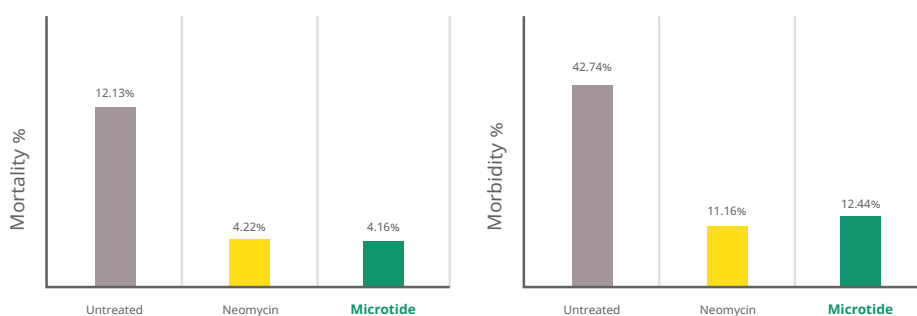
Low resistance development

Bacteria is slow to develop resistance against Microtide.

Field Trial Results

The field trial conducted on Microtide was carried out in Myanmar by the University of Veterinary Science, Yezin between September-October 2020. The trial involved 6 closed houses, with 2 houses allocated per group and 10,000 chickens per house. The three groups were: treated with Microtide, treated with neomycin sulphate, and untreated. Promising results were observed in the Microtide-treated group, which showed a reduction of 60% in mortality rates compared to the untreated group and similar results when compared to the group treated with neomycin.

These results demonstrate Microtide's potential as a beneficial solution for the poultry industry in terms of enhanced health and productivity. Its antimicrobial properties offer a novel approach to combat bacterial infections and improve overall chicken well-being in the poultry sector.



The successful trial in Myanmar, conducted in a large-scale setting with 6 closed houses and three distinct groups, underscores the potential of Microtide as a practical and effective solution for real-world poultry farming.