

Premix solutions
& more

ADDITIVES

Discover our range of additives



Introduction

VDS' nutritionists and veterinary experts have developed a range of additives for livestock and aquaculture, targeting various challenges such as improving health, addressing common issues, and boosting production. Discover our BOOST line to optimize performance and our GUARD line to solve prevalent problems in livestock and aquaculture.

BOOST range

VDS' nutritionists and veterinary experts have developed a range of additives for livestock and aqua-culture, targeting various challenges such as improving health, addressing common issues, and boosting production. Discover our BOOST line, specially designed to maximize animal performance and health. Developed by our expert nutritionists, the additives in the BOOST range promote optimal growth, strengthen immunity, and enhance productivity.

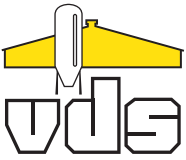
GUARD range

Our GUARD line is dedicated to the protection and well-being of animals. Formulated to address common issues encountered in livestock farming, the additives in the GUARD range strengthen immunity and prevent diseases, ensuring optimal health and better resistance to infections.



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MaxiBuff

An effective and long-lasting rumen buffer

MaxiBuff is a rumen buffer mixture that was developed and tested in Belgium with the aid of pH boluses. The combination of various ingredients ensures effective and long-lasting protection against rumen acidosis. Extensive real-life trials demonstrated that MaxiBuff can be used as a substitute for lithothamnium and sodium bicarbonate.

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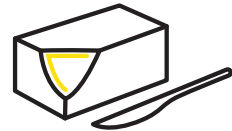
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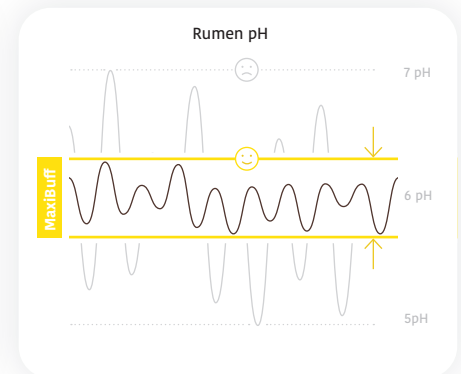
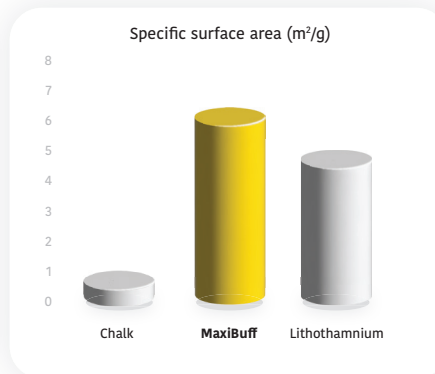
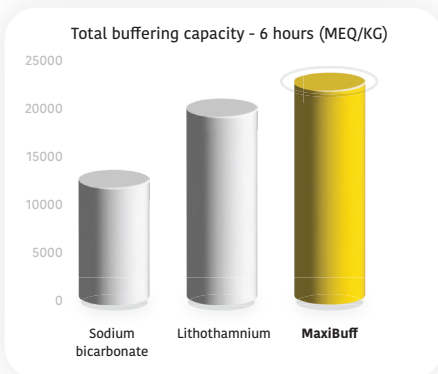
Improves feed efficiency



Increases milk yield



Increases milk butterfat



Long-lasting protection

The combination of fast and long lasting buffers gives up to 8 hours of protection.

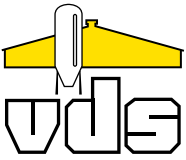
Large contact surface

MaxiBuff is highly porous and has a large specific surface area. This makes it ideal for the neutralisation of acid.

Stable rumen environment

MaxiBuff reduces fluctuations in rumen pH. This results in a higher dry matter intake, an increase in rumen microflora and higher production rates.





CellStop

A unique feed solution to reduce mastitis and somatic cell count

VDS CellStop is a combination of myco-endotoxin binders, minerals and vitamins aimed to reduce the somatic cell count. As a result of the reduced somatic cell count there will be less mastitis incidence and a higher milk production in the herd.

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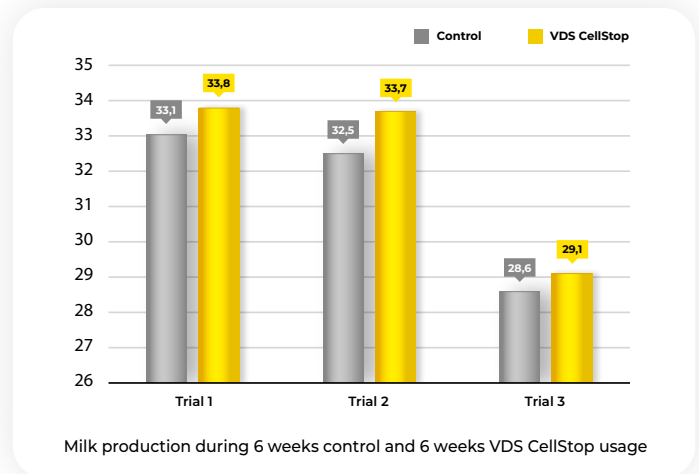
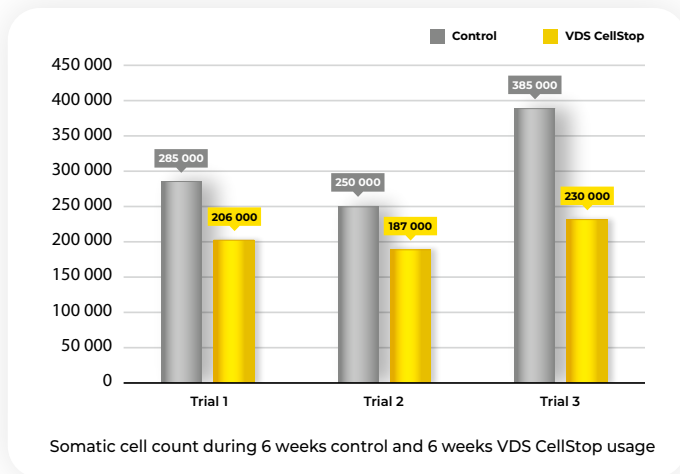
Reduces the somatic cell count



Improves milk production



Reduces the incidence of mastitis



Removal of endotoxins

Endotoxins, like lipopolysaccharides (LPS), are toxic components of Gram-negative bacterial cell walls, commonly found in bacteria like *E. coli* and *Salmonella*. These toxins can cross the gut epithelium into the bloodstream, triggering inflammation. This inflammatory response is energetically costly, impacting milk production and increasing somatic cell count. VDS CellStop removes these endotoxins from the rumen and the gut lumen and therefore prevents the inflammation process from happening.

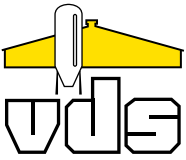
Modulation of the immune system

Mainly, somatic cell count (SCC) consists of leukocytes generated by the cow's immune system as a response to inflammation in the mammary gland. VDS CellStop positively regulates immunity by enhancing antioxidative capacity and reducing inflammatory response. This prevents overstimulation of the immune system in case of chronic SCC problems.

Improved animal Health

Two layers of defense safeguard the mammary gland against pathogens and mastitis in dairy cows: the teat keratin near the gland's opening and the inner epithelial tissue. VDS CellStop strengthens both the keratin and the tight junctions of the epithelial tissues, reducing the infiltration of environmental pathogens and thus preventing mastitis while lowering somatic cell count.





EarProtect

A phytogetic solution against ear tip necrosis

VDS EarProtect is a phytogetic additive specifically formulated to address the common issue of ear tip necrosis. By harnessing the power of plant-based ingredients, it offers an effective and natural solution for the prevention and treatment of this syndrome.

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Exhibits antiviral and antibacterial activity



Has a calming effect

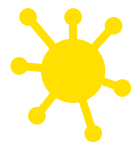


Influences the cardiovascular system



Common causes ear tip necrosis

- Toxines from *Staphylococcus SPP*
- Narrowing or obstruction of small blood vessels as a result of an *M.suis* infection.
- Trauma for example from bite wounds with infected ear tips with *Streptococcus*.



Antiviral and antibacterial activity

The phytogetic products in VDS EarProtect can reduce the pathogenic ability of bacteria such as *S. aureus* and *E. coli* by disrupting their cell wall integrity, reducing bacterial enzymatic activities, and inhibiting bacterial energy production and nucleotide synthesis.

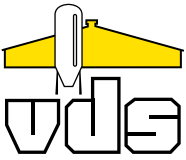
Calming effect

VDS EarProtect has a de-cramping and calming effect, which can help fight ear biting and thus counteract bacterial inflammation in the ear tip.

Effect on cardiovascular system

VDS Earprotect improves blood circulation, which will lift blockages in the ear's veins.





A natural solution for better growth, gut health and immunity in pigs

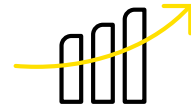
VDS LifePlus Pig is a solution designed to boost growth, gut health, and disease immunity in pigs. Through its synergistic composition of butyric acid molecules, yeast components, clay minerals and polyphenols, VDS LifePlus Pig improves production parameters and inhibits growth of harmful bacteria and pathogens in pig farming.



Improves gut development and intestinal health



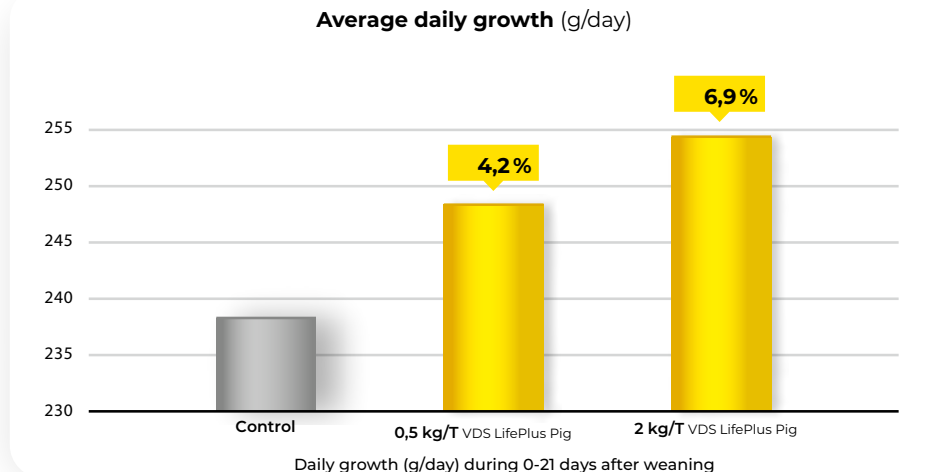
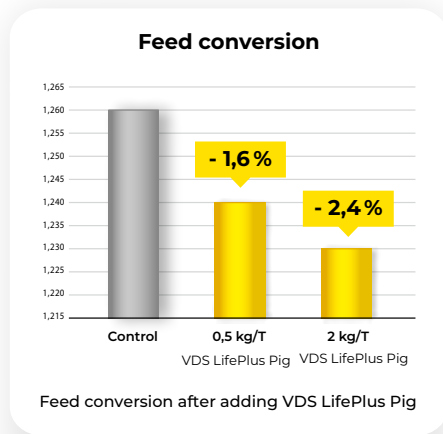
Inhibits growth of harmful bacteria and pathogens



Improves growth and feed conversion through better nutrient uptake

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Inhibits growth of harmful bacteria and pathogens

VDS LifePlus Pig offers a complete solution for controlling harmful bacteria and pathogens by lowering gut pH, binding toxins with clay minerals and preventing pathogen attachment using yeast cell walls. This is enhanced by the anti-oxidative and immunomodulatory properties of the polyphenols. The result is better health of pigs, with reduced diarrhea incidence as an added benefit.

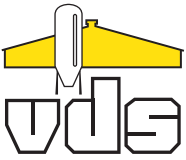
Improves gut development and intestinal health

The butyric acid molecules in VDS LifePlus Pig promote intestinal development and health, restore the intestinal barrier and improve nutrient absorption. This leads to better growth performance in pigs, thanks to improved digestion and gut health.

Improves growth and feed conversion through better nutrient uptake

VDS LifePlus Pig improves growth and feed conversion by promoting efficient nutrient absorption, thanks to the activation of digestive enzymes and optimisation of intestinal morphology.





LifePlus POULTRY

A natural solution for healthy growth and optimal production in poultry farming

VDS LifePlus Poultry is a synergistic blend of butyric acid molecules, yeast products, clay minerals and polyphenols. It enhances the growth, digestive well-being and immune resilience of poultry, while restraining the proliferation of the detrimental bacteria and pathogens within poultry farming operations.

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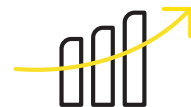
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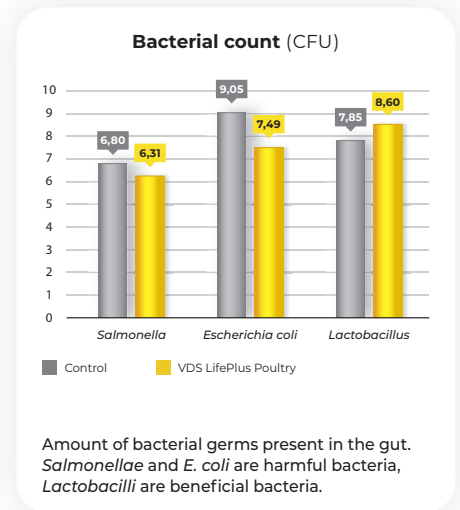
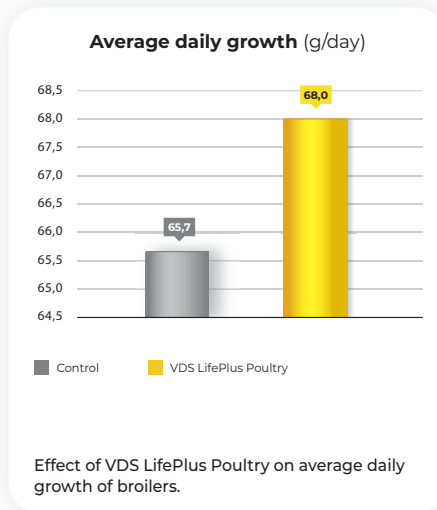
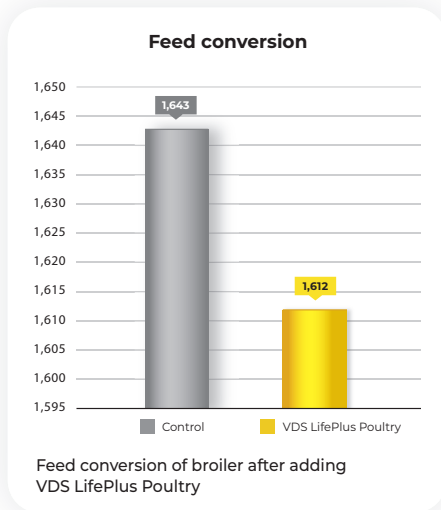
Improves gut development and intestinal health



Inhibits growth of harmful bacteria and pathogens



Improves growth and feed conversion through better nutrient uptake



Inhibition of the growth of harmful bacteria and pathogens

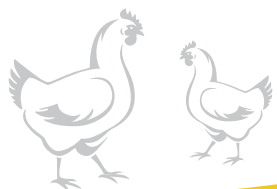
VDS LifePlus Poultry protects poultry from bacteria and pathogens through butyric acid molecules, clay minerals, yeast ingredients and polyphenols. This lowers gut pH, stimulates beneficial bacteria and inhibits harmful bacteria. Clay minerals also absorb endo- and mycotoxins, preventing their uptake, while yeast ingredients boost immunity and inhibit pathogen growth.

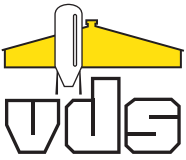
Improvement in growth and feed conversion through better nutrient uptake

VDS LifePlus Poultry promotes growth and nutritional efficiency in poultry by improving gut health. This is achieved by stimulating villi growth, lowering pH to promote beneficial bacteria, supporting healthy gut flora and providing anti inflammatory properties. As a result, poultry exhibits improved performance.

Improvement in gut development and intestinal health

VDS LifePlus Poultry helps promote healthier intestines and positive regulation of intestinal transit in poultry. This leads to better nutrient absorption and reduces the harmful effects of mycotoxins.





OptiCalm

The ideal solution for stress reduction, aggression reduction and performance enhancement

VDS OptiCalm is a synergistic blend of magnesium compounds, vitamin C molecules, vitamin E molecules and polyphenols. It is an additive developed to counteract stress reactions experienced by housed animals. VDS OptiCalm plays a vital role in optimizing the health and productivity of farm animals.

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Reduces aggressiveness and stress in animals

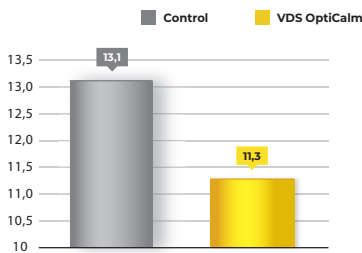


Results in better overall health and performance parameters



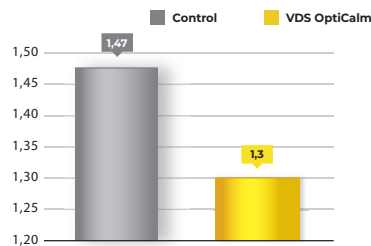
Improves carcass and meat quality

Harmful behaviour (h)



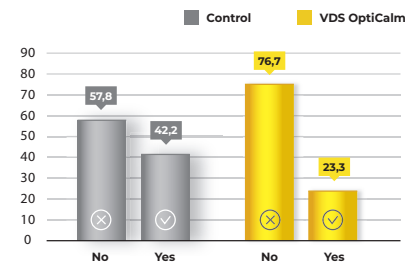
Duration (hours) of harmful behaviour of pigs due to pig stress divided into 2 groups. This is measured in a period of 24h. Here, 1 of the 2 groups was fed with the additive VDS OptiCalm.

Salivary cortisol (ng/ml)



Concentration of cortisol in saliva in 2 groups of fattening pigs: those fed with and without VDS OptiCalm.

Loin lesions (%)



Percentage of carcasses in which loin lesions were present/not present in fattening pigs.

Importance of Magnesium

Magnesium (Mg) is a key component in VDS OptiCalm. It is an essential mineral for the growth and fitness of the animals. The magnesium source in VDS OptiCalm is absorbed better through the intestinal wall due to the high bioavailability. Magnesium is needed for bone and muscle formation. It also plays a role in the proper functioning of muscles and the transmission of nerve impulses. A deficiency in Mg can lead to irritability and nervousness. Thus, a balanced administration of Mg is crucial for optimal nerve and muscle interaction.

Effect on pigs

In the commercial pig farming, VDS OptiCalm can be added to the pig feed during stressful events to alleviate the stress. It can positively affect animal behaviour by reducing the frequency of lesions, leading to better carcass quality and pork quality. (It has also been observed that it improves pork quality, in particular the colour of the meat and drip loss. It also increases carcass quality due to reduced aggression.)

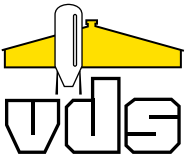
Effect on poultry

Supplementation of VDS OptiCalm exerts positive effects in poultry feeds such as increasing weight gain of broilers, egg production of laying hens and improved meat quality parameters. Also, it has been showed that VDS OptiCalm improved the skeletal integrity.

Effect on beef

VDS OptiCalm reduces feedlot aggression and social stress amongst bulls.





OxyStop

An efficient protection against oxidation of feed and feed ingredients

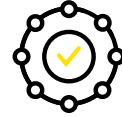
VDS OxyStop is a combination of BHT, Propyl gallate and citric acid. This combination of free radical scavengers and a metal chelator provides maximal feed protection against oxidation reactions in feed materials such as lipids, vitamins, pigments and others.

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Protects unsaturated fatty acids and prevents rancidity

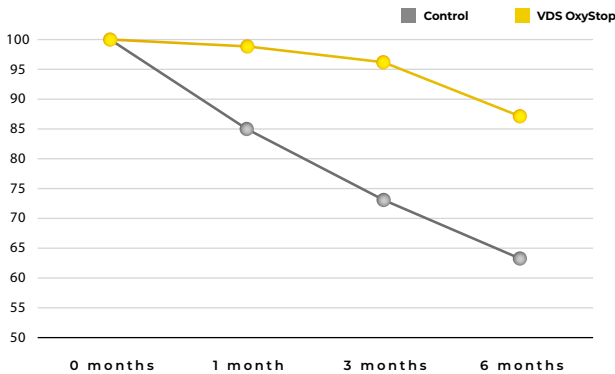


Protects natural antioxidants

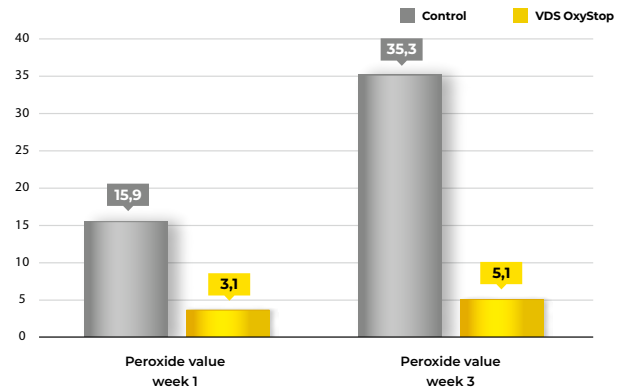


Protects vitamins and pigments

Vitamin A stability in an aggressive premix at 25°C



Broiler feed shelf life study



Synergism

Propyl Gallate and BHT exhibit synergistic antioxidant effects due to their complementary mechanisms in preventing lipid oxidation. BHT primarily acts by donating hydrogen atoms to free radicals, terminating the oxidation chain reaction. Propyl Gallate, on the other hand, can regenerate BHT from its oxidized form, effectively extending BHT's antioxidant action. This combination enhances the overall stability and effectiveness of antioxidant protection, making the pair more effective together than individually.

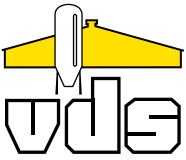
The addition of citric acid enhances the antioxidant effects of BHT and Propyl Gallate by acting as a metal chelator, which neutralizes metal ions that could otherwise promote oxidative reactions. The synergistic blend of these compounds provides better protection against oxidation than any single antioxidant alone.

Physical properties

The physical form of an antioxidant mixture is crucial for its effectiveness. The antioxidants of VDS OxyStop are blended into a uniform, stable mixture with fine particle size.

This way it can be successfully mixed in the feed and provide a consistent and efficient protection against oxidation.





ProbioPlus

A probiotic solution against intestinal disorders

VDS ProbioPlus is a probiotic product containing spores of the bacterium *Bacillus subtilis* (strain DSM 28343). These spores are highly resistant to extreme environmental conditions such as high temperatures, extreme pH levels, stomach acid and bile salts. As a result, the spores can not only survive the high temperatures of pelleting procedures, but also perfectly pass through the acidic stomach to sporulate in the gut. With different modes of action, VDS ProbioPlus can be used in both pigs and poultry.

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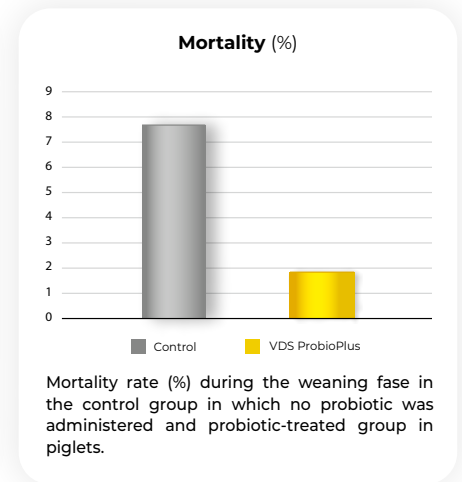
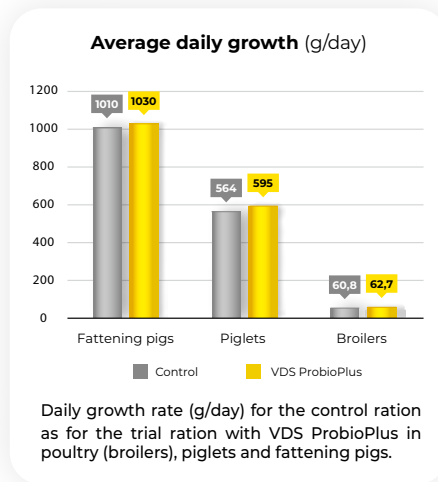
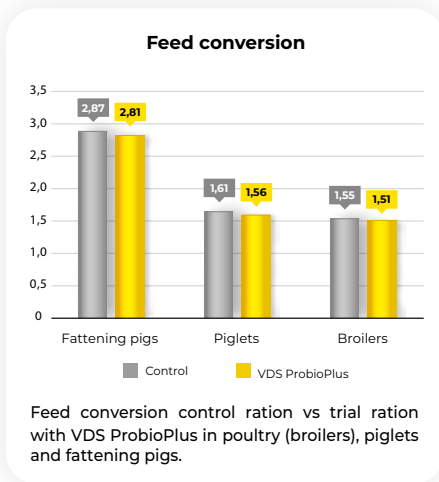
Regulates the gut flora



Supports natural production of enzymes/antibiotics



Modulates the immune system



Mode of action

VDS ProbioPlus has several mechanisms of action: competition with harmful pathogens and influencing intestinal flora, production of enzymes for improved nutrient digestion, antimicrobial effects and stimulation of the host immune system. This results in reduced diarrhea incidence in piglets and poultry, promotion of beneficial bacteria and improved immune response.

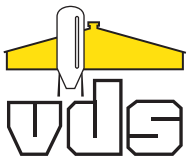
In piglets and fattening pigs

VDS ProbioPlus has positive effects in piglets, including reduced post-weaning mortality, lower diarrhea incidence and improved growth. In fattening pigs, it improves feed conversion and growth. Addition of *B. subtilis* also results in lower diarrhea incidence and helps form a healthy gut flora, which improves digestion and immunity.

In broilers

VDS ProbioPlus has positive effects in broilers, including improved feed conversion, growth and body weight. It also relieves heat stress and extends foraging time, via improved immunity modulated by microbiota. *B. subtilis* competes for nutrients, reduces bacterial overgrowth in the small intestine and enhances the immune response in favour of the host.





ShellGuard

A balanced additive for strong eggshells and healthy laying hens, even during extended laying periods.

VDS ShellGuard is a synergistic blend of highly digestible calcium, vitamin D3 molecules, butyric acid molecules, yeast components and polyphenols.

It is an additive designed to improve eggshell quality in laying hens, with extra emphasis on its importance during longer laying periods. Through its unique composition, it provides effective support for maintaining strong eggshells throughout longer laying periods and optimising production performance of laying hens. VDS ShellGuard can also be used after moulting to improve shell quality.

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Stimulates absorption of Ca in the intestine



Regulates the homeostasis of Ca and P in the blood



Supports eggshell formation, skeletal development and modulates the immune system

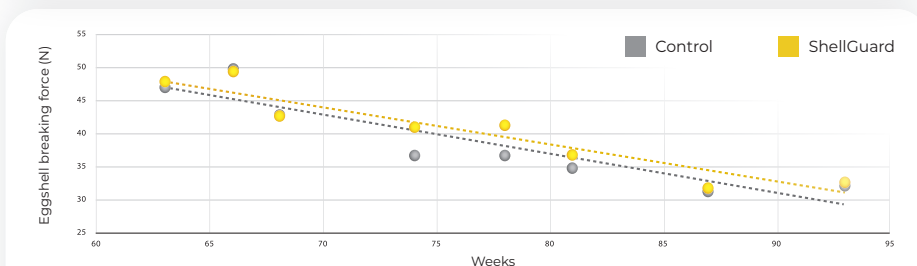
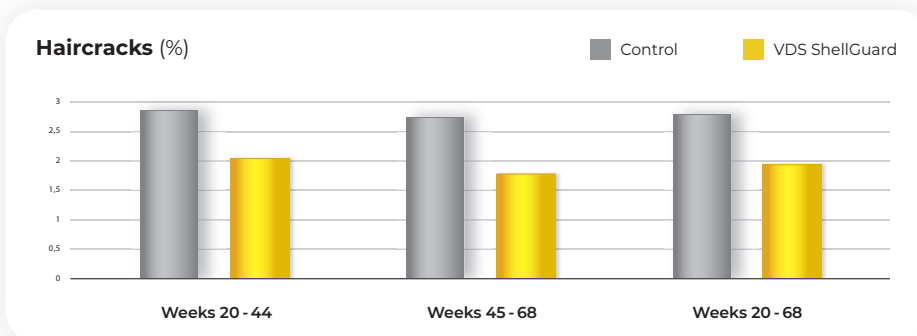
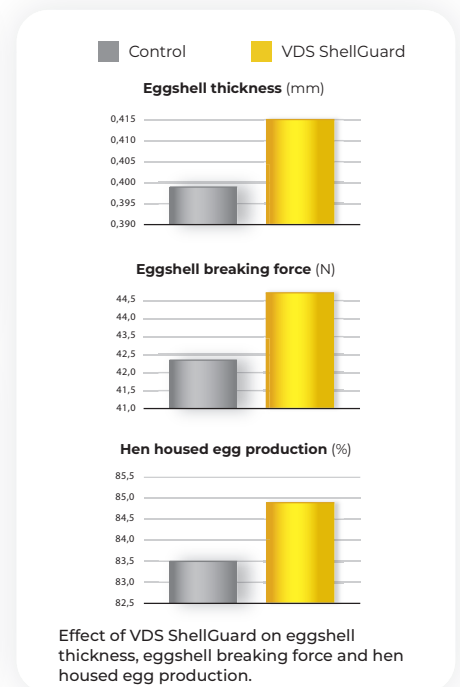


Figure shows that addition of VDS ShellGuard resulted in a significant decrease in the occurrence of hairline cracks in eggs and reduced eggshell deformations.



Effect of VDS ShellGuard on eggshell thickness, eggshell breaking force and hen housed egg production.

Importance of Vitamin D3

Vitamin D3 in the form of 25-OH-D3 is included to promote calcium and phosphorus absorption, support eggshell formation and modulate the immune system. Addition of 25-OH-D3 improves laying performance, reduces the number of broken eggs and increases egg mass.

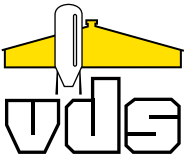
Better egg quality

Butyric acid molecules in VDS ShellGuard improve gut health and eggshell quality, while yeast cell walls strengthen immunity and fight pathogens, resulting in better egg production and quality in laying hens.

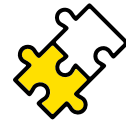
Calcium source

The main component of VDS ShellGuard is a fast-absorbing calcium source with higher absorbability thanks to its amorphous structure.





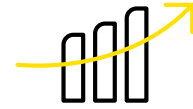
ToxiStop^{PLUS}



Absorbs
mycotoxins

A natural shield against mycotoxins

VDS ToxiStop Plus is a mycotoxin binder consisting of a combination of clay minerals and yeast ingredients. It is designed to counteract the toxic effect of mycotoxins, improving both growth, feed intake and health of animals in case of feed mycotoxin contamination.



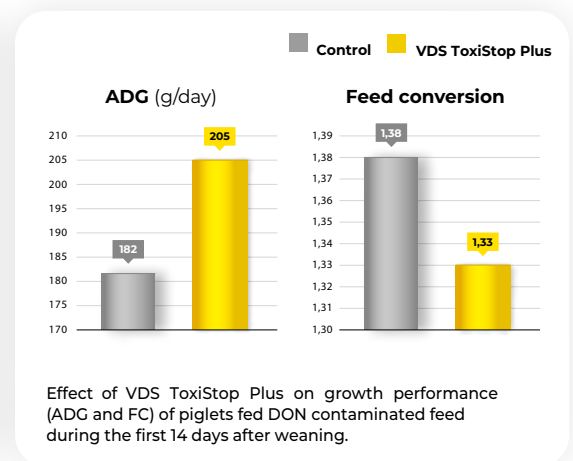
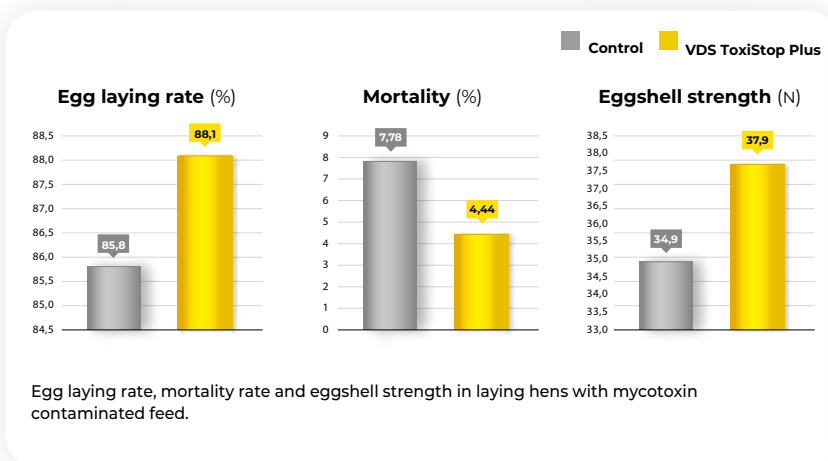
Improves performance
of the animals



Improves animal health
and reduces mortality

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Absorption of mycotoxins

VDS ToxiStop Plus is an innovative solution combining two distinct bentonite clay minerals with yeast cell walls to combat mycotoxins effectively. The bentonite clays absorb a wide range of mycotoxins, preventing their entry into the bloodstream, while the yeast cell walls bind to mycotoxins without compromising nutrient availability. This dual-action formula safeguards livestock from mycotoxin exposure and its detrimental effects.

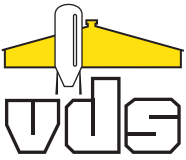
Enhanced growth and feed intake

VDS ToxiStop Plus promotes growth and feed intake in case of mycotoxin contamination in feed. By neutralizing mycotoxins VDS ToxiStop Plus ensures optimal digestive function and preserves the nutritional quality of the feed. This support enhances nutrient absorption, fosters healthy digestion, and ultimately leads to improved growth and feed intake in animals.

Improved animal health

VDS ToxiStop Plus protects animal health through three key mechanisms: reducing the bioavailability of mycotoxins, safeguarding intestinal health, and modulating the immune system. These actions collectively reduce disease incidence and mortality rates in livestock, ensuring a healthier and more productive herd.





LifePlus FISH

Stress tolerance & health booster

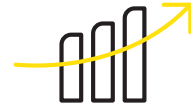
VDS LifePlus Fish is the result of thorough research into optimizing FCR and growth performance in fish culture. VDS LifePlus Fish boosts the fish's gut natural capabilities to digest nutrients and block out pathogens. Stress tolerance is significantly enhanced, leading to higher survival rates when experiencing an acute or chronic negative environment.

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Improves gut health

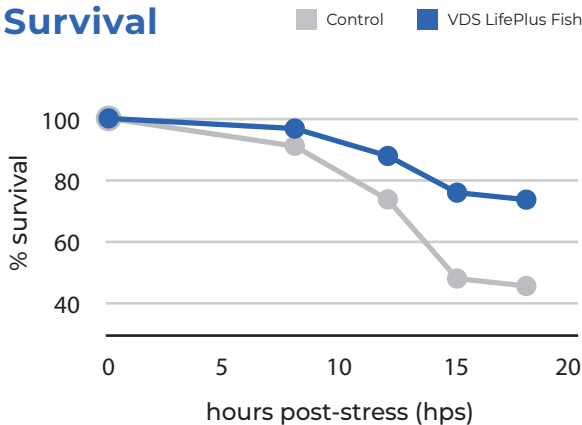


Increases stress tolerance



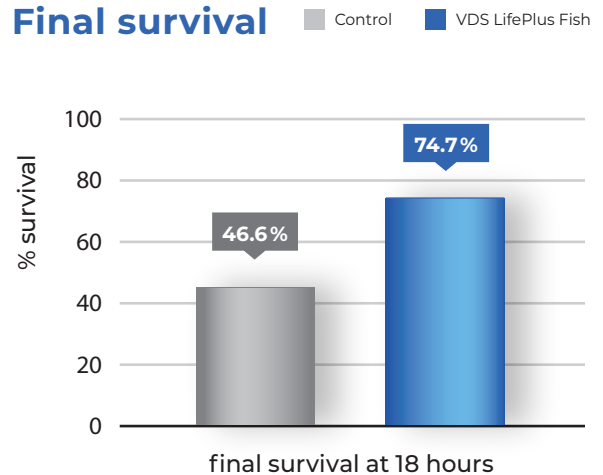
Reduces mortalities by enhancing resistance to pathogen infection

Survival



* survival curves are significantly different (p < 0.0001)

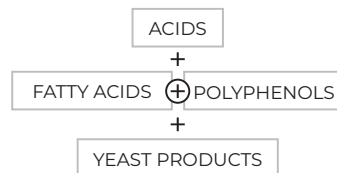
Final survival



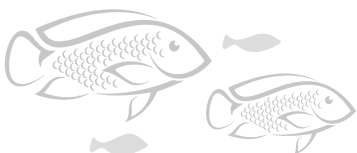
Robustness

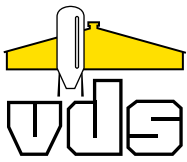
VDS LifePlus Fish is strengthening the immune-system of the fish. This enables them to boost survival-rates when under threat.

VDS LifePlus Fish consists of an unique combination of:



The additives are combined in optimized quantities to achieve maximum efficiency when adding 4kg/ton on final feed.





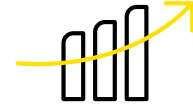
LifePlus SHRIMP



Improves gut health

Growth stimulator & health booster

VDS LifePlus Shrimp is the result of years of research into optimizing FCR and growth performance in shrimp culture. Our goal was to boost growth by enhancing the shrimps' gut natural capabilities to digest nutrients and block out pathogens. Shrimp feed trials in our inhouse R&D unit, combined with field trials with customers led to the unique blend that VDS LifePlus Shrimp is today.



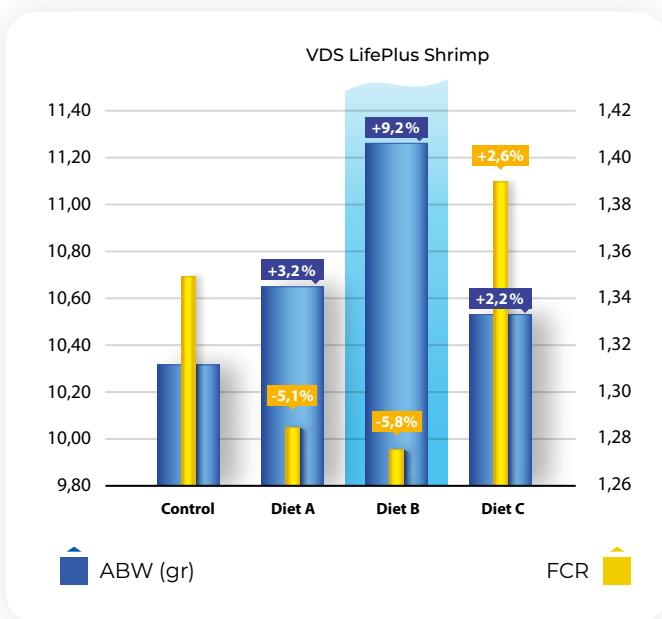
Increases growth rate and improved feed conversion



Reduces mortalities by enhancing resistance to pathogen infection

Ordering information:

vdspremix.be export@vdspremix.be +32 56 71 91 68



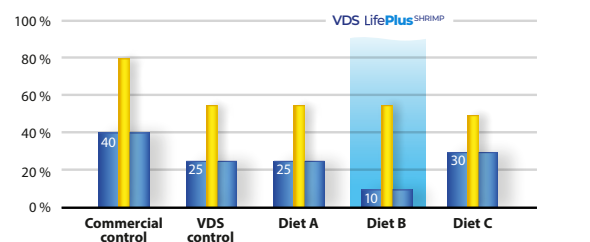
VDS LifePlus Shrimp consists of an unique combination of:

ACIDS + FATTY ACIDS + YEAST PRODUCTS



The additives are combined in optimized quantities to achieve maximum efficiency when adding 4kg/ton on final feed.

WSSV challenge test - Final mortality vs diseased shrimp



Economics

VDS LifePlus Shrimp second strength is seriously reducing mortality in shrimps exposed to pathogens, such as White Spot Syndrome Virus. Active ingredients within VDS LifePlus Shrimp work directly on strengthening the gut barrier, while others attack pathogens present in the shrimp.



Growth

When adding 4 kg/ton of shrimp feed, VDS LifePlus Shrimp is able to boost the growth in our trials with avg 6% while simultaneously reducing the shrimps' Feed Conversation Rate (FCR) with avg 4,5%.



Thank you

for your interest in our company and in our products.

Do you want more information or to place an order?

Don't hesitate to contact us!
Our experts will be happy to help you.

VDS NV

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