



# Alltech pet solutions

As a company driven by research and science, Alltech has developed a large portfolio of innovations.

Alltech creates customer-centric solutions. We work with you to produce safer, higher-quality food in a way that is efficient and profitable for your production and also sustainable for the growing global population.

As we are constantly innovating, this guide provides a simplified overview of the nutritional solutions we currently offer to support you and your business. They are categorized based on their makeup and implementation purpose.

#### Acids

Technology	Feeding rate	Advantage
Mold-Zap® Pet	For further manufacture of pet food	Buffered mold inhibitor
Acid Balance Pet	8 lb./ton	<ul> <li>A dry powder with a high concentration of phosphoric acid, used for acidification of pet food</li> <li>Supports a healthy pH level</li> </ul>

#### **Bacterial technologies**

Several strains of live bacteria and spore options

- Several strains of Lactobacillus
- Mostly custom blends

Technology	Feeding rate	Advantage	
All-Lac® 1.4	1 lb./ton	<ul> <li>Provides a source of naturally occurring microorganisms including <i>Enterococcus faecium</i> and <i>Lactobacillus acidophilus</i></li> <li>Drives gut function and supports a balanced intestinal bacteria profile</li> </ul>	
All-Lac® FAS	0.2 lb./ton	<ul> <li>Provides a source of naturally occurring microorganisms including <i>Bacillus subtilis, Enterococcus faecium</i> and <i>Lactobacillus</i> <i>acidophilus</i></li> <li>Drives gut function to maximize overall health and well-being</li> </ul>	

#### Enzymes

Protein-based molecules that speed up specific chemical reactions

Technology	Feeding rate	Advantage	
Allzyme® Vegpro	2–4 lb./ton	<ul> <li>A combination of naturally occurring enzymes including protease and cellulase</li> <li>Aids in digestion of vegetable protein food ingredients</li> </ul>	
Allzyme® Protease Pet	2–4 lb./ton	<ul> <li>Aids in digestion of protein in pet food diets</li> <li>Contains Aspergillus oryzae and Bacillus subtilis</li> </ul>	



# Hydrolyzed yeast

Technology	Feeding rate	Advantage	Research
Microbuild®	0.5–2 lb./ton	<ul> <li>Prebiotic fiber for gut health and a healthy microbiome</li> <li>Maximizes gut health</li> <li>Supports stool quality</li> <li>Enhances nutrient absorption</li> <li>Boosts GI integrity and stability</li> </ul>	<b>Dogs:</b> 17 papers <b>Cats:</b> 3 papers <i>All species: 800+ papers</i>
Integral® OA	4 lb./ton	<ul> <li>Protects pets against challenged ingredients</li> <li>Hydrolyzed yeast-based feed technology</li> <li>Safeguards pet health to maximize well- being</li> </ul>	<b>Dogs:</b> 3 papers <b>Cats:</b> 3 papers <i>All species: 320+ papers</i>

#### Live yeast culture

From Saccharomyces cerevisiae

Technology	Feeding rate	Advantage	Research
Yea-Sacc® 1026 OA		<ul> <li>Maintains gut health integrity</li> <li>A specifically designed yeast culture that includes <i>Saccharomyces cerevisiae</i></li> <li>Supports nutrient absorption and utilization</li> </ul>	<b>Dogs:</b> 3 papers <b>Cats:</b> 1 paper <i>All species: 270+ papers</i>

#### Organic trace minerals

Highly bioavailable trace minerals bound to amino acids and peptides

Technology	Feeding rate	Advantage	Research
Bioplex®	As needed to meet requirements	<ul> <li>Provides trace mineral nutrition (Zn, Cu, Mn, Fe) in a form as close to nature as possible</li> <li>Optimizes tissue status in pets</li> <li>Better mineral status contributes to the animal's natural defense system</li> <li>Supports skin and coat integrity</li> <li>Better absorbed, stored and utilized</li> </ul>	<b>Dogs:</b> 11 papers <b>Cats:</b> 4 papers <i>All species: 223 papers</i>



# **Protein alternatives**

Technology	Feeding rate	Advantage
Nucleo-Sacc®	1–3% of diet	<ul> <li>A yeast-based protein containing highly concentrated levels of essential and functional nutrients</li> <li>Supports a healthy stress response in young companion animals</li> </ul>
Yea-Pro 405		<ul> <li>Supports gut health</li> <li>Supports skin and coat integrity</li> <li>Supports immune functionality</li> <li>Supports cognitive, arterial and heart health</li> </ul>

#### Selenium yeast

Proprietary organic form of selenium yeast

Technology	Feeding rate	Advantage	Research
Sel-Plex® 2000 Sel-Plex® 2000 OA	<ul> <li>To formulate selenium premixes:</li> <li>With 200 ppm Se/lb., add 200 lb./ton</li> <li>With 400 ppm Se/lb., add 400 lb./ton</li> <li>With 600 ppm Se/lb., add 600 lb./ton</li> </ul>	<ul> <li>A traceable, safe source of organic selenium</li> <li>Optimizes animal health and well-being</li> <li>Supports mineral retention</li> <li>Helps maintain the body's defense</li> </ul>	<b>Dogs:</b> 7 papers <b>Cats:</b> 4 papers
Sel-Plex® 3000	<ul> <li>To formulate selenium premixes:</li> <li>With 200 ppm Se/lb., add 133 lb./ton</li> <li>With 400 ppm Se/lb., add 266.7 lb./ton</li> <li>With 600 ppm Se/lb., add 400 lb./ton</li> </ul>	<ul> <li>system</li> <li>Boosts selenium status reliably and safely</li> <li>The first FDA-reviewed form of organic selenium</li> </ul>	All species: 440+ papers

\*Research counts include an overall total from Alltech's internal database of referred journals, scientific meeting papers, book chapters, dissertations, etc.



# Synergistic blends

Technology	Feeding rate	Advantage	
Lacto-Mos® OA	2 lb./ton	<ul> <li>Supports gut health and immune function</li> <li>A blend of live, naturally occurring microorganisms including (but not limited to) <i>Lactobacillus acidophilus, Lactobacillus casei,</i> <i>Enterococcus faecium</i> and <i>Bifidobacterium longum</i></li> <li>Can be used in organic settings</li> </ul>	
Lacto-Sacc® OA	4–6 lb./ton	<ul> <li>Promotes optimal microbial balance in the gut</li> <li>Enhances digestibility and utilization of nutrients</li> <li>A blend of live, naturally occurring microorganisms, including (but not limited to) <i>Lactobacillus acidophilus</i> and <i>Enterococcus faecium</i></li> </ul>	
Alltech NVGEN Pack®	12–20 lb./ton	<ul> <li>A proprietary blend of prebiotics, yeast extract and Yucca schidigera extract</li> <li>Supports the gut mucosal membrane</li> <li>Promotes a healthier and more diverse gut microbiome</li> </ul>	

Technology	Feeding rate	Advantage	Research
Tynagen® Pet	1 lb./ton	<ul> <li>Designed to deliver metabolites from <i>Lactobacillus</i> directly to the gut</li> <li>Optimizes gut health to promote nutrient absorption and support</li> </ul>	<b>Dogs:</b> 1 paper
Tynagen® Pet Liquid	1–3% of the diet	<ul> <li>Maximizes overall animal health</li> <li>Promotes beneficial bacteria in the gut</li> </ul>	All species: 2 papers

#### Yucca

Formulated from proprietary extracts of the Yucca schidigera plant

Technology	Feeding rate	Advantage	Research
Deo Pet	2–4 oz./ton	Yucca schidigera extract supplement	<b>Dogs:</b> 4 papers <b>Cats:</b> 2 papers <i>All species: 90+ papers</i>

Visit <u>Alltech.com/third-party-verified-products</u> for more information on our OMRI-listed, non-hormone-treated cattle, no antibiotics, and no animal byproducts nutritional solutions.

Different forms and applications are available upon request (granular, powder, liquid, etc.).



### **Backed by science**

Our research is helping to redefine how we feed animals to enhance health and performance with lifetime nutritional solutions. We have more than 100 researchers who are dedicated to discovering solutions to the agri-food industry's most pressing challenges, and their efforts are complemented by five bioscience centers and collaborative projects with experts around the globe.

Scan the QR code below to access our full research bibliography.



#### **Alltech Pet Services**

Alltech is committed to delivering natural nutritional technologies that exceed expectations in addressing challenges faced by the pet industry. We are also leaders in quality assurance and analytical services, ensuring that every solution we manufacture is consistently safe and effective. Alltech Pet Services helps key clients with product innovation and development by offering customized analytical services and expertise.

From probiotic analysis and shelf-life storage to contaminant and enzyme screening, our team and partner labs are equipped to help with product development hurdles. Our pet and lab experts have the expertise and technology access to help you design, establish and monitor new product development for your brands, so you can focus on getting to market sooner.

#### Pet sustainability

Alltech has been accredited by the Pet Sustainability Coalition (PSC), a nonprofit organization that accelerates sustainability in the pet industry through education, implementation tools and collaboration. The PSC offers the only accreditation in the pet industry that measures and verifies sustainable business operations. Earning the Pet Sustainability Accredited Business designation means Alltech has measured the environmental and social impact of our pet business operations, and our use of the accompanying badge and logo signifies our commitment to further advancing the sustainability of our company and the entire pet industry.







# **Global quality and safety program**

# NITECH® QUALITY SYSTEM

The Alltech® Quality System was created in 2005 to ensure consistency across our global manufacturing facilities. AQS was designed to meet or exceed all global, regional and local regulatory requirements. It ensures that all original materials and final products can be traced.

# **Alltech quality policy**

To continuously ensure or exceed customer requirements of biotechnology, quality, safety and service while respecting all regulatory requirements for food and feed.

Alltech Quality System (AQS) is a system that incorporates the requirements of all major global certifications and puts Alltech at the leading edge of quality systems. AQS, put in place in all production facilities, blending and warehouse sites across the globe, instills confidence in relation to quality, safety, traceability and consistency of all Alltech products.

#### Certifications



# The quality system utilized by Alltech facilities worldwide.

If you have questions or would simply like to learn more about the Alltech Pet team and its initiatives, please reach out to <u>pets@alltech.com</u>.





