Science based. Data driven. Future focused.

The National Animal Nutrition Program (NANP) provides data and resources that help create a thriving, healthier world.

Nutrition is one of the most important—and often one of the most expensive—parts of animal agriculture. Good nutrition helps ensure animal development, health, and welfare as well as the quantity, quality, and safety of meat, milk, eggs, and other animal products. Nutrition also influences the amount of harmful emissions and waste that animals produce.

What does NANP do?

The NANP provides research-based data on animal nutrient needs, feed ingredients, feeding strategies, and animal performance as well as software, training tools, and educational materials to support research.

Why does NANP matter?

With easy access to animal nutrition data, researchers, farmers, and policymakers can make informed decisions that promote animal performance and welfare, boost producer profitability and competitiveness, and reduce impacts on the environment.

Who is involved?

Led by **31 scientists** from **22 institutions**, the NANP has diverse expertise on animal species and production types and environments. The team works closely with other research, academic, government, and industry partners worldwide to ensure stakeholder needs are met and NANP data and tools are used widely. Through partnerships, NANP is able to leverage resources to develop comprehensive data, training tools, and opportunities, which individual states or universities would struggle to provide.

What does NANP provide?

Essential data

NANP collected, screened, sorted, and archived over **4 million feed ingredient records** and more than **500,000 observations** on animal performance and metabolism for beef, dairy, swine, poultry, horses, sheep, goats, and aquaculture species.

Easy-to-use

The database offers a standard platform for archiving data so that they are available for future uses. In 2017, NANP made the website easier to use, increasing website visits, time spent per visit, data downloads, and model usage. NANP also developed a method that automatically classifies new datasets, making it easier to provide and find data.

Useful tools

NANP provided more than **300 resources** on animal modeling and statistics, including updated models that are more accurate, easier to use, and work on modern computers; software reviews; and advice on analytical methods. These tools reduce the time researchers spend collecting and synthesizing data and ensure efficient, reliable research.

Critical training

Modeling workshops reached nearly **750 participants** from five continents. Half of the attendees were students or post-docs, which means training is reaching the next generation of scientists. Workshop materials were viewed over **3,000 times** and are available in multiple languages, including English, Chinese, Portuguese, Spanish, and Korean.

Better communication

NANP engaged over **30,000 stakeholders** through conferences, webinars, and other interactions that enabled better communication among animal science professionals in different sectors, new research collaborations, and wider use of best practices.

How are NANP data used?

Widespread use

In 2020, the NANP website had an average of **500 page views per week** from scientists, educators, farmers, government agencies, and other users from more than **50 countries**. NANP data were used in numerous reports that informed policymakers' decisions related to animal agriculture, sustainability, and human health.

Fine tuning animal nutrition

The National Academies of Sciences, Engineering, and Medicine used (and will continue to use) NANP data to revise nutrient requirement models for beef, dairy, swine, and poultry. Animal scientists and Extension educators use these models to provide farmers with optimal feed formulations and strategies, which help minimize environmental impacts. These models are also widely cited as the foundation of research.

Improving animal health

Scientists used NANP data to shed light on ways to decrease antibiotic dependence in animal agriculture.

Developing new feeds

NANP data helped determine how biofuel grain production byproducts can be used in animal feed. Reusing byproducts not only reduces waste, but can also lower costs for the biofuel and livestock industries.

Predicting climate change

The United Nations Climate Change program will use NANP data in a model for estimating the greenhouse gas emissions and carbon footprint of livestock production.

Impacting human health

NANP data enabled publications about animal agriculture's impacts on human health and wellbeing. These publications have been downloaded and cited numerous times.

How is NANP funded?

Since its inception in 2010, _NRSP-9: The National Animal Nutrition Program_ has been supported in part through USDA-NIFA with off-the-top funding from the total federal Hatch Act allocation and by grants to participating institutions, including: Auburn University, University of California-Davis, Colorado State University, University of Georgia, University of Guelph, University of Idaho, University of Illinois, Iowa State University, University of Kentucky, Louisiana State University, University of Maryland, Michigan State University, University of Nebraska, North Carolina State University, North Dakota State University, Ohio State University, Pennsylvania State University, Purdue University, Rutgers University, Texas A&M University, Texas Tech University, Virginia Tech University, and Washington State University. In 2020, NRSP-9 funding was renewed through 2025.

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