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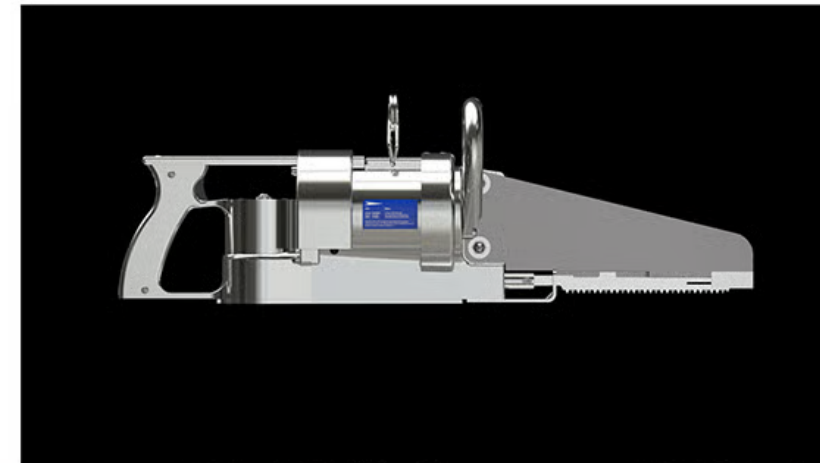


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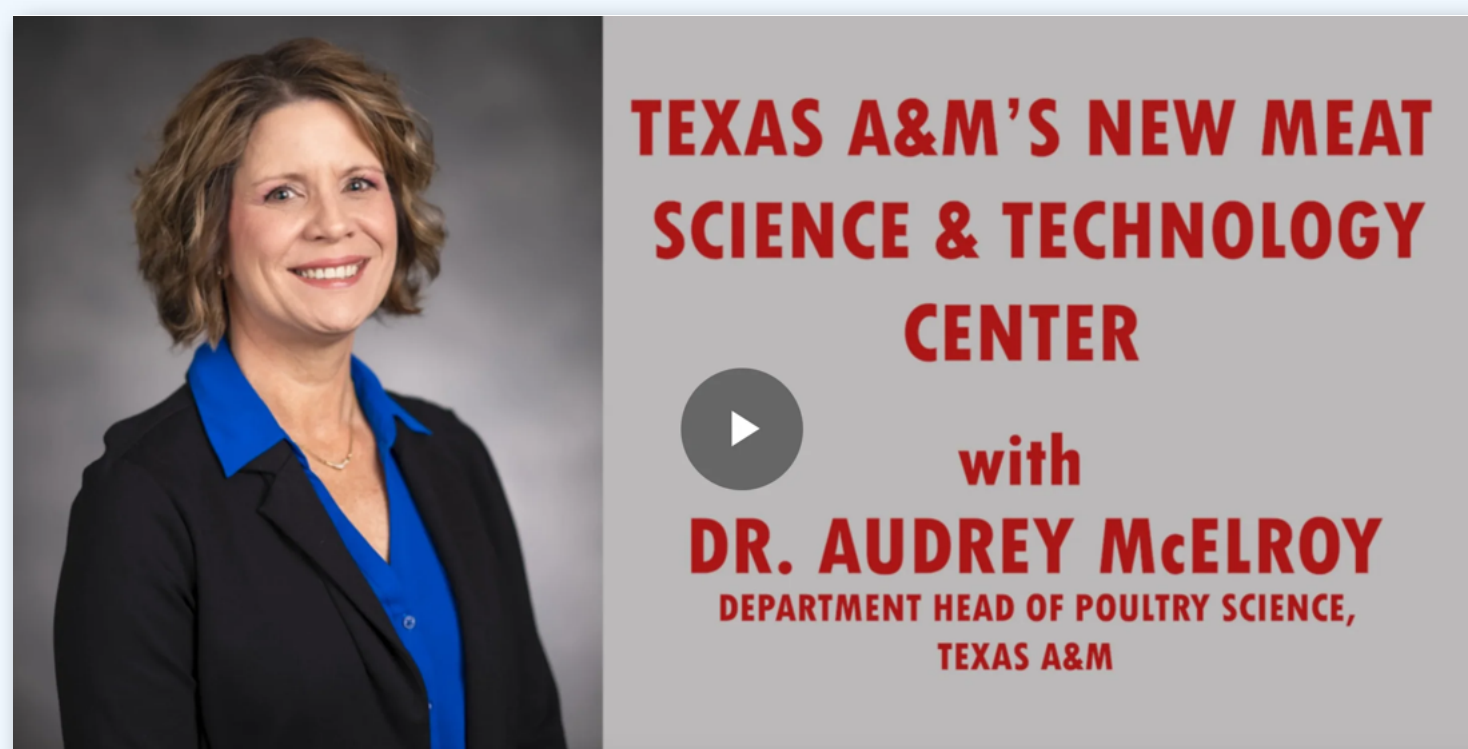
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## DR. AUDREY MCELROY DISCUSSES TEXAS A&M'S NEW MEAT SCIENCE AND TECHNOLOGY CENTER

The National Provisioner's Multimedia Specialist Brett Parker sits down with Dr. Audrey McElroy, department head of poultry science for Texas A&M, as she discusses the school's construction of a new Meat Science and Technology Center. In this interview, McElroy explains the different technologies students will have access to in the center, how the center will address roles that are needed in the meat industry, and the single most important fact students should be aware of when entering the meat workforce.

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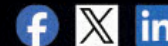


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# THE ENDURING BURGER

Here's a quick overview of some of the latest consumer data related to burger consumption, according to Tastewise Technologies Ltd.'s Burgers By the Numbers:

- The global packaged burger market was valued at \$4.43 billion in 2024 and is projected to reach \$6.99 billion by 2030.
- Nearly 39% of US restaurants offer burgers on their menus.
- 4% of US restaurants offer turkey burger dishes on their menus.
- 23% of turkey burger consumers say taste is their No. 1 consumer need.
- Protein is one of the most-reported consumer needs associated with all burger varieties.



FRED WILKINSON

These consumer data suggest burgers continue to reign supreme for American consumers.

Check out our 2026 Burger Report in this issue and learn about the emerging trends shaping the burger category.

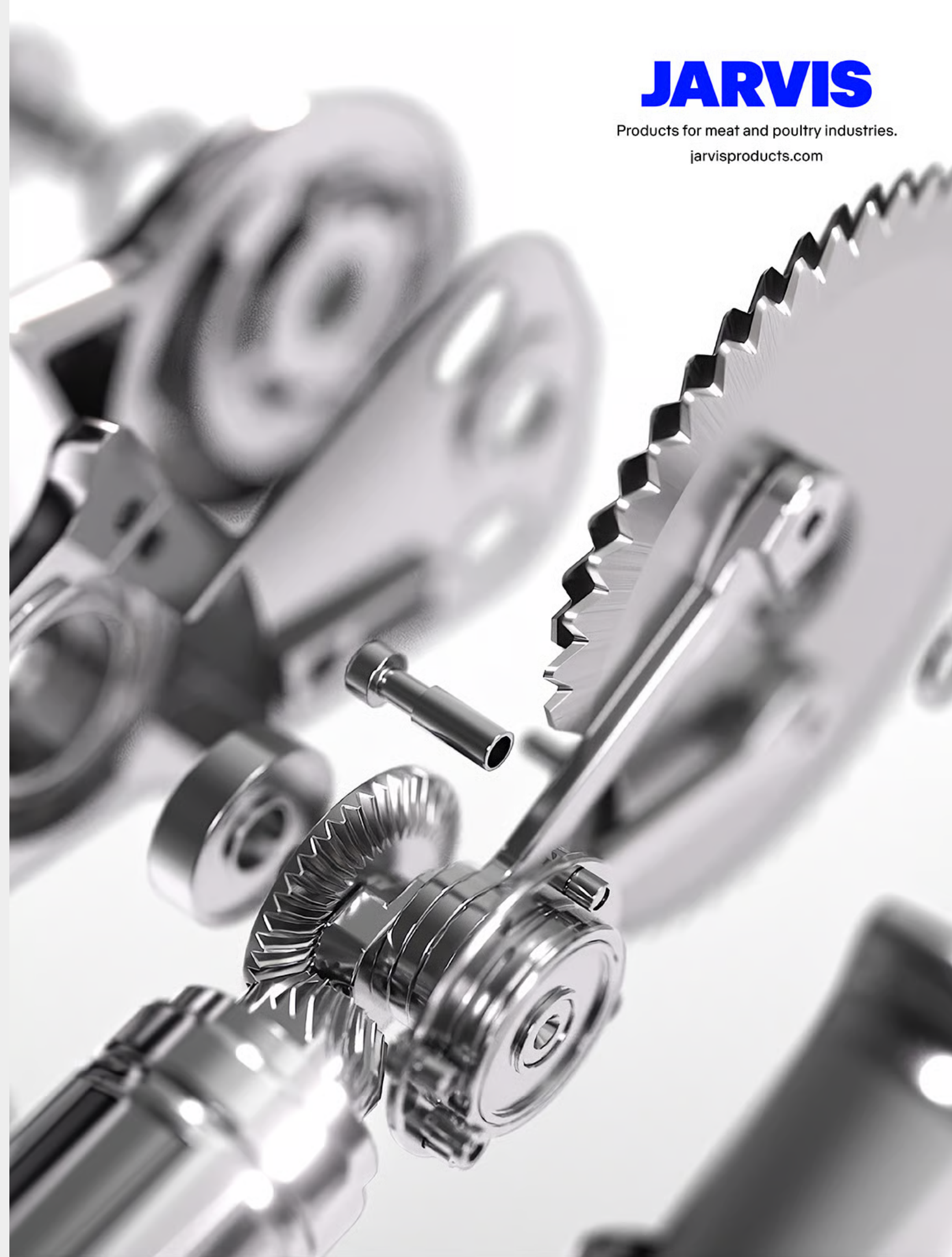
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# PROTEIN DEMAND DRIVES INTEREST IN HIGH-QUALITY BURGERS, BRICKS AND GRINDS



CONSUMER DEMAND FOR PROTEIN IS AT AN ALL-TIME HIGH, LEADING SHOPPERS TO THE BURGER CATEGORY TO MEET NUTRITION AND FLAVOR NEEDS.

BY SAMMY BREDAR  
ASSOCIATE GROUP EDITOR

**PROTEIN DEMAND CONTINUES TO ANCHOR THE MEAT CASE IN 2026**, and burgers remain one of the category’s most resilient and versatile formats.

Despite elevated beef prices and ongoing cattle supply constraints, ground proteins continue to perform well at both retail and foodservice. At the same time, shifting health priorities, leaner blend preferences and formulation pressures are reshaping how processors approach the category.

## GRINDS CONTINUE TO OUTPERFORM

Ground meat remains a retail growth engine. According to Anne-Marie Roerink, principal for 210 Analytics, across 85,000 subcategories tracked by Circana, ground beef ranked number one in absolute dollar growth in both 2024 and 2025. While inflation played a role, ground beef also ranked number three in absolute unit growth in 2025.

Growth extended beyond beef, with ground chicken up 24.9% in pounds, while ground pork rose 3.8% and ground lamb grew 7.9%.

Amid high prices, rather than exiting the meat department, consumers recalibrated their spending. That shift helped burgers remain a frequent menu choice across everyday, entertaining and holiday occasions.

Roerink said retailers and packer-processors are leaning into premium-inspired formats such as ribeye, prime rib and brisket burgers. “If consumers can’t afford the steak or roast, or it’s meant for a weekday occasion, they can still enjoy the unique flavor of each cut via burger format,” Roerink said.

However, preformed patties did not grow as aggressively as ground beef overall, reflecting ongoing consumer trade-offs between time savings and price.

Roerink noted that while the meat department drives the majority of burger sales, processors should watch for growth in frozen and deli-prepared segments. Millennials and Gen Z shoppers are increasingly engaged with frozen meat and poultry, and at-home entertaining continues to support multipack and slider formats. Roerink noted that retailers are increasingly experimenting with smash burger patties builds, sliders and hybrid burgers that blend vegetables or alternative proteins to meet both flavor and nutritional goals.



Photo courtesy of Teton Waters Ranch

## HEALTH PRIORITIES SHIFT BLEND PREFERENCES

Health-driven purchasing behavior is influencing grind composition. Kevin Pallaoro, CEO of Teton Waters Ranch, said demand for high-quality protein continues to rise, fueled in part by consumers using GLP-1 medications who are focused on preventing muscle loss, as well as broader health-conscious shoppers prioritizing nutrient density. He noted that leaner blends, particularly 90/10, are growing significantly faster than traditional 80/20 formulations.

“I hadn’t expected this to happen, but what we’ve seen is that the leaner ground and the leaner burgers are growing at a much faster rate than the fattier,” Pallaoro said. “It used to be that our 80-20 blend was the number one item.”

Pallaoro said consumers are also increasingly focused on micronutrients, seeking foods that deliver vitamins and minerals in addition to protein. While many consumers have historically relied on supplements to get these micronutrients, the “food as medicine” movement is leading more consumers to get their vitamins and minerals from food. Pallaoro cited grass-fed beef’s naturally favorable Omega-3 to Omega-6 ratio and higher vitamin and mineral density compared with conventional beef.

For processors, the shift toward leaner blends has implications for cook performance, texture management and flavor delivery, reinforcing the need for tight formulation control.

At foodservice, operators are navigating similar pressures to retail, balancing quality, flavor and affordability. Tom Ryan, founder of Smashburger, said diners continue to seek high-quality beef and flavor consistency while also looking for affordability and new taste experiences.

“Affordable, great-tasting burgers are driving the category and represent sizable areas of share growth,” Ryan said. He added that bringing familiar flavors outside traditional builds helps drive trial and incremental demand.

Ryan also noted that operator success depends on execution. “Quality starts with high-grade beef, processed correctly to maximize flavor and juiciness,” supported by consistent execution across buns, cheeses and toppings.

For processors supplying foodservice operations like Smashburger, Ryan’s observations underscore the importance of grind consistency, fat distribution and cook performance. Ryan added that as consumer expectations evolve, operators are increasingly experimenting with multilayered builds, sliders and hybrid burgers that blend vegetables or alternative proteins to meet both flavor and nutritional goals.

## TIGHT CATTLE SUPPLY SHAPES SOURCING STRATEGY

The evolving burger market is unfolding against a historically constrained cattle cycle. The US cattle herd is at an 82-year low following four consecutive years of herd reduction. Pallaoro described legitimate domestic grass-fed supply as “miniscule,” citing strong economic incentives for ranchers to sell cattle to feedlots early for guaranteed returns rather than holding animals for the additional 12 to 18 months required for grass-fed certification.

Pallaoro noted that international sourcing fills part of that gap. He expects continued market segmentation, with premium-focused, health-oriented consumers driving demand for differentiated and lean offerings, while value-focused shoppers remain concentrated in commodity beef and higher-fat cuts.

With cattle costs elevated, formulation strategy is increasingly tied to profitability. “Rising beef costs put direct pressure on producers,” said Brian Metzger, VP USA and Canada for Prosur Inc. “Every point of cook loss or retail shrink or shelf-life issues directly impacts margins.” He noted that tight supply and high raw material costs are making waste reduction a strategic priority for producers.



Photo courtesy of Teton Waters Ranch

Processors must balance yield, shelf life and texture performance with growing clean-label expectations and regulatory scrutiny. Metzger said demand is strongest in extended shelf-life solutions for ground beef and phosphate-reduced or phosphate-free systems in patties, driven by cost pressure, tighter regulation and consumers craving simpler, more natural products.

Functional ingredient systems that optimize yield and texture while supporting label strategy are increasingly central to managing both cost and product quality.

Burgers remain one of the most adaptable formats in the meat case. The category in 2026 is defined by dual pressures: sustained protein demand and constrained supply. For processors, the path forward lies in striking a balance—aligning sourcing and formulation with a market that is simultaneously premiumizing and price sensitive.

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## REGULATORY EFFORTS FOCUS ON FIGHTING DISEASE –

### NEW DIETARY GUIDELINES FOR AMERICANS PLAY UP THE NEED FOR ANIMAL PROTEIN IN DIETS, WHILE USDA TAKES AIM AT NEW WORLD SCREWWORM.

BY DAN EMERY

Under the leadership of health and Human Services Robert F Kennedy Jr. and the Trump Administration's Make America Healthy Again push, the meat and poultry industry has an ambassador championing the importance of animal proteins (and fats) in Americans' diets.

In addition to receiving a new focus for animal protein's role in federal Dietary Guidelines for Americans, the US Department of Agriculture's moves to address the New World Screwworm threat to US cattle herds and the nation's already tight beef supply stands as another industry-friendly regulatory development.

#### NEW WORLD SCREWWORM THREAT

USDA says that thanks to strong surveillance and response programs, the current New World Screwworm risk to livestock, other animals, and people in the US remains low, with ongoing surveillance in animals showing no evidence of NWS in the US as of late February 2026.

The NWS animal health scare began in November 2024, when USDA received an official notice from Mexican authorities about a positive detection of New World screwworm in Mexico.



Image courtesy CDC

According to the Centers for Disease Control & Prevention, since 2023, Mexico and Central America combined have reported more than 152,000 cases of NWS in animals and more than 1,300 cases in people as of Feb. 10, 2026.

NWS is a parasitic fly that lays eggs in open wounds or other body cavities of warm-blooded animals, and the larvae feed on and burrow into flesh, CDC explains. Although primarily affecting livestock like cattle and horses, the flies can also lay eggs on people, wildlife and domestic animals and can be fatal if left untreated.

Agriculture Secretary Brooke Rollins, Texas Governor Greg Abbott and other federal, state, and local officials held a grand opening of a sterile fly dispersal facility run by APHIS) at Moore Airfield Base in Edinburg, Texas, to combat NWS.

APHIS added that the sterile flies for this effort will initially be dispersed from the Tampico, Mexico, facility. USDA plans to shift the operations to the new Texas facility if the location of flies shifts or a new concentration of NWS cases is discovered in northern Mexico.

APHIS also has made up to \$100 million available to support innovative projects that enhance sterile NWS fly production, strengthen preparedness and response strategies, and safeguard U.S. agriculture, animal health, and trade, the agency said.

The US Food and Drug Administration in early February 2026 issued an Emergency Use Authorization allowing for Ivermectin use to combat NWS. The agency has concluded that based on the scientific evidence available, it is reasonable to believe the drug may be effective for the prevention of infestations caused by NWS larvae in cattle when administered within 24 hours of birth, at the time of castration, or when a wound appears.



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#### DIETARY GUIDELINES SAY EAT YOUR MEAT

The new Dietary Guidelines for Americans introduced by the Health and Human Services Department and USDA in early January 2026 include an updated food that pyramid is favorable to the animal protein industry. The new guidelines prioritize protein consumption as part of its messaging for Americans to make nutrient-dense, minimally processed foods the focus of their diets.

In rolling out the new dietary guidelines, food policymakers noted America is facing a full-scale health emergency, with more than 70% of adults being overweight or obese, and more than half being diabetic or pre-diabetic.

The dietary guidelines emphasize simple, flexible guidance rooted in largely in fresh, whole foods:

- prioritize protein at every meal
- consume full-fat dairy with no added sugars
- eat vegetables and fruits throughout the day, focusing on whole forms.



Image courtesy HHS

The dietary guidelines also provide tailored recommendations for infants and children, adolescents, pregnant and lactating women, older adults, individuals with chronic disease, and vegetarians and vegans, ensuring nutritional adequacy across every stage of life.

The new guidelines maintain longstanding recommendations on limiting sodium intake, promoting whole grains, and highlighting the importance of consuming fruits and vegetables. DGA also introduces several notable shifts in nutrition guidelines, which focus on increasing daily protein intake from nutrient-dense sources (e.g., meat, dairy, beans, nuts, and soy), emphasize the benefits of dairy, and advise against "highly processed" foods. A redesigned food pyramid now places protein, dairy, and healthy fats alongside vegetables and fruits in the largest sections, with whole grains occupying a smaller portion at the base. Some additional highlights: Added Sugars: DGA says no one meal should contain more than 10 grams of added sugars, or about 2 teaspoons.

Processed Foods: For the first time, DGA explicitly addresses highly processed foods. A recent CDC report, "Ultra-processed Food Consumption in Youth and Adults," found that 55% of the U.S. population receives more than half of their daily calories from ultra-processed foods, and the new guidance calls for avoiding highly processed packaged foods that are excessively salty or sweet. This reflects growing evidence linking high consumption of highly processed foods to increased risk of obesity, cardiovascular disease, and type 2 diabetes.

In a reverse from longstanding federal nutrition policies recommending reducing animal fats in Americans' diets, the new dietary guidelines recommend cooking with "healthy fats" – including beef tallow. The updated guidelines maintain the recommendation to limit saturated fat to no more than 10% of daily calories.

As the foundation for all federal nutrition assistance and feeding programs including SNAP and the National School Lunch Program, the new Dietary Guidelines for Americans will trigger operational and policy shifts across programs serving millions of Americans.

SNAP will be expected to tighten eligibility for food products such as sugar-sweetened beverages, candy and energy drinks. Notably, several states have already secured USDA waivers to restrict these purchases. WIC program administrators may also be tasked with reshaping food packages, specifically regarding protein sources, dairy, infant feeding standards.

Beyond meal service, DGA increasingly emphasizes tailored nutrition for chronic conditions like diabetes and heart disease. Consequently, state and local health agencies should anticipate further integration of medical nutrition therapy into community-based disease prevention initiatives.

Dan Emery has 25 years experience in the food industry, including 15 as vice president of marketing at Pilgrim's Pride. He is directing Meaningful Solutions, a company founded to assist clients in solving problems.

Opening photo credit: tomazl / Getty Images



# WHEN STATE INGREDIENT LAWS COLLIDE WITH FEDERAL MEAT INSPECTION

STATES ARE NO LONGER CONTENT TO LEAVE INGREDIENT OVERSIGHT SOLELY TO FEDERAL AGENCIES.

BY SHAWN K. STEVENS  
FOOD INDUSTRY COUNSEL LLC

FOR DECADES, MEAT AND POULTRY PROCESSORS have operated under a relatively stable assumption: if a label is approved by USDA, that approval carries national authority. The Federal Meat Inspection Act (FMIA) and the Poultry Products Inspection Act (PPIA), for example, contain express preemption provisions that prohibit states from imposing labeling or ingredient requirements “in addition to, or different than” federal standards.

That stability, however, is now, in some cases, being challenged. A wave of new state laws targeting specific food ingredients, ranging from bans to warning labels and QR-code disclosure, raise a fundamental question for meat processors: What happens when a state requirement conflicts with a label already approved by FSIS?

Several recent statutes illustrate the emerging tension. Some states, like West Virginia, have moved to prohibit the manufacture or sale of foods containing certain additives. Others, like Louisiana, require a QR Code for products containing certain ingredients of concern. While some of these laws are being, and will continue to be, challenged in court, their passage signals a broader regulatory shift: states are no longer content to leave ingredient oversight solely to federal agencies.

For processors operating in interstate commerce, this creates immediate practical concerns. FSIS labels are typically approved at the federal level, often through sketch approval or generic approval authority. A processor cannot unilaterally add a state-specific warning or disclosure to an FSIS-regulated product without risking misbranding under federal law. Yet, failing to comply with a state mandate could expose the company to a state enforcement action.

There is also the preemption calculus. Courts have historically interpreted FMIA and PPIA preemption broadly. If a state attempts to mandate additional warnings or ingredient disclosures on meat and poultry products, beyond what FSIS requires, that state requirement may be preempted. Litigation, however, takes time. In the interim, companies are forced to decide whether to challenge the law, redesign packaging, or restrict distribution into certain states.

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Finally, there is the business “optics” issue. Even if a company has a strong preemption defense, publicly opposing a state “health protection” law could potentially be framed as resistance to consumer safety. That reputational layer adds complexity to what might otherwise be a straightforward legal argument.

The most disruptive scenario would involve a state requiring a warning statement that FSIS has not approved or implicitly rejected. Because FSIS maintains primary jurisdiction over labeling of meat and poultry products, inserting unapproved language could create federal enforcement exposure. In that circumstance, processors are effectively caught between sovereigns.

What should companies be doing now? For starters, we recommend beginning with a label audit. Identify products that contain ingredients targeted by emerging state legislation. Assess whether reformulation is feasible and/or economically rational. In parallel, engage regulatory counsel to analyze whether the specific state requirement is likely preempted under FMIA or PPIA.

In addition, monitor enforcement trends. Some of these laws include delayed compliance dates or are currently, or may be, subject to injunction. The difference between statutory language and practical enforcement can be significant.

Moving forward, processors should not assume that preemption arguments will resolve these issues. Rather, proactive analysis, regulatory engagement, and strategic planning will be essential, as states continue to experiment with ingredient regulation. So, while the era of federal uniformity may not be over, one thing is now certain – it will continue to be challenged.

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# DIETARY FAT SOURCES AND LEVELS OF VITAMIN E ISOFORMS

## Impact Carcass Traits And Fresh Pork Quality Of Heavy Slaughter Weight Pigs



**FINDINGS SUGGEST SUPPLEMENTATION WITH 40 PPM GT REDUCES REDNESS AND INCREASED LIGHTNESS OF FRESH PORK.**

BY ANA PAULA SALIM, MARLEE KELLEY DING WANG, GREGG RENTFROW, MERLIN LINDEMANN AND SURENDRANATH P. SUMAN

### INTRODUCTION

The increasing demand for pork can be addressed by increasing slaughter weight and exploring alternative feed ingredients in swine diets. Vitamin E (VE) is an antioxidant and plays an important role in improving the oxidative stability of pork. However, interactions among VE isoforms, dietary fat sources, and pork quality are rarely reported. Therefore, the objective of this study was to evaluate the effects of supplementing the vitamin E isoforms alpha-tocopheryl acetate (ATA) and gamma-tocopherol (GT) in combination with corn oil (CO) and tallow (TW) on the color characteristics of fresh pork loins from heavy-weight pigs (>150 kg).

### MATERIALS AND METHODS

The experiment was conducted in accordance with protocols approved by the Institutional Animal Care and Use Committee of the University of Kentucky. A total of 72 individually fed pigs ( $n = 72$ ) were blocked by sire, body weight, and sex and randomly assigned to individual pens. Dietary vitamin E treatments consisted of four levels of ATA (11, 40, 100, and 200 ppm) and two levels of mixed tocopherols, primarily GT (40 and 100 ppm). Pigs were humanely slaughtered at approximately 150 kg live weight at the University of Kentucky USDA-inspected Meat Laboratory. At 24 h postmortem, a 2.54-cm chop was collected from the longissimus thoracis, placed on foam trays, and overwrapped with polyvinyl chloride (PVC) film for instrumental color evaluation. Instrumental color measurements included lightness ( $L^*$ ), redness ( $a^*$ ), yellowness ( $b^*$ ), hue angle ( $H^*$ ), and chroma ( $C^*$ ), which were obtained from three random locations on the light-exposed surface using a HunterLab MiniScan XE colorimeter (HunterLab Associates, Reston, VA) equipped with a 2.54-cm diameter aperture, illuminant A, and a 10° standard observer. Measurements were conducted on days 1, 3, 5, and 7 of retail display under 1,300 lux. Data was analyzed using SAS by least squares analysis of variance with the generalized linear model (GLM) as a randomized complete block design, with the individual pig serving as the experimental unit. Statistical significance was declared at  $P \leq 0.05$ , and tendencies were identified at  $P \leq 0.10$ .

### RESULTS

Overall, chops from pigs supplemented with GT tended to exhibit greater lightness ( $P \leq 0.10$ ) throughout retail display compared with chops from pigs fed equivalent levels of ATA. Pigs supplemented with TW also tended to have greater lightness ( $P \leq 0.10$ ) by the end of the retail display period compared with those fed CO. Supplementation with GT at 40 ppm resulted in greater lightness ( $P < 0.05$ ) and hue angle ( $P < 0.05$ ), along with lower redness ( $P < 0.05$ ) and chroma ( $P < 0.05$ ), indicating a paler and less red color compared with 40 ppm ATA. In contrast, supplementation with GT at 100 ppm resulted in lower lightness ( $P < 0.05$ ) and hue angle ( $P < 0.05$ ), and greater redness ( $P < 0.05$ ) and chroma ( $P < 0.05$ ) during the first 7 d of retail display, indicating a darker and redder color compared with 100 ppm ATA. Chops from pigs fed TW exhibited greater lightness and yellowness values ( $P < 0.05$ ) during extended retail display compared with chops from pigs fed CO.

### CONCLUSIONS

These findings demonstrated that supplementation with 40 ppm GT reduced redness and increased lightness of fresh pork. In contrast, supplementation with 100 ppm GT resulted in a darker appearance during the first seven days of retail display compared with ATA. The combined use of GT and TW may be exploited as a pre-harvest strategy to enhance color stability of fresh pork from heavy-weight pigs during retail display.

### ACKNOWLEDGMENTS

This work was supported by the National Pork Board, Fats and Proteins Research Foundation, and DSM.

Ana Paula Salim, Marlee Kelley, Ding Wang, Gregg Rentfrow, Merlin Lindemann and Surendranath P. Suman are with the Department of Animal and Food Sciences, University of Kentucky, Lexington (e-mail [apaulasalim@uky.edu](mailto:apaulasalim@uky.edu)).

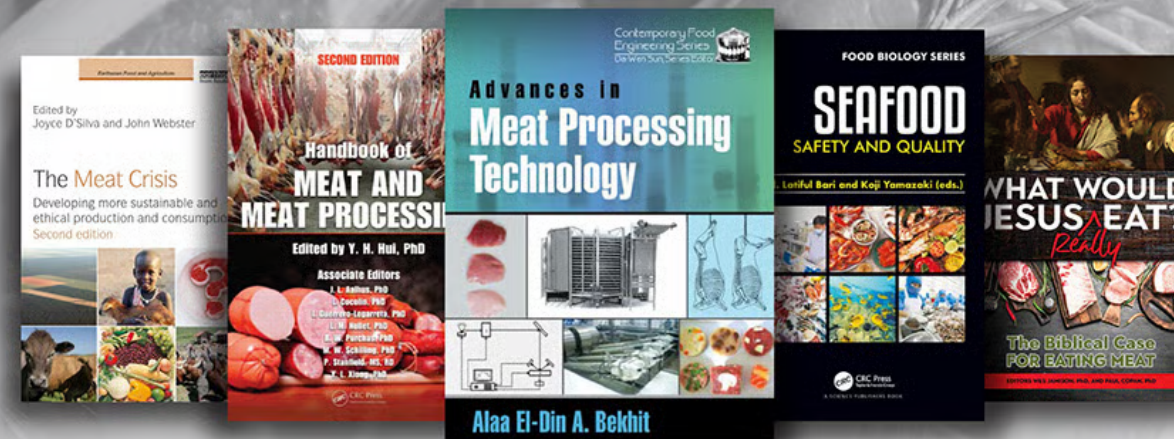
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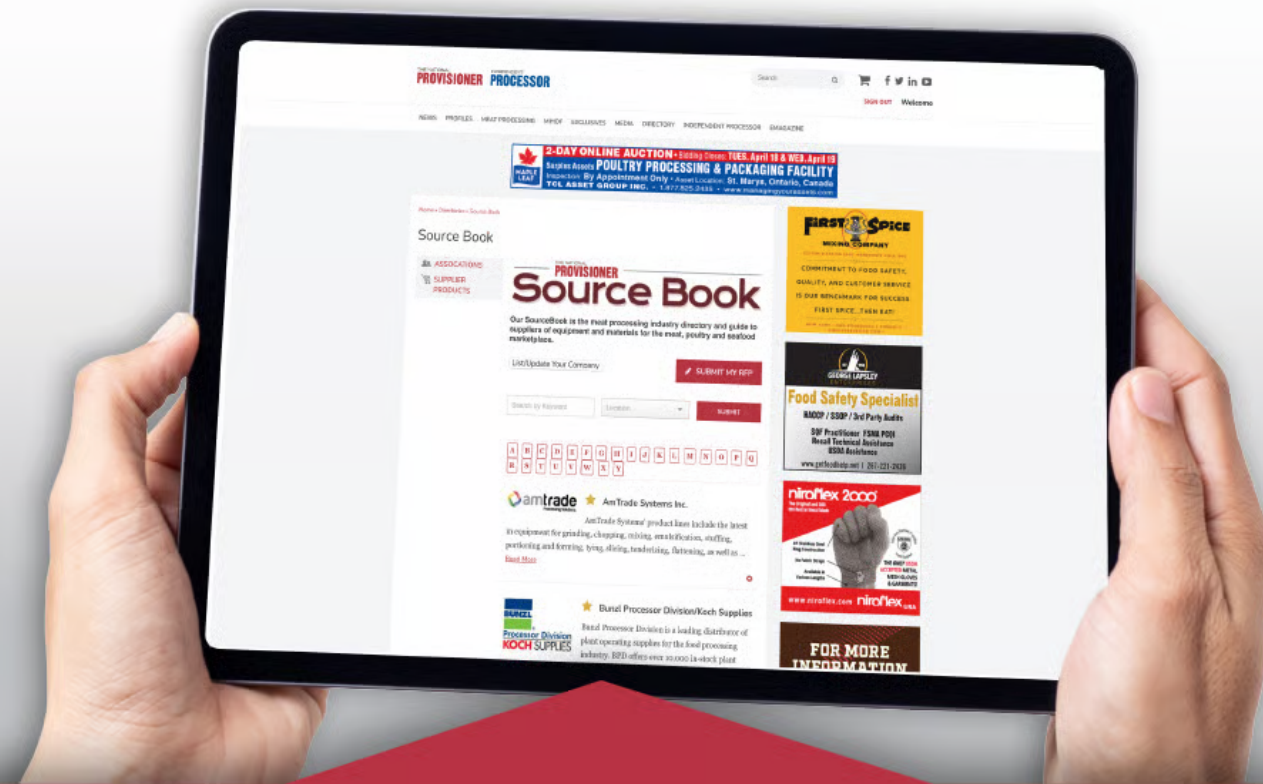


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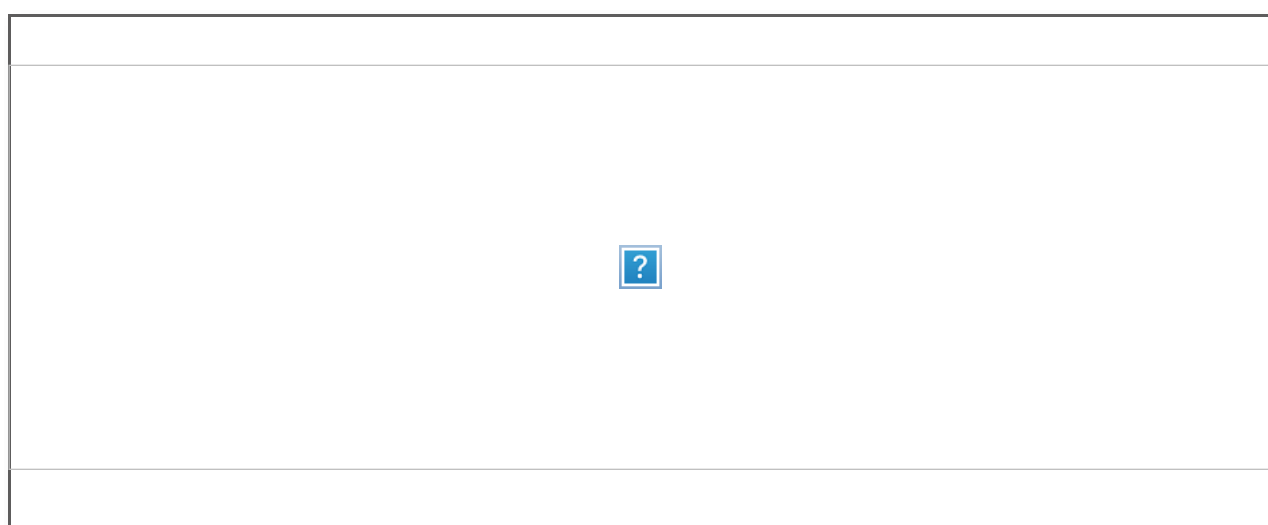
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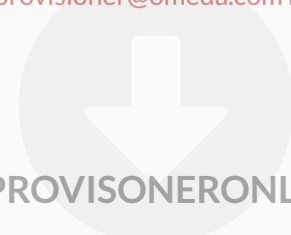
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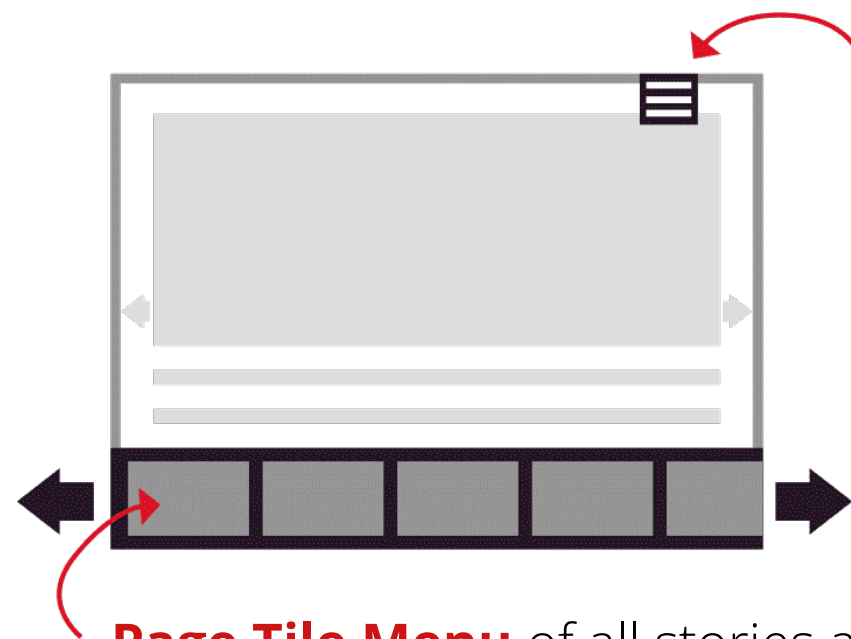
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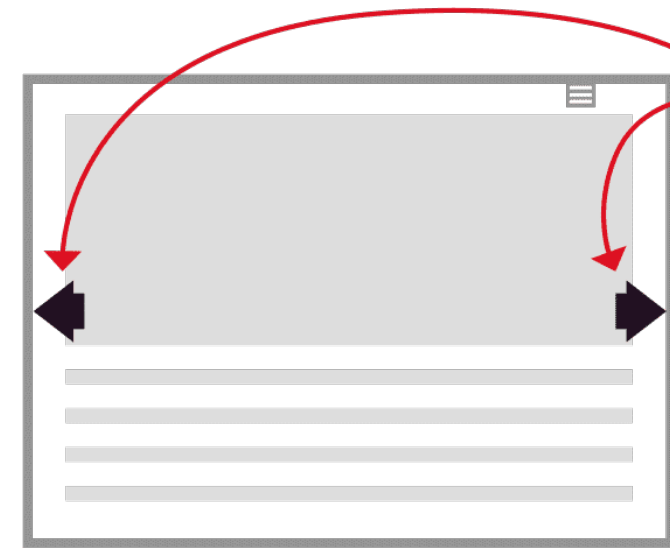


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