



nuevo
empowering evolution

nufense premium

**DEFEND
YOUR FEED**

nufense

defend your feed

nufense alters the molecular structure of mycotoxins into non-toxic metabolites, creating a wall against animal diseases.

nufense improves production parameters by minimizing the effects of mycotoxins, lowers occurrence of gastro-intestinal and respiratory diseases and boosts efficacy of immune system.



Adsorbing, biotransforming and biodegrading mycotoxins, **nufense** neutralizes the impact of mycotoxins. It is catalytic as it combines the action of powerful enzymes, ion-exchange and a yeast culture that undergoes numerous fermentation cycles, making the yeast cell wall much denser.

Transforming Mycotoxins
Elevating Health, Unlocking Performance

nufense premium

Solutions for the Mycotoxin Challenges

Contamination of feeds with mycotoxins is a worldwide problem with serious impact on livestock production, **nufense** transforms the molecular structure of mycotoxins into non-toxic metabolites, forming a protective wall against animal diseases.



Through the processes of adsorbing, biotransforming and biodegrading mycotoxins, **nufense** effectively neutralizes their negative impact in animals. **nufense** acts as a facilitator by combining the action of specialized enzymes, adsorbents and a yeast culture rich in b-glucans concentration.

nufense improves production by minimizing the effects of mycotoxins, reducing the incidence of gastro-intestinal, reproductive respiratory diseases resulting from mycotoxicosis and boosting the function of immune system.

- Thermally & Mechanically activated Aluminosilicate
- Dry Yeast Cell wall
- Specific enzymes DON & FUM
- Bioactive ingredients with hepatoprotective activity and anti-inflammatory properties



The mineral clay used is highly porous, thermally, and mechanically activated with a highly sorbitive behavior and enhanced hydrophilic (anti-diarrhea) and oleophilic (toxin-binding) activity.



Biologically specific active enzymes that have the capability to bind and deactivate harmful mycotoxins.



Dry Yeast Cell wall: a premium yeast fraction rich in β -glucans and mannan-oligosaccharides (MOS).

It prevents colonization of the GIT by pathogens, stimulates the immune activity of the phagocytic cells and enhances the action of beneficial bacteria.



Natural bioactive ingredients: mycotoxins cause significant liver damage. nufense contains natural phenolic compounds with proven anti-inflammatory and antioxidant activity that protects liver from the free radical damage caused by mycotoxins.

Aiming to determine the mycotoxin detoxifying activity of **nufense premium** in broiler, layer and breeder feed, a mycotoxin eliminating analysis was carried out. Two pH values (pH=4.5, pH=7.5) were tested, simulating gastric and intestinal juice. In order to determine the mycotoxin eliminating efficiency of the product during the transition in poultry gastrointestinal tract, 6 incubation times were used (0, 30, 60, 120, 240 and 300 min). The mycotoxin concentration was calculated using HPLC-DAD chromatographic analysis.

Results:

- Strong adsorption efficiency: Aflatoxin concentration decreased by more than 95% for 30 min incubation time.
- High elimination efficiency: mycotoxins DON and FUM were eliminated by more than 90% in contrast with control diet.

| | <u>Trilogy Results</u> | <u>University of Veterinary Medicine Budapest</u> | |
|--------------|------------------------|---|----------|
| | AF1 | DON | FUM |
| % Efficiency | 99.6 | 94,7 | 92.6 |
| Toxin conc. | 4000 ppb | 2000ppb | 10000ppb |



*EURL Method:
Adsorption of 4000 ppb Afl
with 0,02% product at pH 5.0*

Dosage for all species: 0.5 - 1 kg / ton of feed • *Dosage depends on the mycotoxin risk level*

