Safeguarding the health of your animals starts with the quality of your feed. Produced by molds, mycotoxins affect animal performance and producer profitability in a number of ways. Effective mycotoxin management is about seeing the whole challenge. From the farm to the feed mill and from risk assessment to feed management, the Alltech Mycotoxin Management program consists of solutions tailored to address challenges impacting animal health and performance.

Identifying a mycotoxin issue

Increased demand in animal performance brings new challenges and risks to today's farm. Mycotoxins, and their impact on the health and performance of animals, are inherently linked to these demands and if left untreated can affect farm profitability.

Commonly seen mycotoxin symptoms in pigs

**Aflatoxins/DON-Group/T-2 Group/Fumonisins:**
- Damage to gut integrity
- Ulcers and hemorrhages
- Decreased villus height and surface area
- Poor intestinal digestion and absorption
- Undigested feed particles in feces
- Diarrhea
- Enteritis/colibacillosis
- Salmonella infection

**Aflatoxins/Ochratoxins/T-2 Group/DON-Group:**
- Poor antibody production/vaccine titers
- Poor cell-mediated immunity
- Altered cytokine profile
- Increased mortality

**Aflatoxins/Ochratoxins/Fumonisins:**
- Liver damage
- Liver enlargement
- Fatty liver

**T-2 Group/DON-Group:**
- Poor feed intake

**Fumonisins/Moniliformin:**
- Heart enlargement
- Heart failure

**Fumonisins:**
- Pulmonary edema (water accumulation in lungs)

**Ochratoxins/Citrinin/Penicillic acid:**
- Kidney damage
- Uric acid crystals in kidneys (gout) and joints
- Increased water consumption/loose feces
The Alltech 37+® mycotoxin analysis considers the mycotoxin challenge in each sample as a whole, rather than looking at the individual mycotoxins present. In this way it more closely reflects commercial production and the challenges facing producers around the world. Utilizing the most advanced mycotoxin detection technology available (LCMS/MS), Alltech 37+® provides producers with a more accurate picture of mycotoxin contamination. It shows how likely it is to impact their animals’ health and performance through tailored species-specific risk assessment reports and recommendations.

Mycotoxin quick guide – Symptoms in swine

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Aflatoxins</th>
<th>Ochratoxins</th>
<th>Type B Trichothecenes</th>
<th>Type A Trichothecenes</th>
<th>Zearalenone Group</th>
<th>Fumonisins</th>
<th>Other Penicillium mycotoxins</th>
<th>Other Aspergillus mycotoxins</th>
<th>Ergot Alkaloids</th>
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*The toxicity of Fusaric Acid is significantly enhanced when the feed is co-contaminated with the Type B Trichothecene, Deoxynivalenol (DON).