

Meat Quality Research Priorities

Outcomes from a Technical Summit

Contributions of Meat

The meat industry is a cornerstone of the global economy, nutrition, and society. Valued at \$897 billion in 2021 and projected to surpass \$1.3 trillion by 2027, it supports millions of jobs and contributes significantly to economic growth. Beyond economic value, meat plays an essential role in global nutrition, supplying critical nutrients that are particularly vital for cognitive and physical development. Additionally, meat holds cultural importance worldwide, linking traditions and fostering social connections.

The Importance of Meat Quality Research

Meat quality research is vital for ensuring the sustainability, safety, and competitiveness of the meat industry. It contributes to solving industry challenges like food security, meeting consumer expectations, and waste reduction while developing the next generation of scientific leaders. Despite its importance, funding for this research has significantly declined over recent years (Figure 1).

Meat Quality Research Priority Areas

Resource Utilization, Climate Impact & Sustainability	Food Security, Nutritional Value and Impact on Human Health	Food Waste	Future of Meat: Talent, Training and Technology Advancement
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Consequences of Continued Funding Decline

Research priorities cannot be addressed without funding. Impacts will be notable.

Impact on Innovation: Lack of funding stifles technological advancements, such as co-product utilization, automation or genetics, and hinders preparedness to proactively address challenges and issues which are important to meat production.

Sustainability and Food Security: Insufficient research jeopardizes the U.S. meat industry's ability to remain competitive globally, affects the sustainability of animal agriculture, and impacts food security by missing opportunities for affordable availability of a nutrient dense food.

Talent Pipeline Disruption: Without adequate funding, fewer students are trained, weakening the pipeline of future meat science leaders and problem solvers.



Total Public Funding of Agriculture and Food Research and Development in the U.S. 1997-2019

Source: USDA/Economic Research Service, 2022

Current State of Funding

USDA-NIFA's Agriculture and Food Research Initiative (AFRI) has been a major source of funding for meat quality research, but recent years have seen a decrease in grants awarded for meat-focused projects. This decline reflects a shift in priority areas, with funding increasingly directed towards non-meat research, including plant-based alternatives.

Other funding options, such as private industry or USDA-ARS, supplement meat quality research, yet these sources can be inconsistent. This funding gap raises concerns about advancing meat science and maintaining a high-quality meat supply in the face of growing challenges.

Impactful Actions

Advocate for:

- ✓ Increased prioritization of meat quality research
- ✓ More robust funding
- ✓ More interdisciplinary research to sustain industry innovation

Share the Consequences:

- ✓ Answers to challenges/issues not proactively available
- ✓ Food security (availability and affordability negatively impacted)
- ✓ Future researchers and problem solvers not trained

Join a Program Panel:

- ✓ Gain firsthand experience in the funding process
- ✓ Contribute to shaping the future of meat science research

