

# VIUSID<sup>®</sup> vet

**VIUSID<sup>®</sup> vet** acts on the growth of poultry birds, strengthening their immune system. It increases appetite and is an excellent antiviral and hepatoprotector.

#### COMPOSITION of VIUSID<sup>®</sup> vet Solution

Malic Acid, Glucosamine, Arginine, Glycine, Ascorbic Acid, Monoammonium Glycyrhizinate, Pyridoxine Hydrochloride, Zinc Sulfate, Calcium Pantothenate, Folic Acid, Cyanocobalamin, Sodium Benzoate, Potassium Sorbate, and Distilled Water.

#### COMPOSITION of VIUSID<sup>®</sup> vet Powder

Malic Acid, Glucosamine, Arginine, Glycine, Ascorbic Acid, Monoammonium Glycyrhizinate, Pyridoxine Hydrochloride, Zinc Sulfate, Calcium Pantothenate, Folic Acid, Cyanocobalamin, Sodium Benzoate, Potassium Sorbate, Maltodextrin, Calcium Carbonate, and Silicon Dioxide.



Containers with 1, 5, and 25 kg of powder ready to be mixed with feed

#### STORAGE

Store in a cool, dry place below 25° C.  
Keep out of the reach of children and animals.

#### DOSAGE VIUSID<sup>®</sup> vet Solution

1 litre (33.81 fl.oz.) per 1000 litres of drinking water throughout the production cycle.

#### DOSAGE VIUSID<sup>®</sup> vet Powder

1 Kg (35.27 oz.) per 1000 Kg of feed throughout the production cycle.



Containers with 1, 5, and 25 litres of solution ready to be diluted in drinking water

**Authorized Distributor:**

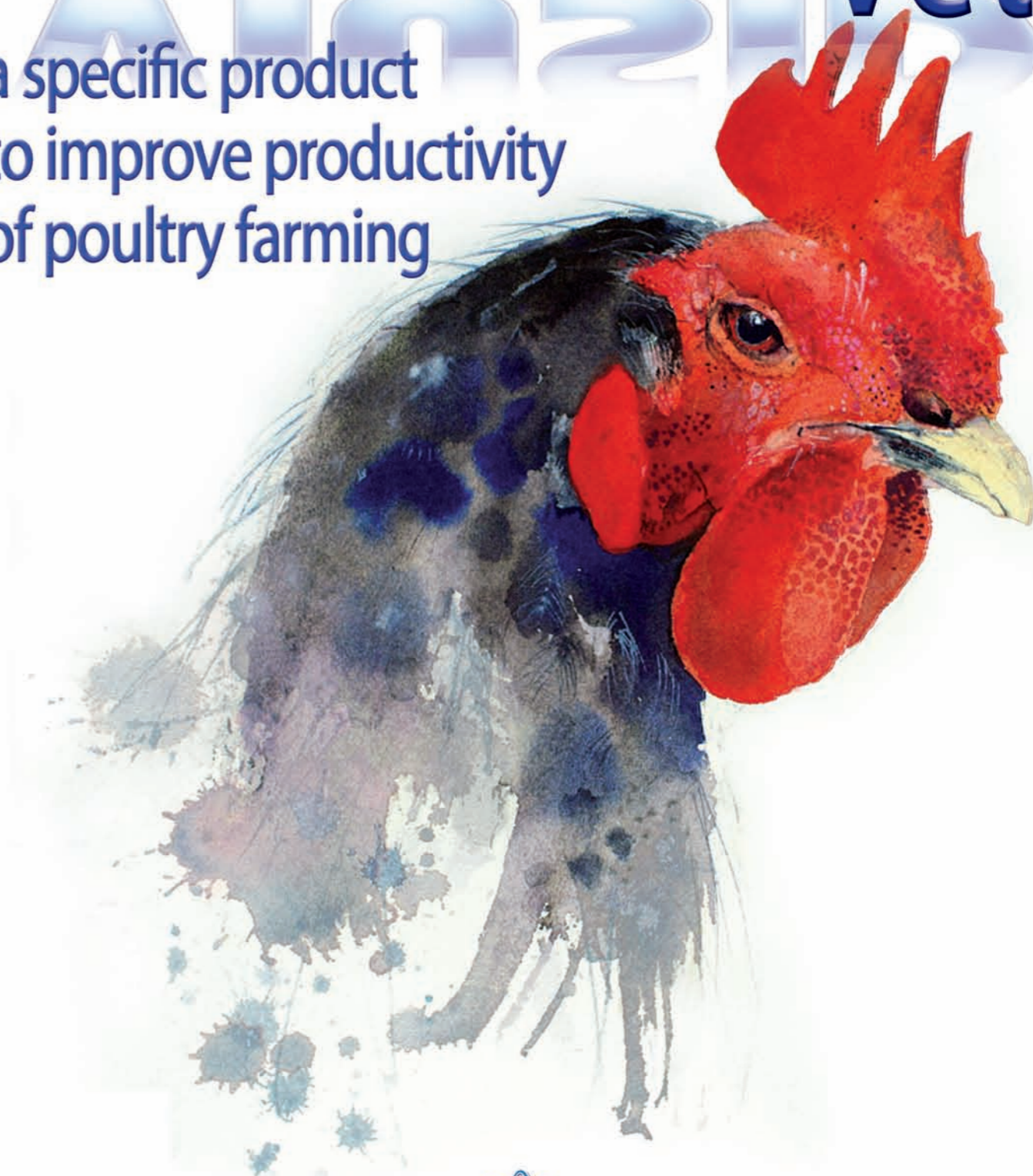


AGROVETERINARY DIVISION

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# VIUSID<sup>®</sup> vet

a specific product  
to improve productivity  
of poultry farming



catalysis

AGROVETERINARY DIVISION



Why choose **VIUSID® vet**?

All the ingredients of **VIUSID® vet** undergo a biocatalytic process of MOLECULAR ACTIVATION.

The biocatalytic process of MOLECULAR ACTIVATION considerably improves the biological activity and the biochemical reactivity of all antioxidant molecules.

This method of ACTIVATION is much more effective when applied to a far wider range of hydrosoluble and liposoluble molecules.

We know the answer to this ACTIVATION in numerous antioxidants of all kinds and also the mechanism by which the accumulated electrons are able to reduce the free radicals of oxidant molecules.

In this mechanism we have observed greater synergy between some antioxidants used, that are sometimes capable of considerably increasing their overall antioxidant capacity.

Many factors can influence the ACTIVATION of all antioxidants.

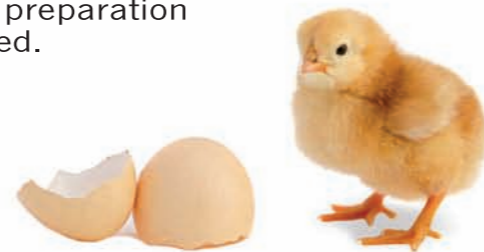
Amongst the most important chemical factors are the molecular structure, the active functional groups, specific antioxidant catalysts, the molecular weight, the pH, double carbon bonds, their solubility coefficient, etc., as well as the antioxidant capacity of each molecule.

The duration and the intensity of MOLECULAR ACTIVATION are amongst the most influential and important physical factors.

Not all antioxidants require the same ACTIVATION time to reach their maximum antioxidant capacity. The most important parameter for the control of better performance is their optimization. Once their highest antioxidant capacity is at its most favourable peak, ACTIVATION must be suspended because, after that maximum peak, their antioxidant capacity normally starts to diminish gradually or quickly.

When there is a mixture of two or more antioxidants, the optimal ACTIVATION time is previously calculated for each preparation separately, and this fixed parameter is always respected.

These results demonstrate that MOLECULAR ACTIVATION is essential and necessary to increase biological activity and obtain this way the greatest effectiveness in the treatment of diseases which directly or indirectly produce free radicals.



improves feed conversion  
and increases daily weight  
by 15.5%

the studies carried out show the efficacy of  
**VIUSID® vet**  
to optimize productivity of poultry farming

**VIUSID® vet** is a nutritional preparation made of antioxidants, vitamins, trace minerals, and glycyrrhizic acid, a substance with antiviral properties.

It is specially designed to boost the immune system. Therefore, it is perfect in all those processes that cause immunodeficiency.

It is common knowledge that consuming antioxidant nutrients is essential to ensure that the immune system works properly. **VIUSID® vet** constitutes in this sense a guarantee.

The activation of the ingredients of **VIUSID® vet** increases to a large degree the power of the biological functions of all of them, such as the antiviral and antioxidant action, without modifying or changing the molecular structure, and assures a very significant increase of the immunological defences of the organism.

**VIUSID® vet** is particularly suitable to be used as an adjuvant therapy for viral and parasitic illnesses, in chronic wasting diseases, and to build up the immune system.

it is also a powerful hepatoprotector

Thanks to its composition based on natural ingredients, **VIUSID® vet** does not have any side effects.





# Effect of the administration of **VIUSID® vet** on immune response in broiler chicks

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## DOSAGE

**1 litre (33.81 fl.oz.) of VIUSID® vet per 1000 litres of drinking water**

60,000 one-day-old birds from the Ross x Ross strain were divided into two groups of 30,000 birds in each group. One of these groups was treated with **VIUSID® vet** in the ratio of 1 litre (33.81 fl.oz.) of the product per 1000 litres of drinking water throughout the whole production cycle (49 days). The other group, that was not treated, was the control group.

Feed: Administered in stages with an automatic feeder.

Type of water dispenser: Cupless nipple drinkers.

Product: **VIUSID® vet**.

Inclusion level: 1 litre (33.8 fl.oz.) per 1000 litres of drinking water.

## **VIUSID® vet** evaluation: Statistical analysis for weight, feed conversion, and mortality rate.

The aim of this study was to establish the efficacy of **VIUSID® vet** in commercial broilers evaluating humoral and cellular immune response. A study was conducted on commercial broilers. At 21 and 42 days of age, serum and blood were evaluated. Cellular immune response was evaluated with cutaneous basophilic hypersensitivity mediated by an interdigital skin test.

**The groups that were supplemented with VIUSID® vet showed an improvement of the immune response.**

**boosts the immune system  
 helps prevent viral diseases**

## RESULTS

### Productive Parameter Results

Week	VIUSID	CONTROL	VIUSID		CONTROL		VIUSID	CONTROL	
	Weight (kg)	Weight (kg)	%C. Mort	%C. Mort	C. Conv.	C. Conv.	C. Conv.		
1	0.1475	0.1440	2%	0.67%	0.64%	4%	1.0130	1.0885	-7
2	0.3075	0.3150	-2%	1.27%	1.18%	8%	1.2490	1.2565	-1
3	0.6520	0.6310	3%	1.63%	1.90%	-14%	1.4380	1.4815	-3
4	<b>1.180</b>	<b>1.160</b>	<b>2%</b>	<b>2.45%</b>	<b>3.36%</b>	<b>-27%</b>	<b>1.508</b>	<b>1.660</b>	<b>-9</b>
5	1.638	1.655	-1%	4.15%	5.74%	-28%	1.636	1.806	-9
6	2.234	2.205	1%	4.27%	6.98%	-39%	1.783	1.991	-10
7	<b>2.947</b>	<b>2.905</b>	<b>1%</b>	<b>5.95%</b>	<b>8.17%</b>	<b>-27%</b>	<b>1.940</b>	<b>2.148</b>	<b>-10</b>

Considering the results obtained in this clinical trial, **VIUSID® vet** acts like an immunostimulant as was conclusively proved throughout this study in the humoral immune response evaluation and through the measured protective antibody titres against the Newcastle disease virus.

The cellular immune response (delayed-type hypersensitivity basophilic test) also had significantly positive results, namely, the increase in the thickness of the interdigital membrane of the broilers treated with **VIUSID® vet** when they were 23 and 49 days old, which is a sign of an improved immune response. A positive effect was also observed in the preservation of the histological structure of the Fabricio's bag when the birds were 21 days old and then at 49 days old.

Another important finding is the increase in the relative weight percentage of the lymphoid organs, like the thymus and the spleen, which implies that the birds were healthier.

The product can be used only until the 5th week, as it is assumed that from this time onwards, the immune system had been stimulated enough to be able to complete the whole production cycle without having any infectious problems.

**weight gain 1%**  
**mortality -27%**  
**feed conversion -10%**



**VIUSID® vet**



# Testing protocol for VIUSID® vet at a poultry farm

Poultry farm "Granja Milagros"  
Texcoco, Mexico  
Dr. Martín Gómez Domínguez

## DOSAGE

**1 litre (33.81 fl.oz.) of VIUSID® vet per 1000 litres of drinking water**

This protocol was carried out between the months of May and July 2010 at a poultry farm in Santa Isabel Ixtapa, Texcoco, Mexico, with 10000 Ross x Ross broiler chicks, of both sexes, that were one day old at the beginning of the test. The broiler chicks were put into two sheds under natural ambient conditions; each shed housing 5000 birds respectively: 5000 birds treated with VIUSID® vet and 5000 untreated birds in the control group. The aim of the test was to prove the immunostimulatory capacity of VIUSID® vet in birds during the fattening period, constantly administering the product added to the drinking water until 45 days old.

Both groups of poultry birds were vaccinated in the same way. Serological assessment was made by means of the haemagglutination-inhibition test for Newcastle disease and avian influenza at 7 and 49 days old. Respiratory symptoms were looked at very closely, evaluating sneezing, lacrimation, nasal exudate, and rales.

The studied parameters were the following: **mortality, weight, feed conversion, daily weight gain, and respiratory symptoms.**

**reduces morbidity and mortality**

## RESULTS

**improves antibody levels after vaccination against Newcastle disease and avian influenza**

Birds treated with VIUSID® vet

Age Weeks	Mortality %	Weight in g	Conv. Weeks	Feed Conv.	DWG
1	0.37	150	1.00	1.01	21.42
2	0.84	330	1.62	1.22	23.57
3	1.25	557	1.75	1.44	26.52
4	1.58	1,094	1.23	1.34	39.07
5	1.96	1,420	2.55	1.62	40.57
6	2.39	2,047	1.59	1.61	48.73
7	3.05	2,645	1.99	1.71	53.98
8	4.04	3,100	2.99	1.91	55.35
9	<b>4.88</b>	<b>3,500</b>	0.98	<b>1.82</b>	55.55

Untreated birds (control group)

Age Weeks	Mortality %	Weight in g	Conv. Weeks	Feed Conv.	DWG
1	0.92	146	1.12	1.12	20.85
2	1.86	288	1.99	1.40	20.57
3	3.05	638	1.29	1.35	30.38
4	4.58	1,028	1.75	1.51	36.71
5	6.35	1,302	3.11	1.87	37.20
6	9.72	1,713	2.37	2.05	40.78
7	15.09	2,343	2.14	2.16	47.81
8	23.64	2,694	4.25	2.65	48.10
9	<b>27.13</b>	<b>3,028</b>	1.99	<b>2.69</b>	48.06

The differences in weekly and accumulated mortality were always less for the VIUSID® vet treatment group, especially with regard to accumulated mortality, in less than a third.

Weight was always more for the VIUSID® vet treatment group. At day 49, it was 302 grams more than that of the control group, and at the end of the test period, the difference was 472 grams in the treatment group over the control group.

Feed conversion in the VIUSID® vet treatment group was 55 points higher as compared to the control group.

Daily weight gain was 6.17 grams higher than in the control group.

With regard to respiratory symptoms, the birds treated with VIUSID® vet remained completely healthy from the beginning of the test (1 day old) to the end of the fattening period (62 days old).

The control group had respiratory and digestive disorders in the 2nd, 4th, 6th, and 8th week. Hence the higher mortality rate.

