FOOD EXPORT ASSOCIATION OF THE MIDWEST USA AND FOOD EXPORT USA - NORTHEAST

U.S.Feedlink

A publication highlighting information about the U.S. animal feed and pet food ingredients and additives industries



Leading Technology Advancing Poultry Production in 2023 & Beyond

Although commodity costs were volatile, feed costs trended up for most of 2022. The upward trend that began during the pandemic, was worsened by Russia's invasion of Ukraine, sending agriculture markets soaring. There is good news and hope for the future.

Since January 2022, American and European poultry prices have also been trending upward, bringing with them, higher margins to help absorb some losses. The high costs in 2022 peaked in recent months while technology advancements are helping to lower the cost of conducting business. Although still high, feed costs recently began to lower, and are expected to end 2022 with a slight decline, continuing over the next six months.

To help mitigate high feed costs, the industry continues to innovate and develop new solutions to help run their businesses more efficiently at lower overall costs. We're finding more high-tech in the industry with leaders recognizing the benefits of interconnectedness across their entire operation not only helps with logistics but can improve the health and well-being of their flocks.

There has been an increase in the use of smart technology in a number of capacities in the poultry industry. check water levels, feed, or even medicate. Smart technology is a growing tool to monitor water, feed and even medications while maximizing labor needs. Additionally, using smart technology in this way provides more precision resulting in less waste and improved flock health.

The use of machine learning and artificial intelligence is also being utilized and gaining popularity. For example, sensors can now conduct head counts on flocks, saving time and money in manpower. In fact, sensors are being used throughout the poultry including to monitor, report, and resolve issues that arise with temperatures, predators, behavior, and health within the flocks.

Moreover, biosensors are being taught to detect, report, treat, and eliminate harmful pathogens in barns such as E. coli, norovirus, and other food safety and health risks, reducing the spread of contagions and improving the overall health. This newer technology can also be used to detect, treat and reduce high ammonia emissions in the poultry house.

Microbiome tests are now incorporating statistical analysis using robust databases of poultry microbiome along with machine learning and artificial intelligence to provide producers with comprehensive reports and advise next steps to address identified issues. Among the many ways microbiome tests can help improve flocks are converting additives and feeds to improve processes, maintaining and supporting an already healthy flock, reporting when flock health is shifting, and determining why farms with the same inputs and treatments have differing results.

In a challenging labor market with increasing input costs technology is showing us new paths forward. Machines and robots are successfully being utilized to take on tasks with better results than when performed manually, and they are helping to fill gaps in a growing industry. Although feed costs have begun to lower, climate change and geopolitical changes will continue to create varying feed demands. The increasing demand for animal protein, both eggs and poultry products continues to grow, as much as 65% for eggs and 121% for poultry meat by 2050. Tech will provide valuable tools to meet that demand and Midwest producers are leading the way in feed production ready to meet that needs of a growing market with high quality products.

Trends Shaping the Global Pet Food Industry

The trend toward humanization and premiumization is all about premium products made from premium ingredients. For our pets, nothing seems out of bounds with nearly 80% of Americans reporting they see their pets as family. In both pet food and treats grain-free and non-GMO options are readily available. Pet owners think about pet food with a lens of what they would want to eat.

The Covid era saw a jump in adoption numbers with pet food sales following closely behind. A shift was seen at this time with pet owners not only concerned about their own health but also the health of their pets. This led to further premiumization being a primary factor in pet food growth and continues today.

Emerging Trends in Pet Food

As consumers continue to humanize their pets they prioritize pet health and seek out functional products made from natural ingredients. Newer humanization trends driving the pet food ingredient market include:

- Energy snacks high-calorie gel or pastes designed to provide the calories and energy dogs need on hikes, long walks or active play
- Protein bars perfect for on the go or delayed pet mealtimes
- High-protein diet/food this trend aligns with consumers matching their pets needs with their own diet beliefs
- Vegan diet/food whether due to climate concerns or animal welfare, it is not uncommon for the same values to play a role in the selection of foods for the diet of their pets
- Insect protein gaining popularity, insect protein is now being considered an alternative protein in pet food mainly due to accessibility, cost, and sustainability

Sustainability Beyond Packaging and Manufacturing Plant

Consumers have more information at their fingertips than ever before. Climate concerns are front of mind for many and they expect this to be a priority for the brands they support on behalf of their pets. Not only is the brand's commitment to sustainability a consideration, they also care about the upstream sourcing supply chain and the suppliers brands source from. Consumers want to know how sustainable a product is from farm to dog bowl, and they want it communicated clearly on the packaging.

In the newest protein sourcing trend, consumers perceive plant proteins as more sustainable than animal-based proteins. While studies differ on the value of both omnivore and vegan diets for pets, high-quality protein is key. The emergence of insect proteins for their sustainable footprint using less water, land, and energy than traditional animal proteins may interest consumers.

And of course, sustainability is often about utilizing byproducts that would otherwise become waste. Recent work from the poultry industry by Dr. Charles Starkey, a professor in the Poultry Science Department of Auburn University, studies the upcycling of low-value proteins into sustainable pet treats, looking at how the pet food industry might incorporate nutrient-dense poultry proteins such as wingtips, liver, kidney, and heart to find a new use as a premium pet food ingredient.

The Midwest is home to many leading pet food manufacturers and sourcing options for high quality feed ingredients. With advancing science and problem solving solutions, expect to see rapid progress towards sustainability. New innovations and technology are introduced every day to assist in the creation of more sustainable products to meet both consumer demand and animal health needs.



International Production & Processing Expo

January 24-26, 2023 | Atlanta, GA | ippexpo.org

IPPE is the largest global expo highlighting technology, equipment, supplies and services used in the production and process of eggs, meat, poultry and feed manufacturing. Every segment of the industry will be represented including: feed milling, animal food, genetics, hatchery, live production and animal health, egg production & processing, poultry & meat processing, further processing, rendering, marketing, and all support activities.

If you are interested in participating at an in-person feed ingredients event with us in 2023, please contact info@foodexport.org.

With Food Export's program, we found a chance to meet with new suppliers in feed and food industry. In the feed market, we are currently working to developing new ingredients and solutions for our customers. Thanks to Food Export's team and all the services they gave to connect us new opportunities, we are meeting those goals."

Pelin GUNESOGLU, Managing Director | Demeter Dis Tic. Ltd. Sti. | Turkey

Palatable & Digestible Pet Food

Enzymes play an important role in pet food production, aiding digestion and improving flavor, such as intensifying flavor and reducing bitterness. "With sustainable protein popularity rising in pet foods, so are the use of these essential enzymes. They are critical in making our pets' foods palatable and digestible, while also supporting trends toward sustainability," Christina S. Barsa, CFS, Director-Strategic Accounts with Enzyme Development Corporation said. enzymedevelopment.com



















For more information about these or other featured products please email: feedlink@foodexport.org

Pro 88™ Cheese Powder Keys Manufacturing Company, Inc. Paris, Illinois

Pro 88 is a cheese-based ingredient and attractant for the swine industry. It provides an economical and reliable source of high quality protein and milk fat that can be used in the formulation of diets for weanling pigs while also being used as an attractant. Studies from the Universities of Illinois and Minnesota have demonstrated the effectiveness of Pro88 in growth performance and the quality and digestibility of its nutrients. keysmanufacturing.com





Amphi-BACT American Pharmaceutical innovations Company (AmPharma) **Downers Grove, Illinois**

A concentrated water-soluble blend of probiotics and enzymes of a wide range of probiotic bacterial strains and digestive enzymes for use in poultry feed or water. americanpharma.net

U.S. High Protein DDGS 50% International Feed

Excelsior, Minnesota

US High Pro DDGS 50% is a unique vegetable protein source offering superior digestible amino acid properties, excellent feeding and economic values, used successfully in aquaculture, poultry, swine and dairy feed rations as a replacement to fish meal, CGM, soybean meal and specialty soy proteins concentrates. Feed inclusion levels range from 5% - 20% of daily ration. Physical properties allow for longer shelf-life and storage due to low moisture and low fat content. internationalfeed.com



supplier directory

For more information about these or other companies please email: feedlink@foodexport.org

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Global Processing Inc. globalprocessing.org Kanawha, Iowa	Jerod Wolff jwolff@globalprocessing.org		•												
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IFC Solutions ifc-solutions.com Linden, New Jersey	Christine Brestlin info@ifc-solutions.com	•							•	•					
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RIBUS, Inc. ribus.com St. Louis, Missouri	Alicia Kasch info@ribus.com	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SCD Probiotics scdprobiotics.com Kansas City, Missouri	Fabio Duarte fabio.duarte@scdprobiotics.com											•	•		
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Universal Probiotics universalprobiotics.com Linwood, Kansas	Mark Gehrt mark@universalprobiotics.com	•	•	•	•	•	•		•			•	•		
Vesta Nutra vestanutra.com Indianapolis, Indiana	Sam Kwon samkwon@vestanutra.com	•	•	•	•	•	•	•	•	•	•	•	•		

Avian Flu Continues to Linger

2022 has seen a resurgence of avian flu. In the last 6 months, approximately 70 commercial poultry operations have been impacted in the U.S with almost half of those occurring in the last month, predominantly in turkey operations. According to the CDC, avian flu outbreaks have been recorded in 42 states and impacted more than 47 million birds. Strict protocols remain in place to protect all poultry operations and stop the spread.



Regulatory Issues to Watch in 2023

In a recent podcast interview with Feed Strategy, Gary Huddleston, director of feed manufacturing and regulatory affairs at the American Feed Industry Association highlighted the following regulatory issues to watch.

- Watching EPA related to formaldehyde and PFAS chemicals and urging the agency to follow good science when thinking through setting limits that could affect future regulations.
- Transportation will continue to be a challenge and the Federal Motor Carrier Safety Administration will need to explore more ideas to address the driver shortage.
- · Occupational Safety and Health Administration (OSHA) has several changes including a potential infectious disease standard, work on the forthcoming heat illness and injury standard, as well as their new proposed rule to require certain employers to electronically submit more injury and illness data to OSHA.



Fertilizer Price Impacts Not Slowing Plantings

A recent analysis of fertilizer price transparency by the Farmers Business Network (FBN) notes that increasing fertilizer pricing is expected to impact application rates and cropping choices through the fall and spring planting seasons, especially with nitrogen-based products. The FBN survey looked at 2023 acreage intentions for soybeans, wheat and sorghum with increases expected by 43% of all wheat producers. Producers were more reserved on their soybean acreage decisions with most being undecided, but corn increases are expected to be up double digits.



Industry Asks FDA to Modernize Feed Ingredient Claims

AFIA along with other industry groups are urging the FDA to evaluate regulatory policy by reviewing feed claims to keep pace with environmental and production changes. Changes in feed ingredients and climate-friendly additives are growing in industry use and should be regulated as feed, not drugs. Additionally, organizations are asking the agency to speed up the approval process on new sustainable feed additives. These changes are critical to improving the health of animals and advancing innovation in a global marketplace.

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If you are a buyer or a seller and interested in participating in any of our in-person events and learning more, please contact info@foodexport.org

Value-Added Feed Ingredients Buyers Mission at the International Production & Processing Expo January 25, 2023, Atlanta Georgia

- VIV Asia March 8-10, 2023, Bangkok, Thailand
- ▶ Pet Food Buyers Mission at the 2023 Global Pet Expo March 21, 2023, Orlando, Florida
- ▶ Pet Food Ingredients Buyers Mission at the 2023 Petfood Forum April 30, 2023, Kansas City, Missouri
- · Value-Added Feed Ingredients Buyers Mission at the Pork Expo June 7-8, 2023, Des Moines, Iowa