



ELSEVIER



NEWS RELEASE FOR IMMEDIATE RELEASE

Media contact:

Brittany Morstatter

+1-217-356-3182 ext. 143

ARPAS@assochq.org

Strengthening the food supply chain in response to the COVID-19 pandemic

Lessons learned from the pandemic in the protein sector are analyzed in a new review in Applied Animal Science

Champaign, IL, November 29, 2021—The unprecedented COVID-19 pandemic sent shock waves through systems and markets around the world, causing complex economic disruptions. The agricultural market too faced significant challenges. A new [article](#) in *Applied Animal Science* analyzes these challenges to learn from the experience. Specifically, the authors examine protein-sector food supply chains and present lessons learned from the COVID-19 pandemic.

The article resulted from the July 2021 Symposium of the American Registry of Professional Animal Scientists. “This invited review examines the nature and causes of these food supply chain and market disruptions, evaluates the economic consequences, and addresses potential market and policy responses that should be explored to reduce similar adverse effects from such possible events in the future,” said David K. Beede, PhD, Editor-in-Chief of *Applied Animal Science*.

The authors explore how the pandemic has affected the supply and demand sides of the food market simultaneously. They discuss how panic buying caused an initial surge in food demand that was met with increased production. Lead author John D. Anderson, PhD, Department of Agricultural Economics and Agribusiness, University of Arkansas, Fayetteville, AR, USA, explained that during the following slowdown, “demand was negatively affected both by the near-total loss of food service outlets and by a consumer shift to precautionary saving.” The article next details the challenges on the supply side, discussing how COVID-induced food-processing restrictions, workers being kept at home, and a shift in protein demand from food service to food at home led to plant slowdowns and complete shutdowns.

The meat processing sector also experienced “a significant increase in production and price risks and a dramatic widening of marketing margins,” according to Anderson. These insecurities encouraged building the resilience of the food supply chain. The authors pointed out that larger commercial firms have the advantage of increasing resilience through improved efficiency, adoption of technology, and global marketing. But, Anderson adds, “Certainly, the experience of the pandemic highlighted the vulnerabilities

of having a food supply chain in which capacity is concentrated in a handful of large firms.” The authors discuss how public interest has resulted in research and investment in shortening the food supply chain and expanding local and regional systems.



Caption: Meat processors faced many challenges during the COVID-19 pandemic that caused a decrease in supply. This led many retailers to limit their offerings (Credit: iStock.com/JosieN).

The authors predict that if large commercial food supply chains increase efficiency and use of automation in response to challenges faced during the pandemic, this will pose a real threat to the economic viability of smaller local and regional systems. Anderson said these smaller operations might face “an even more competitive environment than the environment that existed before the pandemic.”

The article appears in the December issue of *Applied Animal Science*.

Notes for editors

“Invited Review: Lessons from the COVID-19 pandemic for food supply chains,” by J.D. Anderson, J.L. Mitchell, and J.G. Maples (<https://doi.org/10.15232/aas.2021-02223>), *Applied Animal Science*, volume 37, issue 6 (December 2021), published by Fass Inc. and Elsevier.

This article is openly available at <https://doi.org/10.15232/aas.2021-02223>.

Full text of the article is also available to credentialed journalists upon request; contact Brittany Morstatter at +1-217-356-3182 ext. 143 or ARPAS@assoqh.org to obtain copies. To schedule an interview with the author(s), please contact John D. Anderson at jda042@uark.edu.

Elsevier's Novel Coronavirus Information Center provides expert-curated information for researchers, healthcare professionals and public health officials, including clinical guidance and a portal to access all of Elsevier's COVID-19 research. All resources are freely available. We also have dedicated hubs for healthcare professionals; health educators and students; librarians; and R&D professionals. You can find these in our Coronavirus Resource Directory. www.elsevier.com/connect/coronavirus-information-center.

About *Applied Animal Science*

Applied Animal Science (AAS) is a peer-reviewed scientific journal and the official publication of the American Registry of Professional Animal Scientists (ARPAS). In continuous publication since 1985, AAS is a leading outlet for animal science research and is indexed by Scopus and ESCI (Clarivate's Emerging Sources Citation Index). The journal welcomes novel manuscripts on applied technology, reviews on the use or application of research-based information on animal agriculture, commentaries on contemporary issues, short communications, and technical notes. Topics that will be considered for publication include (but are not limited to) feed science, farm animal management and production, dairy science, meat science, animal nutrition, reproduction, animal physiology and behavior, disease control and prevention, microbiology, agricultural economics, and environmental issues related to agriculture. Themed special issues also will be considered for publication. www.appliedanimalscience.org

About the American Registry of Professional Animal Scientists (ARPAS)

The American Registry of Professional Animal Scientists (ARPAS) is the organization that provides certification of animal scientists through examination, continuing education, and commitment to a code of ethics. Continual improvement of individual members is catalyzed through publications (including the AAS journal) and by providing information on educational opportunities. ARPAS is affiliated with five professional societies: American Dairy Science Association, American Meat Science Association, American Society of Animal Science, Equine Science Society, and Poultry Science Association. www.arpas.org

About Fass Inc.

Since 1998, Fass has provided shared management services to not-for-profit scientific organizations. With combined membership rosters of more than 10,000 professionals in animal agriculture and other sciences, Fass offers clients services in accounting, membership management, convention and meeting planning, information technology, and scientific publication support. The Fass publications department provides journal management, peer-review support, copyediting, and composition for this journal; the staff includes four BELS-certified (www.bels.org) technical editors and experienced composition staff. www.fass.org

About Elsevier

As a global leader in information and analytics, [Elsevier](http://www.elsevier.com) helps researchers and healthcare professionals advance science and improve health outcomes for the benefit of society. We do this by facilitating insights and critical decision-making for customers across the global research and health ecosystems.

In everything we publish, we uphold the highest standards of quality and integrity. We bring that same rigor to our information analytics solutions for researchers, health professionals, institutions and funders.

Elsevier employs 8,100 people worldwide. We have supported the work of our research and health partners for more than 140 years. Growing from our roots in publishing, we offer knowledge and valuable analytics that help our users make breakthroughs and drive societal progress. Digital solutions such as [ScienceDirect](#), [Scopus](#), [SciVal](#), [ClinicalKey](#) and [Sherpath](#) support strategic [research management](#), [R&D performance](#), [clinical decision support](#), and [health education](#). Researchers and healthcare professionals rely on our 2,500+ digitized journals, including [The Lancet](#) and [Cell](#); our 40,000 eBook titles; and our iconic reference works, such as *Gray's Anatomy*. With the [Elsevier Foundation](#) and our external [Inclusion & Diversity Advisory Board](#), we work in partnership with diverse stakeholders to advance [inclusion and diversity](#) in science, research and healthcare in developing countries and around the world.

Elsevier is part of [RELX](#), a global provider of information-based analytics and decision tools for professional and business customers. www.elsevier.com