



SYNERGY AT WORK TO STOP BAD BUGS!



Bacterial pathogens are an increasing risk for the sustainability and profitability of aquaculture. Bacti-Nil® Aqua is a cost-effective blend of organic acids to reduce the impact of bacterial pathogens on productivity of fish and shrimp. Its synergistic anti-bacterial activities target major aquaculture pathogens including a wide range of gram positive as well as gram negative bacteria. Thanks to its selective action against pathogens and synergies with probiotics, it promotes a healthy gut microbioma resulting in a better performance.

The benefits of Bacti-Nil® Aqua

- ✓ Synergistic blend of organic acids
- ✓ Highly effective under conditions and challenges encountered in aquaculture species
- ✓ Reduced mortality caused by bacterial pathogens
- ✓ Reduced the impact from stress conditions on performance
- ✓ Improved growth performance and productivity



How it works ... Bacti-Nil® Aqua

PROBLEM DEFINITION

Sustainable and profitable aquaculture requires adequate measures to control diseases



Corrective:
 ✗ Increase costs
 ✗ Loss of productivity
 ✗ Increase disease risk



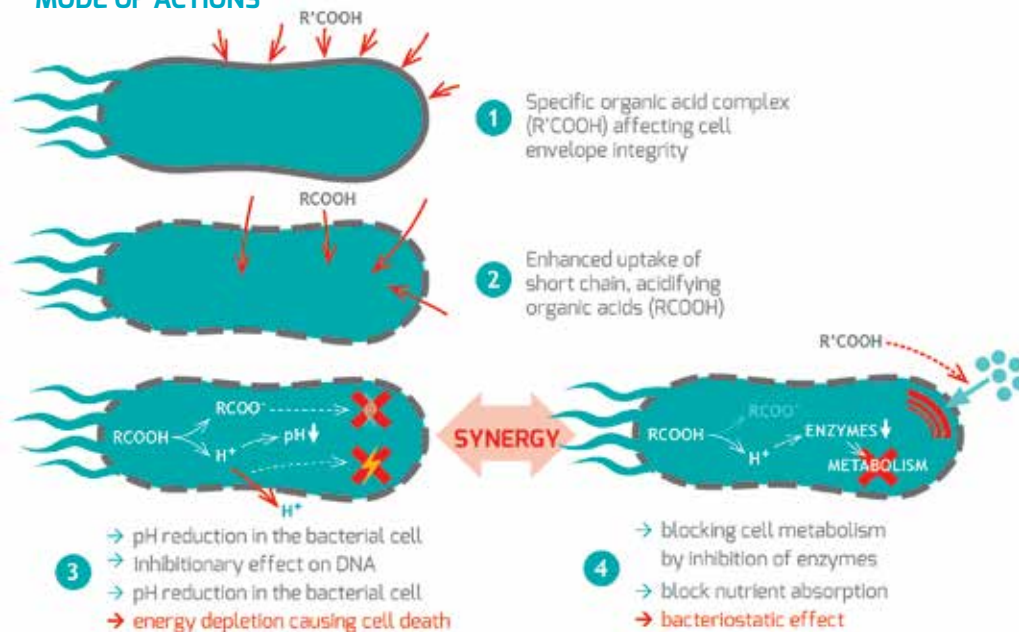
Preventive:
 ✓ Increase productivity
 ✓ Increase profitability
 ✓ Reduce disease risk

OUR SOLUTION

Synergistic mode of actions to inhibit growth of pathogenic bacteria

Bacti-Nil® Aqua incorporates a complex blend of organic acids activating a chain of synergistic actions capable of inhibiting growth of pathogenic bacteria.

MODE OF ACTIONS



EFFECTS

Modulation of gut microbiota thanks to selective anti-bacterial action

Pathogens are **highly sensitive** to Bacti-Nil® Aqua

SPECIES	MIC (g/kg)
<i>Francisella noatunensis orientalis</i>	0.30
<i>Streptococcus penaicida</i>	0.50
<i>Vibrio spp</i>	1.50
<i>Vibrio harveyi</i>	2.00
<i>Vibrio vulnificus</i>	2.00
<i>Pseudomonas sp</i>	2.00
<i>Aeromonas hydrophila</i>	2.00
<i>Streptococcus agalactiae</i>	2.00
<i>Streptococcus iniae</i>	3.00

Probiotics are **insensitive** to Bacti-Nil® Aqua

SPECIES	MIC (g/kg)
<i>Lactococcus lactis</i>	9.40
<i>Roseobacter denitrificans</i>	9.40
<i>Micrococcus luteus</i>	9.40
<i>Bacillus licheniformis</i>	9.40
<i>Bacillus subtilis</i>	9.40
<i>Lactobacillus rhamnosus</i>	18.80
<i>Streptomyces cellulosae</i>	18.80
<i>Lactobacillus plantarum</i>	18.80
<i>Pediococcus acidilactici</i>	18.80

DOSAGE/APPLICATION

- At the feedmill via the mixer (resistant to industrial processing conditions for fish and shrimp feed).
- At the farm top-dressed with a suitable binder.

2-5 kg/MT of feed

We welcome you to consult our health experts to design an optimal additive strategy for specific disease challenges in your target species. Request our sensitivity analysis for your pathogen isolates.

AQUACULTURE SPECIALTY PROGRAMS



ADISSEO
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