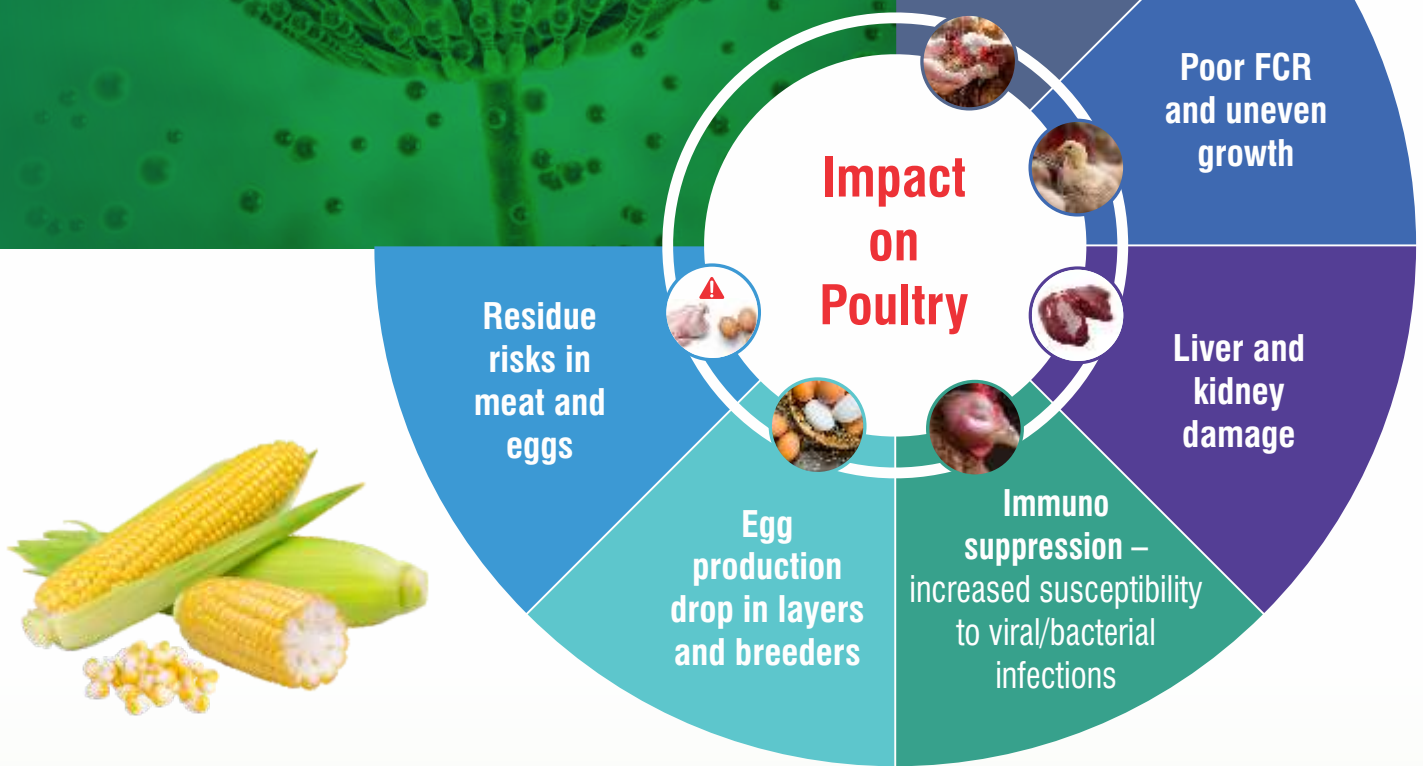


# **Mycotoxins:** A Silent Threat to Animal Health & Productivity



**Note:** Mycotoxin effects are often compounded by environmental stress, poor gut health, and immunosuppressive diseases

# **MaxTox-DX**

**Powder**



## **Dual Detox Defense**





# Understanding the Mycotoxin Challenge in **Poultry & Livestock**


## MaxTox-DX Dual Detox Defense Powder


Mycotoxins are toxic secondary metabolites produced by fungi, such as *Aspergillus*, *Fusarium*, and *Penicillium*, which contaminate feed ingredients. Even at subclinical levels, Mycotoxins such as Aflatoxins, Fumonisin, Zearalenone, T-2 toxin, DON, and Ochratoxins can severely impair animal health.


### Type of Mycotoxin in Poultry diet


Toxin	Fungus	Commodities	Poultry Diet
Aflatoxin	<i>Aspergillus flavus</i>	Corn, Cotton Seed	
	<i>Aspergillus parasiticus</i>	Soybean, peanuts	
Ochratoxin A	<i>Aspergillus ochraceus</i>	Wheat, barley, Oats	
	<i>Aspergillus niger</i>	Oats, Corn	
DON, T-2, DAS	<i>Fusarium culmorum</i>	Corn, Wheat, Barley	
Zearalenone	<i>Fusarium graminearum</i>	Corn, Wheat, Barley	
Fumonisin	<i>Fusarium verticillioides</i>	Corn	


### Type of mycotoxin effect


**Mutagenic & carcinogenic**  
Aflatoxins


**Teratogenic**  
Trichothecenes


**Neurotoxic**  
Ergot alkaloids


**Hepatotoxic**  
Fumonisin


**Immunotoxic**  
Aflatoxins, trichothecenes, fumonisin

**Composition:** MOS, HSCAS, Activated Charcoal, and Organic Acids

**Mode of Action** – A Targeted Approach

#### MOS (Mannan Oligosaccharides):

- Derived from *Saccharomyces cerevisiae* cell walls
- Binds Pathogenic bacteria and Mycotoxins, especially Aflatoxins and Zearalenone
- Enhances gut immunity and competitive exclusion of pathogens

#### Activated Charcoal:

- High surface area adsorbent
- Binds a wide spectrum of polar and non-polar Mycotoxins
- Neutralises enterotoxins and supports detoxification

#### HSCAS (Hydrated Sodium Calcium Aluminosilicate):

- High-affinity clay with selective binding properties
- Proven effectiveness against Aflatoxins, Fumonisin, and T-2 toxin
- Thermally stable and safe for long-term use

#### Organic Acids (Propionic, Fumaric):

- Lower gut pH, inhibiting mold and bacterial growth
- Improve gut integrity and digestion
- Support feed preservation and reduce fungal proliferation

#### Feature & Benefits:

- Broad-spectrum toxin binding (Aflatoxins, DON, ZEA, T-2, OTA, FUM)
- Improved gut health and reduced gut lesions
- Enhanced immune function; Reduced mortality and improved livability
- Better FCR, weight gain, and uniformity
- Supports reproductive health – especially critical in breeders and sows

#### Recommended Inclusion: (gm/MT of feed)

Species	Preventive Use	Therapeutic Use
Broilers	750	1000
Layers	500–700	1000
Breeders	750	1200
Swine (Growers/Finishers)	500–700	1000
Swine (Sows)	700–1000	1200

Inclusion can be modulated on feed toxin load, veterinary guidance, and lab reports.

#### Packaging:

5 kg and 25 kg HDPE bags