Ervin Thaddeus Kornegay (1931–1999): A Brief Biography

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Figure 1. Ervin Thaddeus Kornegay. Color version available in the online PDF.

Ervin Thaddeus (E.T.) Kornegay was born on a general livestock and tobacco farm in Duplin County, North Carolina. He earned the BS degree from North Carolina State University in 1953 and served in the US Army. After having served 2 yr on active duty and 32 yr in the Army Reserves, he retired as a colonel in 1986. Following his active duty in the Army, he was assistant county agent in the North Carolina Extension Service. He earned the MS degree from North Carolina State in 1960 and the PhD in animal nutrition from Michigan State University in 1963. He joined the faculty of Rutgers University and was promoted to associate professor in 1967. Later that year, he moved to Virginia Polytechnic Institute and State University (Virginia Tech) and was promoted to professor in 1973. He married Juanita Goode in 1956, and they had 3 daughters, Susan, Cindy, and Jennifer, and 7 grandchildren. He was very devoted to his family and profession.

Kornegay was active in research and teaching. He taught undergraduate and graduate courses in swine nutrition and production. Perhaps his most outstanding accomplishment was serving as major professor to 27 students who earned the MS and 19 who earned the PhD degree. He also served on committees of another 46 graduate students. Kornegay cared about his students beyond the laboratory and classroom as well, regularly inviting many students who were thousands of miles from their own families to his own home for dinners and holidays with his family.

Kornegay developed a basic and applied research and graduate training program in swine nutrition and management, providing leadership in the development of interdisciplinary programs in mineral and vitamin nutrition, environmental nutrition, waste management, and characterization and improvement of structural soundness in swine.

His research covered a broad area including Cu and Zn supplementation, the effects of biotin on growth performance and toe lesions, the effects of chromium picolinate on N balance, growth performance, and carcass characteristics. Additional research investigated dietary lysine requirements, Ca and P requirements, effects of supplemental vitamin E on growth and immune status, and folic acid supplementation. He was a leader in sow nutrition, adding significantly to the understanding of Ca and P nutrition and interrelationships between growth rate, bone mineralization, and structural soundness. He and his colleagues demonstrated that long-term soil application of swine manure with increased Cu concentration did not present a hazard to crops grown on the land.

One of the most important contributions was his pioneering research on the feeding of phytase to improve the absorption of P. Feeding of the enzyme results in increased availability of phytate P (naturally occurring storage form of P in plants) for absorption by swine and poultry. Increasing the efficiency of utilization of

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P not only reduces the amount of supplemental P that needs to be fed, thereby reducing the cost of feeding swine and poultry, but reduces the amount of P excreted. This has resulted in enhancing the environment because P concentration in water is a pertinent environmental concern. In addition to his innovative research in swine nutrition and management, Kornegay made major contributions in poultry nutrition, especially concerning the benefits of feeding phytase in reducing the excretion of P, thereby reducing the amount of supplemental P fed.

Kornegay was one of the first to characterize the influence of stocking density on performance, immune status, animal health, growth, and reproductive performance of swine in confinement. He developed response equations that are widely used in growth models. Other significant research included diet acidification, probiotic supplementation, aflatoxins, dietary fiber, diet influences on structural soundness, by-product feeding, dietary energy, and housing and feeding systems for nursery pigs.

Kornegay was a very productive research scientist and a prolific writer. He was author or coauthor of more than 200 refereed journal papers, 22 chapters in books, and numerous abstracts, research reports, and articles in the popular press. His popular articles showed application of his research.

Kornegay was a recipient of numerous awards, including the Research Award, Gamma Sigma Delta, 1976; American Feed Manufacturers Nutrition Research Award, American Society of Animal Science, 1982; Moorman Travel Fellowship, National Feed Ingredients Association, 1983; Gustav Bohstedt Mineral Award, American Society of Animal Science, 1986; Alumnus Research Award, VA Tech, 1987; Animal Management Award, American Society of Animal Science, 1990; Industry Service Award, VA Pork Industry, 1991; and Morrison Award, American Society of Animal Science, 1998.

He was active in professional activities. He served 2 terms on the editorial board of the *Journal of Animal Science*. He was a member of the subcommittee of the National Research Council publication *Nutrient Requirements of Swine*. He served on the swine subcommittee of the Federation of Animal Science Societies for revision of the *Guide for the Care and Use of Animals in Agricultural Research and Teaching*.

Kornegay was active and served in leadership positions in departmental, college, and university committees. He served as a faculty senator, on the University Council, University Commission on Faculty Affairs, and University Animal Care Committee and was president of the College of Agriculture and Life Sciences Faculty Association.

Kornegay was a popular speaker at professional and industry meetings regionally, nationally, and internationally. He gave invited presentations in 25 foreign countries, including the Far East, Europe, Brazil, and Canada. Other international involvement included guest lectures at Zhejiang University and serving a 3-yr term on the editorial board of *Animal Feed Science and Technology*. He had a profound influence, not only in Virginia and the United States, but in other parts of the world listed above. One international scientist phoned Juanita shortly after the death of Kornegay and said, "I owe my life to Dr. Kornegay."

Kornegay was an active member of his community, serving on various committees, and was involved in several other community activities. You would often find him helping build and maintain the church preschool playgrounds or participating in Habitat for Humanity projects. At his Blacksburg home, Kornegay also had a farm and raised sheep and horses. "I want to learn about animals I don't know as much about," he told his children.

Kornegay was a leader in research and graduate training in swine and poultry nutrition. He was an innovative, visionary scientist. His basic and applied research was always aimed at enhancing the efficiency of animal products, which enhanced the environment. The research contributed to the profession, but also increased the profitability of livestock producers. The students he trained are in leadership positions in the United States and internationally, and he would be proud to know many are continuing his legacy as a lifelong learner, always willing to share of himself, his home, and his expertise. He reached out to people around the world to share his knowledge for the betterment of all.