

Animal Husbandry

PRODUCTS, STUDIES, AND PUBLICATIONS



catalysis

AGROVETERINARY DIVISION

**Innovative Technology
at the service of animal farming**

Catalysis, S.L.
Macarena 14
28016 Madrid • SPAIN
www.catalysis.es

LIBR010



The changes that are taking place in modern livestock are the spearhead of the economic and social change that is to come.

Josette Decaux
General Manager

At **Catalysis Agroveterinary Division** we have developed a **product line for livestock** that produces significant improvements in the quality and performance of farming.

The objective of our research in the farm husbandry sector is to discover harmless treatments to improve the productivity and health status of farm animals.

The secret of the high effectiveness of our products lies in the biocatalytic process of MOLECULAR ACTIVATION TECHNOLOGY developed by Catalysis. By this process, the natural ingredients present in the products increase their biological activity without suffering any alteration in their chemical structure.

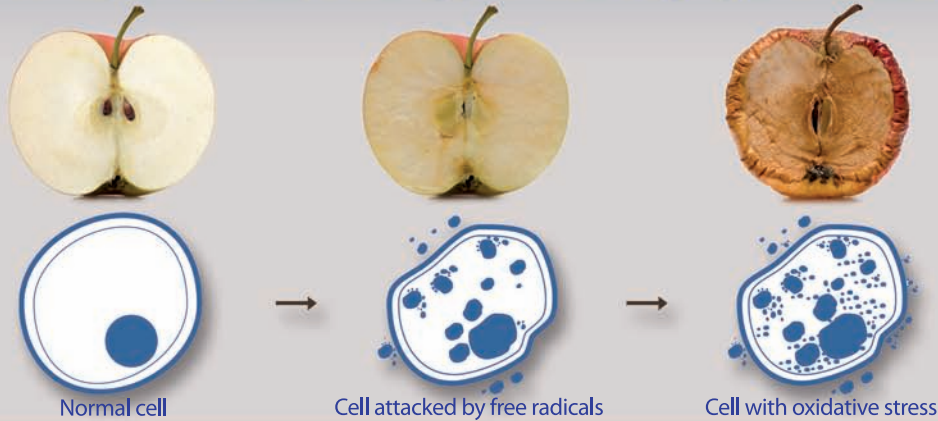
Our laboratories are equipped with the most advanced technologies under "**Good Handling Practices**" and are subject to stricter controls than the European Union imposes on all manufacturers within their borders.

Catalysis, S.L. is a Spanish company with presence in over 80 countries



Oxidative stress

damages the cells, causing premature aging and disease

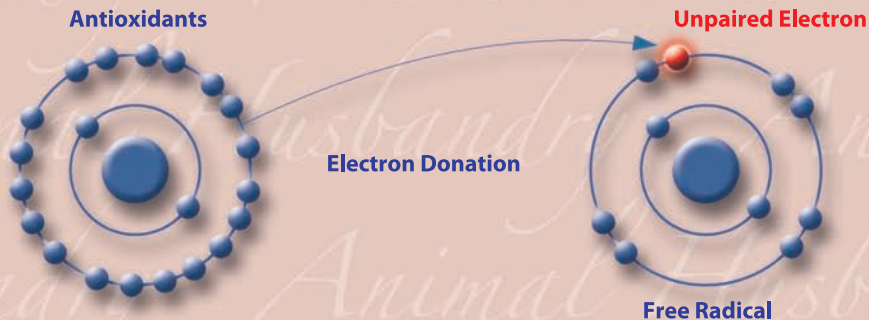


Our products are formulated with the benefit of activated molecules.



1. Increased biological activity
2. Lower concentrations of active ingredients required
3. Synergistic effects of antioxidants
4. Fast action
5. No side effects

Activated antioxidant therapy neutralizes free radicals



MOLECULAR ACTIVATION TECHNOLOGY is essential and necessary to increase biological activity and thus obtain the greatest effectiveness in the treatment of diseases that directly or indirectly produce free radicals.

Animal Husbandry

highly effective products
to improve livestock productivity

- **VIUSID® vet**
Powerful antioxidant, antiviral and immunomodulator
- **ASBRIP® vet**
For chronic respiratory processes
- **CARMINAL® vet**
Integral product to improve digestive health
- **DIAMEL® vet**
Restores metabolic balance
- **RENALOF® vet**
Improves kidney function
- **VIUSID® biotics**
Optimizes feed conversion rate
- **VIUSID® detox**
Eliminates liver toxicity
- **VIUSID® agro**
Increases forage crop yield
- **VIUSID® apis**
Optimizes the productivity of beehives

VIUSID[®] vet

activated glycyrrhizinic acid,
amino acids, vitamins and minerals

what is it?

VIUSID[®] vet is a nutritional supplement made up of vitamins, antioxidants, trace elements and plant extracts

Supplying antioxidant nutrients is fundamental in guaranteeing optimum functioning of cell metabolism and to prevent infectious and degenerative diseases.

All the ingredients in **VIUSID[®] vet** have undergone a molecular activation process that greatly increases their biological activity, without causing any alterations to their molecular structure.

VIUSID[®] vet is designed to allow animals to express their maximum genetic potential.

Its liver protecting action optimizes productivity and improves immune defence mechanisms, which makes it especially indicated as a support therapy in preventing and fighting against infectious diseases.

- **Enhances productivity**
- **Reinforces the immune system**
- **Counteracts viral load**
- **Works powerfully as a hepatoprotector**
- **No side effects and no withdrawal period**

its efficacy
has been tested in all kinds
of productive environments
in different countries

an exclusive product
**with antiviral, antioxidant
and immunomodulatory effects**



VIUSID[®] vet

activated glycyrrhizinic acid,
amino acids, vitamins and minerals

productivity in broilers

- **Dosage**

1 litre of **VIUSID[®] vet Liquid** per 1000 litres of drinking water, until 21 days of life.

VIUSID[®] vet in broilers

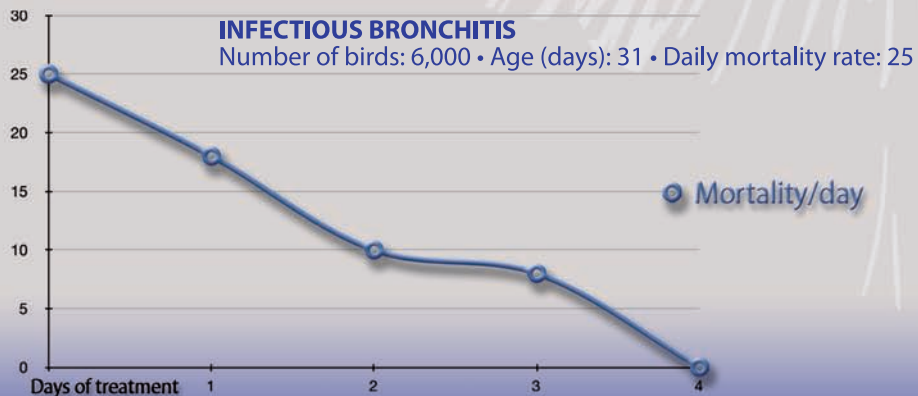
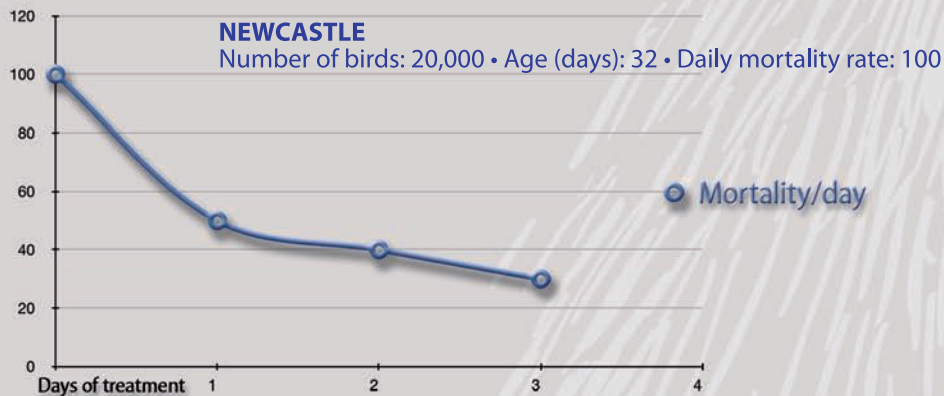
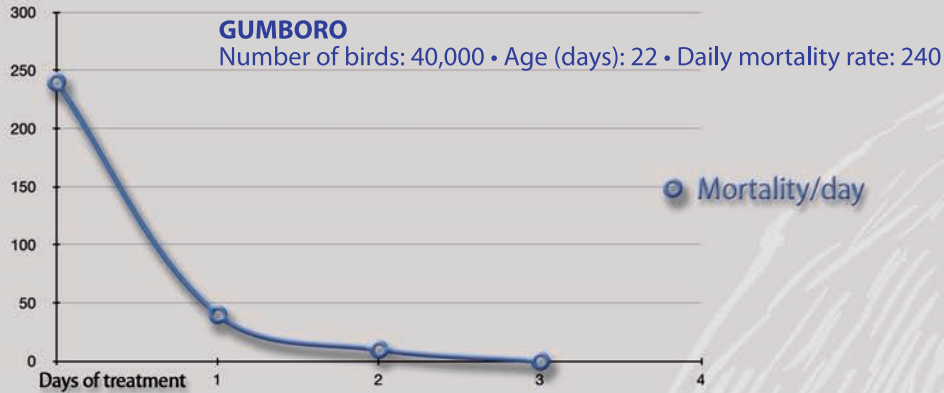
- Improved feed conversion ratio
- Lower mortality
- Higher levels of antibodies after vaccinations
- Excellent liver protector
- Greater final weight

a wise investment
to improve results
in broilers



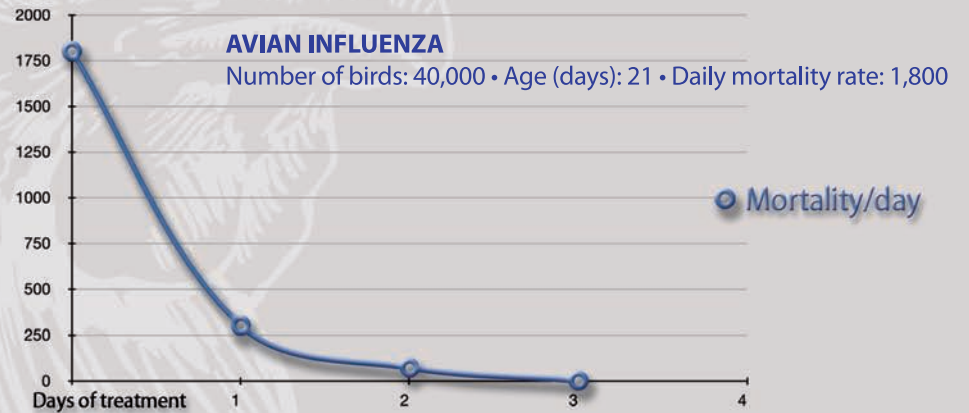
improves productivity by boosting growth during the entire production process

how does it act against the challenge of the main poultry diseases?



- **Dosage**
2 ml of **VIUSID[®] vet Liquid** per litre of drinking water for 5 days.
Immediately after detecting a viral outbreak.

reduces bird mortality and quickly restores expected growth levels



Broiler affected by avian influenza
before treatment



Broiler affected by avian influenza
treated with **VIUSID[®] vet** for 3 days

VIUSID® vet

activated glycyrrhizinic acid,
amino acids, vitamins and minerals

productivity in laying hens

• Dosage

1 kg of **VIUSID® vet Powder** per 1000 kg of feed.

1 litre of **VIUSID® vet Liquid** per 1000 litres of drinking water.

In 30 day treatments, followed by a 2 month off period, throughout all the laying cycle or at critical times.



- 2 ml per litre in drinking water for a week in the event of a viral outbreak.
- 3 days before and 3 days after vaccinations plus on the vaccination day.

better quality and more crack-resistant eggs

VIUSID® vet in laying hens

- Up to 10% less confiscated eggs
- Mortality rate on the farm drops by up to 50%
- Better FCR (feed conversion ratio) of up to 12%
- Greater egg size
- Increased laying percentage of 1 to 3%
- Improved nutritional parameters (proteinogram, Haugh units)

additional benefits for breeding hens

- Greater amount of fertile eggs
- Greater hatching percentage of up to 9%



more fertile hens with healthier flocks

VIUSID[®] vet

activated glycyrrhizinic acid,
amino acids, vitamins and minerals

productivity in sows and piglets

- **Dosage per sows and piglets**

10 g or 10 ml of **VIUSID[®] vet** per sow and day, 15 days before farrowing and until weaning.

+

10 g or 10 ml of **VIUSID[®] vet** to suckling piglets in the prestarter feed.

+

2 g or 2 ml of **VIUSID[®] vet** the first 3 weeks of nursery.



- **Dosage per boars**

In stressful situations or different pathologies:

10 g per day and boar for 6 - 8 weeks.

Maintenance plan or for the improvement of seminal parameters:

10 g per day and boar for 2 weeks every 2 - 3 months.

**up to 1 more piglet weaned
per litter**

Productivity results

- **More piglets born alive**
Lower amount of mummies and stillbirths
- **Higher number of weaned piglets**
- **Greater uniformity within the lot**
Higher viability in nursery, greater weight gain and greater final weight
- **Shortening of the weaning-service timeframe**
- **Better immune status of sows and piglets**
- **Improves sperm quality in boars**

Challenge results

- **Eradication of PED outbreaks within a few weeks**
- **Up to 90% lower rates of RNA detected in viremic pigs during PRRSv outbreaks**
- **Downregulation of IL-10 in PRRSv-infected pigs and 26.5 score in Odds Ratio testing mortality**
- **4.6 score in Odds Ratio testing positive/negative viremia in a PCv-2 outbreak**
- **Decreases viremia and increases antibody titers against swine influenza virus (tested strains: H1N1 and H3N2)**
- **46.1% survival in a treated group versus 9.23% in a non-treated group during an ASF outbreak**

**improves productivity
through better health
and effective disease control**

VIUSID® vet

activated glycyrrhizinic acid,
amino acids, vitamins and minerals

productivity in cows

- **Dosage**

50 g or 50 ml of VIUSID® vet per cow and day early morning or with the first feed amount provided.

21 days before and 14 days after calving.

If the cow suffers from ketosis, 2 kg/MT of feed for 30 days.

**increases fertility
and is especially recommended
during gestation and parturition**

VIUSID® vet in cows

- **Greater quantity and quality of colostrum** (total proteins and immune globulins)
More than 10% rise in colostrum immune globulins
- **Up to 70% decrease in somatic cell count**
Less subclinical mastitis
- **Up to 70% decrease in subclinical and clinical mastitis**
- **Up to 24% higher weight at birth**
- **Remarkable increase in milk production**
- **92% reduction in post-partum limping**
- **Reduction of endometritis dystocia and perinatal mortality by up to 45%**
- **Highly protective effect to the liver able to prevent and reverse fatty liver**
- **Earlier return to estrus**
- **Feasible saving of normally required drugs or supplements**

**productivity increases
and the sanitary state
of bovines improves**



VIUSID® vet

*activated glycyrrhizinic acid,
amino acids, vitamins and minerals*

productivity in cows

- **Dosage**

8 ml of **VIUSID® vet Liquid** per calf and day, mixed with the milk replacer or given directly the first 60 days of lifetime. Intake should better be split into two half doses (4 ml + 4 ml).

healthier calves
with higher weight

VIUSID® vet mixed with milk replacer

- Up to 10% greater weight gain
- Lower incidence of diarrhea and respiratory diseases by up to 64%
- Strengthens the immune system, resulting in greater protection and less stress
- Better feed conversion ratio
- Faster growth and better appearance and condition

its liver protective action
has proved to increase
significantly animal performance



ASBRIP® vet

for chronic respiratory processes

- **Dosage**
2 ml of **ASBRIP® vet** per litre of drinking water.
1 ml of **ASBRIP® vet** per litre of water for aerosol administration.
- **Antiseptic**
- **Desinfectant**
- **Expectorant**



ASBRIP® vet is a specific formulation for the prevention and control of respiratory diseases on farms, focusing as an antiseptic on symptomatic relief and rapid recovery of treated animals.

soothes symptoms
good tolerance
and no side effects



CARMINAL[®] vet

integral product to improve digestive health

- **Dosage**
2 ml of **CARMINAL[®] vet** per litre of drinking water.
- **Antioxidant**
- **Digestive stimulant**



CARMINAL[®] vet is a product that comprehensively addresses digestive health at critical moments of the reproductive cycle, either preventing or controlling the proliferation of pathogenic organisms or supporting poor intestinal metabolism derived from diet changes or weaning processes.

**stops vomiting
and diarrhea**



DIAMEL[®] vet

restores metabolic balance

- **Dosage**
2 ml of DIAMEL[®] vet per litre of drinking water.
- **Regulates glucose metabolism**
- **Increases insulin sensitivity**
- **Improves fertility**



promotes
reproductive function

DIAMEL[®] vet is a vitamin and mineral supplement that improves reproductive health by preventing associated diseases.

helps normalize
glucose, cholesterol, uric acid,
and triglyceride levels



RENALOF® vet

improves kidney function

- **Dosage**
2 ml of **RENALOF® vet** per litre of drinking water.
- **Removes kidney stones**
- **Diuretic**
- **Relieves visceral gout and minor urinary tract infections**

highly effective
against urolithiasis

RENALOF® vet is a vitamin and mineral complex that complements high- protein diets preventing disorders derived from their use.

prophylactic treatment
to prevent kidney diseases



VIUSID® biotics

optimizes feed conversion rate

- **Dosage**
2 ml of **VIUSID® biotics** per litre of drinking water.
- **Antiviral**
- **Antioxidant**
- **Immune modulator**



**improves
nutrient absorption**

VIUSID® biotics combines the immunomodulatory effect of **VIUSID® vet** with the immunostimulatory effect of probiotics, achieving a comprehensive immune booster that prevents the proliferation of microbial organisms or the development of infectious diseases, especially those of viral origin.

**increases resistance
against infections**



VIUSID® detox

eliminates liver toxicity

- **Dosage**
2 ml of **VIUSID® detox** per litre of drinking water.
- **Hepatoprotector**
- **Antioxidant**
- **Immune modulator**



**reduces toxins
in the liver
and acts as an
osmoprotectant**

VIUSID® detox is a vitamin and mineral complex that optimizes animal health against the harmful effects of mycotoxins in feed.

**powerful
hepatoprotector
with detox effect**

VIUSID® vet is sold in powder form ready to be mixed with food or as a liquid to be added to drinking water.



VIUSID[®] agro

increases forage crop yield

- **Dosage**

1 ml of **VIUSID[®] agro** per 5 litres of water.

40 ml of **VIUSID[®] agro** dissolved in 200 litres of water per hectare.

1 application of the treatment every 2 - 3 weeks.

- **12 tons more of forage per hectare**
- **Healthier grass with better nutritional quality**

the increase in performance
allows at least
4 animals more
per hectare

The effectiveness of **VIUSID[®] agro** was evaluated based on the morpho-agronomic and productive parameters of several types of grass and forage.



allows to reduce
the use of pesticides



VIUSID® apis

optimizes the productivity of beehives

**VIUSID® apis is a product
for hive health and against
bee mortality**



- Helps correct nutritional imbalances and deficiencies, ensuring the continuous development of colonies in times and places of scarcity of nectar and pollen.
- Relieves transport stress.
- Increases egg laying and viability of eggs, and, as a consequence, the number of brood combs.
- Helps restore and strengthen the health and defence capacity of the colony, which favours the formation of strong and healthy swarms.
- Increases hive productivity.



**VIUSID® apis
is a natural product
without side effects**

**improves results
in beekeeping**