

# Innovative Solutions

to understand and mitigate the mycotoxin challenge





## At the heart of Alltech is an entrepreneurial journey

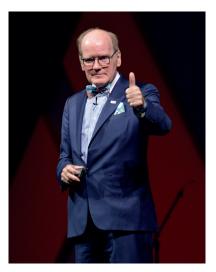
Founded in 1980 by Irish entrepreneur and scientist Dr. Pearse Lyons, Alltech delivers smarter, more sustainable solutions for agriculture.

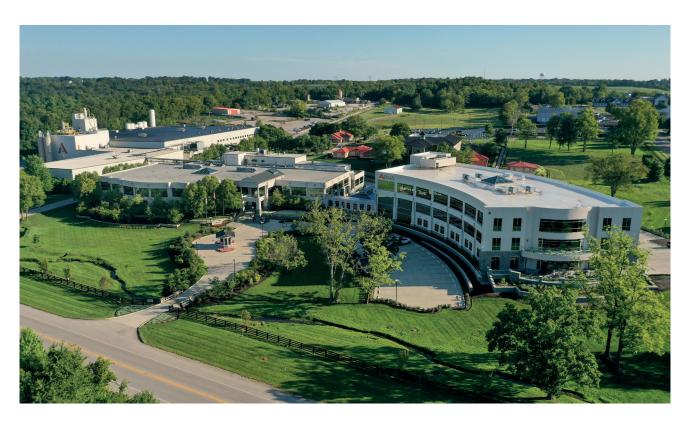
Our products improve the health and performance of plants and animals, resulting in better nutrition for consumers and a reduced environmental impact.

We are a global leader in the animal health industry, producing specialty ingredients, premix supplements, feed and complete feed. Strengthened by more than 40 years of scientific research, we carry forward a legacy of innovation and a unique culture that views challenges through an entrepreneurial lens.

Our more than 5,000 talented team members worldwide share our vision for a Planet of Plenty<sup>™</sup>. We believe agriculture has the greatest potential to shape the future of our planet, but it will take all of us working together, led by science, technology and a shared will to make a difference.

Alltech is a private, family-owned company, which allows us to adapt quickly to our customers' needs and maintain focus on advanced innovation. Headquartered just outside of Lexington, Kentucky, USA, Alltech has a strong presence in all regions of the world.









# Starting with the soil

Alltech Crop Science aims to seamlessly bridge the gap between science and sustainability. By sharing our expertise, providing constant technical support and exploring the intricacies of each region we serve, we are not only pursuing greater productivity, profitability and sustainability for every crop — we are working alongside producers and agronomists to build the future of agriculture.

# Focusing on the feed...

Through our innovative study of nutrigenomics, our nutritional technologies help animals maximize the nutrients in their feed for optimal well-being and performance.

We work with producers across the globe to address the animal nutrition issues most important to them, including:

The control of mycotoxins Promoting good gut health Optimizing rumen function The effective use of enzymes Enhancing mineral absorption

### ...and the farm

Alltech's support goes beyond nutrition. We work closely with producers to increase their efficiency, productivity and profitability through a suite of analytical services, including:

Alltech 37+® and Alltech RAPIREAD® to quantify the mycotoxin risk Alltech IFM® to analyze feed rations InTouch to take control of feed management Alltech E-CO<sub>2</sub> to assess on-farm efficiency and sustainability

### Food

### We bring traceability, quality and improved nutrition to the table

As a family company, we understand the consumer's desire to ensure that their family's meals are as safe and nutritious as possible. From our innovative use of organic minerals to toxin and pathogen control and our work in crop science, we focus on improving nutrient value throughout the food chain.





### Science

#### The source of our strength

At the center of our efforts to redefine how we feed animals and plants, as well as add value to the food chain, are our five major bioscience centers. Together with our own global research teams, complemented by more than 20 research alliances and academic partners, we unite a network of more than all 150 scientists, all working to solve some of agriculture's biggest challenges.



## Working Together for a Planet of Plenty™

A commitment to having a positive impact on the animal, consumer and environment (ACE) was one of our founding principles. Our Planet of Plenty<sup>™</sup> vision is now bringing ACE to new life and propelling this principle into the future and a new world of possibility.

We envision a world of abundance, made possible through new technologies and management practices, and the world's most valuable infinite resource — human ingenuity. A vision this transformative, however, calls for a new era of collaboration. A Planet of Plenty is an invitation to work together, across industry sectors and geographical boundaries, to create a place where animals, plants and people thrive in harmony.



### How do we support a Planet of Plenty?

The world we share is diverse, with myriad needs, and our vision of a Planet of Plenty addresses humanity's most basic requirements, as well as our aspirations for a better future, by:

**Supporting agriculture** to produce enough food for a growing population

Improving safety and quality within the food chain

**Adding value and nutrition** to fruits and vegetables, meat, milk and eggs

**Meeting consumers' demands** for their food and beverages to be produced in a way that ensures the welfare of the animal and the environment.

Through improving the health of animals and the soil, maximizing the value of feedstuffs, increasing the efficiency of the farm and reinvesting in innovation, we endeavor to do our part for a Planet of Plenty.

## How can you contribute to a Planet of Plenty?

Collaborate with us. Our Planet of Plenty vision is not exclusive to sustainability. It is a vision of a more positive future, full of promise and possibility, and that extends to education, talent development, nutritional and digital technologies, new management practices, innovative ideas, and human health. Our own journeys may be unique, but if we work together, our destination can be the same: a Planet of Plenty in which there is enough nutritious food for all, the world's resources are responsibly managed for future generations, and people, animals and plants thrive.



# An insight into Alltech's pioneering approach to mycotoxin management

At Alltech, we believe that effective mycotoxin management is about seeing the whole challenge, from the farm to the feed mill, and from risk assessment to feed management.

For almost 30 years, Alltech has been leading the way in understanding more about the complex challenge of mycotoxins in agriculture, from how they are impacting the health and performance of different species groups to how feed and livestock producers can effectively mitigate the challenge in their business.

Using a combination of modern management tools, the Alltech® Mycotoxin Management program provides a complete holistic solution to help producers take control of mycotoxin contamination. The program is built around class-leading risk identification technology, data analysis and insights, and mycotoxin binder solutions designed to reduce the damaging effects of mycotoxins on animal health and production potential.







**33** review articles



**5** published papers on analytical methods



**22** published in vitro trials



**43** total PhD and masters students





**138** published in vivo trials

**192** peer-reviewed studies





## THE RISK

Mycotoxin Management Portal Alltech PROTECT™ (REQ) MITIGATE THE RISK

Mycosorb® family

of mycotoxin adsorbents

### Alltech 37+®

### Detecting the broad-spectrum mycotoxin challenge

THE RISK

Alltech 37+®

Alltech RAPIREAD®

The Alltech 37+ program is the cornerstone of our mycotoxin control program, and since its establishment in 2012, our labs in the USA and Ireland have analyzed over 49,000 samples. Each test can identify up to 54 individual mycotoxins in raw materials or finished feeds.

### **Alltech RAPIREAD®**

#### Detecting mycotoxin contamination in real-time on the farm or in the feed mill

Time is key to ensuring effective mycotoxin management. Developed in collaboration with Neogen, Alltech RAPIREAD connects modern testing devices with the latest mobile technology, allowing for the detection of seven key mycotoxins, and the analysis of results in just minutes.

### Mycotoxin Management Portal

### Intuitive online analysis of mycotoxin test data

Access to information in real-time is key to achieving faster results. We recognize the importance of being "always on" and so can provide secure, web-based access to both Alltech 37+ and Alltech RAPIREAD mycotoxin test results.

With a modern, easy-to-use interface, feed and livestock producers can access the latest mycotoxin contamination insights, allowing them to make the most informed mycotoxin control decisions.

## Mycosorb<sup>®</sup> range of mycotoxin binders

### Adsorption solutions backed by decades of research and innovation

A robust research and development program has helped us maintain scientific stewardship and leadership through in-depth interaction with key experts in the field. This has allowed us to develop a multi-faceted exploration of mycotoxins' impact on animal systems and remediation, using in silico, in vitro, ex vivo, in situ and in vivo methodologies, pushing the frontiers in the search for successful mitigation strategies. Depending on the mycotoxin risk level, producers can choose from a range of technologies that help reduce the negative impacts of mycotoxins on animal health and performance.

# A global team that is ready to support you!

Complementing our class-leading mycotoxin management program, Alltech possesses a global team focused on delivering the latest in mycotoxin research, knowledge transfer and technical support, all helping to ensure the health and productivity of animals and the contribution to a safer food supply chain for the end consumer.





For more information, please contact our office:

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