

Jason K. Apple

Work phone: 361-593-3376

Cell: 479-601-1189

Email: Jason.Apple@tamuk.edu

Work address: 700 University Blvd., Kingsville,
Texas 78363

1995 to 2001 **Assistant Professor** (70% research/20% teaching/10% service), **Department of Animal Sciences, University of Arkansas, Fayetteville**
Authored/co-authored 14 peer-reviewed articles

90. Wang, Y., K. Thakali, P. Morse, S. Shelby, J. Chen, **J. Apple**, and Y. Huang. 2021. Comparison of growth performance and meat quality traits of commercial cross-bred pigs versus Large Black pig breeds. *Animals*, vol. 11(1), 200 (<https://doi.org/10.3390/ani11010200>).
89. Cauble, R., E. Greene, S. Orlowski, C. Walk, M. Bedford, **J. Apple**, M. T. Kidd, and S. Dridi. 2020. Research Note: Dietary phytase reduces broiler woody breast severity via potential modulation of breast muscle fatty acid profiles. *Poultry Sci.* 99:4009-4015.
88. Keys, C. A., **J. K. Apple**, J. W. S. Yancey, R. J. Stackhouse, and L. N. Mehall. 2020. Comparison of meat quality and health implications of branded and commodity beef. *Appl. Anim. Sci.* 36:135-144.
87. Wang, X., T. Tsai, F. Deng, X. Wei, J. Chai, J. Knapp, **J. Apple**, C. V. Maxwell, J. A. Lee, Y. Li, and J. Zhao. 2019. Longitudinal investigation of the swine gut microbiome from birth to market revealed stage and growth performance associated microbiome. *Microbiome* vol. 7, article no. 109.
86. Basinger, K. L., B. C. Shanks, **J. K. Apple**, J. D. Caldwell, J. W. S. Yancey, E. A. Backes, L. S. Wilbers, T. M. Johnson, and A. L. Bax. 2019. Application of tension to prerigor goat carcasses to improve cooked meat tenderness. *Meat Sci.* 147:1-5.
85. Hollenbeck, J. J., **J. K. Apple**, J. W. S. Yancey, T. M. Johnson, K. N. Kerns, and A. N. Young. 2019. Cooked color of precooked ground beef patties manufactured with mature bull trimmings. *Meat Sci.* 148:41-49.
84. Alexander, J. C., K. J. Rucker, D. L. Graham, J. D. Miller, and **J. K. Apple**. 2018. Perceptions of agricultural leadership academic programs of 1862 land-grant universities. *J. Agric. Educ.* 58:66-83
83. Ball, J. J., E. B. Kegley, P. A. Beck, **J. K. Apple**, D. R. Cox, and J. G. Powell. 2018. CASE STUDY: Effect of injectable castration regimen on beef bull calves. *Prof. Anim. Sci.* 34:218-222.
82. **Apple, J. K.**, C. V. Maxwell, B. E. Bass, J. W. S. Yancey, R. L. Payne, and J. Thomson. 2017. Effects of reducing dietary CP levels and replacement with crystalline AA on growth performance, carcass composition, and fresh pork quality of finishing pigs fed ractopamine hydrochloride. *J. Anim. Sci.* 95:4971-4985.
81. Caldwell, M. S., **J. K. Apple**

74. Browne, N. A., **J. K. Apple**, B. E. Bass, C. V. Maxwell, J. W. S. Yancey, T. M. Johnson, and D. L. Galloway. 2013. Phase-feeding dietary fat to growing-finishing pigs fed dried distillers' grains with soluble: I. Growth performance, pork carcass characteristics, and fatty acid composition of subcutaneous fat depots. *J. Anim. Sci.* 91:1493-1508.
73. Browne, N. A., **J. K. Apple**, C. V. Maxwell, J. W. S. Yancey, T. M. Johnson, D. L. Galloway, and B. E. Bass. 2013. Phase-feeding dietary fat to growing-finishing pigs fed dried distillers' grains with soluble: II. Fresh belly and bacon quality characteristics. *J. Anim. Sci.* 91:1509-1521.
72. Kuttappan, V.A., G. R. Huff, W. E. Huff, B. M. Hargis,

22. **Apple, J. K.**, C. V. Maxwell, M. R. Stivarius, L. K. Rakes, and Z. B. Johnson. 200

4. **Apple, J. K.**, J. A. Unruh, J. E. Minton, and J. B. Bartlett. 1993. Influence of repeated restraint and isolation stress and electrolyte administration on carcass quality and muscle electrolyte content of sheep. *Meat Sci.* 35:191-203.
3. **Apple, J. K.**, and J. V. Craig. 1992. The influence of pen size on toy preference of growing pigs. *Appl. Anim. Behav. Sci.* 35:149-155.
2. **Apple, J. K.**, M. E. Dikeman, L. V. Cundiff, and J. W. Wise. 1991. Determining retail product and trimmable fat yields within 1 hour postmortem. *J. Anim. Sci.* 69:4845-4857.
1. **Apple, J. K.**, M. E. Dikeman, D. Dil products,

174. Newman, D. J., S. T. Beauchamp, C. L. Burden, J. M. Young, **J. K. Apple**, X. Sun, C. C. Carr, and C. Roland. 2019. National retail benchmarking for pork 2019. *Meat Muscle Biol.* 3(2):97-98.
173. Ball, J. J., E. M. Herring, E. B. Kegley, J. T. Richeson, **J. K. Apple**, E. A. Palmer, and J. G. Powell. 2019. Comparison of growth-promoting implant regimens from calfhod to finishing in beef steers: finishing phase. *J. Anim. Sci.* 97(Suppl. 1):66.
172. Lichtenwalter, C. A., **J. K. Apple**

- containing psyllium seed husks on carcass composition, fatty acid profile, and cholesterol of rabbits. *J. Anim. Sci.* 94(Suppl. 2):190-191.
156. Kim, H. J., T. C. Tsai, J. J. Chewning, **J. K. Apple**, K. J. Touchette, J. E. Thomson, J. Less, and C. V. Maxwell. 2016. Effects of aggressive feed-grade amino acid supplementation in reduced CP diets formulated on ME or NE basis on growth performance of nursery pigs. *J. Anim. Sci.* 94(Suppl. 1):91.
 155. Maxwell, C. V., T. C. Tsai, H. J. Kim, **J. K. Apple**, K. J. Touchette, and J. J. Chewning. 2016. Supplementation of feed grade essential and non-essential amino acids to control levels in pigs fed reduced crude protein (RCP) diets meeting SID His:Lys ratio requirement to maintained growth performance and carcass composition of growing/finishing swine. *J. Anim. Sci.* 94(Suppl. 2):89.
 154. **Apple, J. K.**, C. V. Maxwell, T. C. Tsai, H. J. Kim, D. G. Cook, K. J. Touchette, J. E. Thomson, J. Less, and J. J. Chewning. 2015. Effect of feed-grade amino acid supplementation in reduced crude protein diets formulated on a net energy basis on performance and carcass characteristics of growing-finishing pigs. *J. Anim. Sci.* 93(Suppl. 2):18-19.
 153. **Apple, J. K.**, C. V. Maxwell, T. C. Tsai, H. J. Kim, J. W. Yancey, K. J. Touchette, J. E. Thomson, J. Less, and J. J. Chewning. 2015. Effects of reduced CP diets, formulated on either an ME or NE basis, on growth performance and carcass characteristics of growing-finishing swine. *J. Anim. Sci.* 93(Suppl. 2):74-75.
 152. **Apple, J. K.**, T. C. Tsai, H. J. Kim, M. Wang, B. P. Corbett, T. M. Johnson, and C. V. Maxwell. 2015. Intratesticular injection of zinc solution effectively castrates male pigs without affecting pork quality. *J. Anim. Sci.* 93(Suppl. s3):222.
 151. Basinger, K. L., B. C. Shanks, **J. K. Apple**, J. D. Caldwell, L. S. Wilbers, C. L. Thomas, W. M. Haslag, S. N. Kleithermes, and A. L. Bax. 2015. Pre-weaning growth performance of F₁ intact male Kiko × Boer goat kids from does divided into high and low lines for parasite resistance – one-year summary. *J. Anim. Sci.* 93(Suppl. s3):499.
 150. Cook, D. G., **J. K. Apple**, C. V. Maxwell, A. N. Young, D. L. Galloway, H. J. Kim, and T. C. Tsai. 2015. Effects of amino acid supplementation of reduced crude protein (RCP) diets formulated on a NE basis on belly fatty acid deposition in swine. *J. Anim. Sci.* 93(Suppl. 2):166.
 149. Cook, D. G., **J. K. Apple**, C. V. Maxwell, A. N. Young, D. L. Galloway, H. J. Kim, and T. C. Tsai. 2015. Effects of amino acid supplementation of reduce crude protein (RCP) diets formulated on a NE basis on the fatty acid composition of the LM and jowl subcutaneous fat. *J. Anim. Sci.* 93(Suppl. 2):188-189.
 148. Kim, H. J., T. C. Tsai, J. R. Bergstrom, J. J. Chewning, **J. K. Apple**, and C. V. Maxwell. 2015. Effects of a multicomponent enzyme product in diets with and without wheat middlings on the performance of nursery pigs during the first 23 d postweaning. *J. Anim. Sci.* 93(Suppl. 2):126-127.
 147. Thomas, C. L., B. C. Shanks, K. L. Basinger, **J. K. Apple**, B. R. Wiegand, J. D. Caldwell, L. S. Wilbers, A. L. Bax, and S. A. Marler. 2016. Evaluation of cholesterol and fatty acid content of lamb and goat longissimus muscle. *Meat Sci.* 112:169-170.
 146. Tsai, T. C., H. J. Kim, J. R. Bergstrom, J. J. Chewning, **J. K. Apple**, and C. V. Maxwell. 2015. Effects of increasing dietary levels of *Aspergillus oryzae*-derived phytase (Ronozyme) on the growth performance of nursery pigs fed an adequate phosphorus diet. *J. Anim. Sci.* 93(Suppl. 2):55-56.
 145. Tsai, T. C., H. J. Kim, J. L. Usry, J. Cohen, J. J. Chewning, **J. K. Apple**, and C. V. Maxwell. 2015. Effect of Zn sources and inclusion rate on growth performance and carcass composition in grower-finisher pigs. *J. Anim. Sci.* 93(Suppl. 2):143-144.
 144. Basinger, K., J. D. Caldwell, **J. K. Apple**, and B. C. Shanks. 2015. Application of “Tendercut” with added weight and “Tenderstretch” to goat carcasses. *Meat Sci.* 101:127.
 143. Cook, D., **J. Apple**

energy basis on longissimus muscle (LM) quality of growing-finishing swine. Meat Sci. 101:122.

142. Hawley, J., E. B. Kegley, J. W. Yancey, and **J. K. Apple**

127. Kuttappan, V. A., G. R. Huff, W. E. Huff, B. M. Hargis, **J. K. Apple**, C. Coon, and C. M. Owens. 2012. Comparison of hematologic and serologic profiles of broiler birds with normal and severe degrees of white striping in breast fillets. *Poultry Sci.* 91(Suppl. 1):148.
126. Moon, C. T., J. W. S. Yancey,

110. Keys, C. A., **J. K. Apple**, J. W. S. Yancey, R. J. Stackhouse, and L. N. Mehall. 2010. Benefits of natural branded vs. conventionally-fed, commodity beef. *Meat Sci.* 86:554.
109. Machete, J. B., **J. K. Apple**, R. J. Stackhouse, T. M. Johnson, C. A. Keys, and J. W. S. Yancey. 2010. Color stability and tenderness variations within the gluteus medius from beef top sirloin butts. *J. Anim. Sci.* 88(E-Suppl. 3):83.
108. Stackhouse, R. J., **J. K. Apple**, J. W. S. Yancey, C. A. Keys, T. M. Johnson, and L. N. Mehall. 2010. The impact of citric acid marination pH on visual and instrumental color characteristics of dark-cutting beef. *J. Anim. Sci.* 88(E-Suppl. 3):16.
107. Stackhouse, R. J., **J. K. Apple**, J. W. S. Yancey, C. A. Keys, and T. M. Johnson. 2010. Effect of

91. Shockey, J. D., S. A. Gunter, P. A. Beck, and **J. K. Apple**. 2008. Evaluation of feeding systems for finishing beef cattle. *J. Anim. Sci.* 86(Suppl. 1):12.
90. Yancey, J. W. S., **J. K. Apple**, J. T. Sawyer, M. S. Lee, and M. D. Wharton. 2008. Relationship of belly-flop measurements with smokehouse yield and fatty acid composition. *J. Anim. Sci.* 86(E-Suppl. 2):38.
89. Yancey, J. W. S.,

72. **Apple, J. K.**, C. V. Maxwell, D. L. Galloway, S. Hutchison, and J. T. Sawyer. 2006. Effect of dietary fat source on the polyunsaturated fatty acid (PUFA) composition of backfat from growing-finishing swine. *J. Anim. Sci.* 84(Suppl. 2):58.
71. **Apple, J. K.**, C. V. Maxwell, D. L. Galloway, S. Hutchison, and J. T. Sawyer. 2006. Effect of dietary fat source on fatty acid composition of backfat from growing-finishing swine. *J. Anim. Sci.* 84(Suppl. 2):58.
70. Flórez-Díaz, H., E. B. Kegley, G. F. Erf, D. L. Kreider, K. P. Coffey, **J. K. Apple**, and N. D. Luchini. 2006. Effects of rumen-protected Ca salts of conjugated linoleic acid (CLA) and previous rate of gain on growth performance, immune function, and carcass characteristics of feedlot cattle. *J. Anim. Sci.* 84(Suppl. 1):70.
69. Lee, M. S., **J. K. Apple**, C. V. Maxwell, D. L. Galloway, J. T. Sawyer, and J. W. S. Yancey. 2006. Effects of dietary fat source and slaughter weight on LM fatty acid composition of growing-finishing swine. *J. Anim. Sci.* 84(Suppl. 2):20.

54. Hutchison, S., **J. K. Apple**, E. B. Kegley, and T. J. Wistuba. 2004. Comparison of beef tallow versus

- trisodium phosphate on processing, textural, lipid, instrumental color and sensory characteristics when used in a ground beef patty production system. *J. Anim. Sci.* 80(Suppl. 2):13.
37. Jimenez-Villarreal, J. R., F. W. Pohlman, Z. B. Johnson, A. H. Brown, Jr., **J. K. Apple**, and J. F. Meullenet. 2002. The effects of multiple antimicrobial interventions on processing, lipid, textural instrumental color and sensory characteristics when used in a ground beef patty production system. *J. Anim. Sci.* 80(Suppl. 2):16.
 36. Roberts, W. J., **J. K. Apple**, C. B. Boger, C. V. Maxwell, and K. G. Friesen. 2002. Effects of dietary manganese on quality characteristics of pork longissimus muscle (LM) chops during retail display. *J. Anim. Sci.* 80(Suppl. 2):51.
 35. Wistuba, T. J., E. B. Kegley, and **J. K. Apple**. 2002. Influence of fish oil addition on growth performance and immune function of growing cattle. *J. Anim. Sci.* 80(Suppl. 2):21.
 34. Wistuba, T. J., E. B. Kegley, and **J. K. Apple**. 2002. Influence of fish oil addition to finishing diets on carcass characteristics, immune function, and growth performance of cattle. *J. Anim. Sci.* 80(Suppl. 1):99.
 33. **Apple, J. K.**, J. M. Burke, W. J. Roberts, J. S. Stephenson, and L. K. Rakes. 2001. Effect of breed-type on the performance and carcass traits of hair-sheep. *J. Anim. Sci.* 79(Suppl. 1):442.
 32. **Apple, J. K.**, E. B. Kegley, L. K. Rakes, K. S. Anschutz, T. J. Wistuba, and C. V. Maxwell. 2001. Effects of supplemental magnesium and short-term transportation stress on pork quality. *J. Anim. Sci.* 79(Suppl. 2):9.
 31. **Apple, J. K.**, C. V. Maxwell, A. L. Hays, D. L. Kirkpatrick, M. R. Stivarius, and L. K. Rakes. 2001. Effects of magnesium mica and halothane-genotype on performance and carcass traits of growing-finishing swine. *J. Anim. Sci.* 79(Suppl. 2):9.
 30. **Apple, J. K.**, M. R. Stivarius, J. Rieman, L. K. Rakes, and C. V. Maxwell. 2001. Effects of halothane genotype, dietary magnesium, and duration of refrigerated storage on quality characteristics of vacuum-packaged pork loins. *J. Anim. Sci.* 79(Suppl. 2):56.
 29. Pohlman, F. W., M. R. Stivarius, K. S. McElyea, **J. K. Apple**, and J. R. Jimenez-Villarreal. 2001. The effects of ozone and chlorine dioxide on microbial, instrumental color and sensory color and odor characteristics when used in a ground beef production system. *J. Anim. Sci.* 79(Suppl. 2):10.
 28. Wistuba, T. J., E. B. Kegley, and **J. K. Apple**. 2001. Influence of fish oil addition on growth performance, immune function, and carcass characteristics of cattle. *Plains Nutr. Conf. Publ. No. AREC 01-23*, p. 95.
 27. **Apple, J. K.**, J. R. Davis, L. K. Rakes, C. V. Maxwell, and F. W. Pohlman. 2000. Dietary magnesium effects on quality of vacuum-packaged pork loins during refrigerated storage. *J. Anim. Sci.* 78(Suppl. 2):16.
 26. Brown, D. C., **J. K. Apple**, C. V. Maxwell, B. Z. deRodas, Z. B. Johnson, and K. Friesen. 2000. Efficacy of feather meal in improving gain, efficiency and carcass composition in growing-finishing pigs. *J. Anim. Sci.* 78(Suppl. 1):59.
 25. Davis, J. R., **J. K. Apple**, D. H. Hellwig, E. B. Kegley, and F. W. Pohlman. 2000. The impact of feeding poultry litter on microbial contamination of beef carcasses. *J. Anim. Sci.* 78(Suppl. 2):44.
 24. Davis, J. R., **J. K. Apple**, D. H. Hellwig, E. B. Kegley, and F. W. Pohlman. 2000. The impact of fertilization with poultry litter on microbial contamination of grass-fed beef carcasses. *J. Anim. Sci.* 78(Suppl. 2):44.
 23. Pohlman, F. W., M. R. Stivarius, K. S. McElyea, M. G. Johnson, **J. K. Apple**, and A. L. Waldroup. 2000. The effects of hot water and lactic acid treatment prior to grinding on microbial growth, instrumental color and sensory properties of ground beef during storage. *J. Anim. Sci.* 78(Suppl. 2):17.
 22. Stivarius, M. R., F. W. Pohlman, K. S. McElyea, M. G. Johnson, **J. K. Apple**, and A. L. Waldroup. 2000. Reduction of *E. coli*.

21. Stivarius, M. R., F. W. Pohlman, K. S. McElyea, M. G. Johnson, **J. K. Apple**, A. L. Waldroup, and Z. B. Johnson. 2000. Reduction of microbial pathogens in ground beef utilizing hurdle technology and a novel ozone generator. *J. Anim. Sci.* 78 (Suppl. 2):48.
20. Stivarius, M. R., F. W. Pohlman, K. S. McElyea, M. G. Johnson, **J. K. Apple**, A. L. Waldroup, and Z. B. Johnson. 2000. Reduction of microbial pathogens in ground beef using multiple intervention technology. *J. Anim. Sci.* 78(Suppl. 2):45.
19. **Apple, J. K**

3. Bartlett, J. B., **J. K. Apple**, J. A. Unruh, and J. E. Minton. 1991. Influence of preslaughter stress and electrolyte administration on lamb endocrine responses and carcass quality of sheep. *J. Anim. Sci.* 69(Suppl. 1):96.
2. **Apple, J. K.**, M. E. Dikeman, L. V. Cundiff, and J. W. Wise. 1990. Determining retail product within one hour postmortem. *J. Anim. Sci.* 68(Suppl. 1):92.
1. **Apple, J. K.**, M. E. Dikeman, D. D. Simms, C. L. Kastner, and G. Kuhl. 1990. Effects of Finaplix®, Synovex-S® and Ralgro®, singularly or in combinations, on performance, carcass traits and longissimus palatability of Holstein steers. *J. Anim. Sci.* 68(Suppl. 1):93.

RESEARCH REPORTS

83. Lichtenwalter, C. A., **J. K. Apple**, B. Kegley, and T. C. Tsai. 2018. Impact of teat order on feed consumption in swine from birth to nursery. *Discovery, the Student Journal of Dale Bumpers College of Agricultural, Food and Life Science* 19:46-52.
82. Hamm, J. M., and **J. Apple**. 2018. Predicting kidding date using prepartum milk calcium concentrations and comparing kid growth to colostrum quality in goats. *Discovery, the Student Journal of Dale Bumpers College of Agricultural, Food and Life Science* 19:24-30.
81. Hawley, J., B. Kegley, D. Galloway, J. Yancey, and **J. Apple**. 2015. Effects of excess dietary sulfur on fatty acid composition in muscle of beef cattle. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 628:56-58.
80. Basinger, K. L., B. C. Shanks, **J. K. Apple**, J. D. Caldwell, E. A. Backes, J. J. Hollenbeck, K. R. Ness, J. W. S. Yancey, L. S. Wilbers, and E. L. Farrell. 2014. Carcass manipulation to improve tenderness in goat meat. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 620:58-60.
79. Hawley, J., E. B. Kegley, J. W. S. Yancey, **J. K. Apple**, T. M. Johnson, and A. W. Ryan. 2014. Effects of excess dietary sulfur on beef carcass characteristics and quality after aging. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 620:26-30.
78. Hollenbeck, J. J., **J. K. Apple**, J. W. S. Yancey, K. N. Kerns, and A. N. Young. 2013. Beef quality attributes of precooked ground beef patties formulated with mature bull trimmings. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 612:115-119.
77. Hollenbeck, J. J., **J. K. Apple**, J. W. S. Yancey, A. N. Young, C. T. Moon, T. M. Johnson, and D. L. Galloway. 2013. Effects of lactic acid enhancement on beef quality attributes of mature bull strip loins. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 612:120-125.
76. Moon, C. T., J. W. S. Yancey, **J. K. Apple**, J. J. Hollenbeck, T. M. Johnson, and A. R. Winters. 2012. Incorporation of lean finely textured beef improved select quality characteristics of ground beef patties. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 606:100-103.
75. Ahrens, C. R., J. W. S. Yancey, **J. K. Apple**, T. M. Johnson, and N. A. Browne. 2011. Effects of Noni puree vs. clarified Noni juice on quality characteristics of fresh ground beef patties. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 597:89-92.
74. Ahrens, C. R., J. W. S. Yancey, **J. K. Apple**, T. M. Johnson, and N. A. Browne. 2011. Effects of Noni puree vs. clarified Noni juice on quality characteristics of cooked ground beef patties. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 597:93-96.
73. Browne, N. A., **J. K. Apple**, and J. W. S. Yancey. 2011. Phase-feeding dietary fat to growing-finishing pigs fed dried distillers grains with soluble I. Performance and carcass characteristics. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 597:75-78.
72. Browne, N. A., **J. K. Apple**, and J. W. S. Yancey. 2011. Phase-feeding dietary fat to growing-finishing pigs fed dried distillers grains with soluble II. Fresh belly quality and yields of commercially-processed bacon. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 597:79-82.
71. Browne, N. A., **J. K. Apple**, and J. W. S. Yancey. 2011. Phase-feeding dietary fat to growing-finishing pigs fed dried distillers grains with soluble III. Quality characteristics of bacon. *Ark. Anim. Sci. Dept. Rep., AAES Research Series* 597:83-85.

70. Gadberry, S., P. Beck, B. Barham, W. Whitworth, G. Montgomery, and **J. Apple**. 2010. Impact of a starch- or fiber-based creep feed and backgrounding diet on calf growth performance and carcass characteristics. Ark. Anim. Sci. Dept. Rep., AAES Research Series 584:89-91.
69. Keys, C. A., **J. K. Apple**, J. W. S. Yancey, R. J. Stackhouse, and L. N. Mehall. 2010. Benefits of natural branded vs. conventionally-fed, commodity beef. Ark. Anim. Sci. Dept. Rep., AAES Research Series 584:57-59.
68. Stackhouse, R. J., **J. K. Apple**, J. W. S. Yancey, C. A. Keys, and T. M. Johnson. 2010. Citric acid enhancement at solution pH values between 3.5 and 5.0 does not alter the fresh or cooked color of dark-cutting beef. Ark. Anim. Sci. Dept. Re08.62 Tm0 g0 Gk DepTm0 g0 G(91.)TJET MehaE

53. Sawyer, J. T., **J. K. Apple**, and Z. B. Johnson. 2007. The impact of acidic marination concentration and sodium chloride on sensory and instrumental color characteristics of dark-cutting beef. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 555:92-95.*
52. Sawyer, J. T., **J. K. Apple**, Z. B. Johnson, R. T. Baublits, and J. W. S. Yancey. 2007. Color stability of dark-cutting beef enhanced with lactic acid. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 555:87-91.*
51. Flórez-Díaz, H., E. B. Kegley, G. F. Erf, D. L. Kreider, K. P. Coffey, **J. K. Apple**, and N. D. Luchini. 2006. Effects of Ca salts of conjugated linoleic acid and previous rate of weight gain on growth performance, immune function, and carcass characteristics of beef cattle. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 545:163-166.*
50. Lee, M. S., J. W. S. Yancey, **J. K. Apple**, J. Sawyer, and R. T. Baublits. 2006. Within muscle variation in color and pH of beef semimembranosus. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 545:26-30.*
49. Sawyer, J. T., **J. K. Apple**, J. –F. Meullenet, B. Cheatman, W. K. Chung, R. Xiong, and S. G. Bajwa. 2006. Empirical modeling for predicting tenderness of muscles from the beef round. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 545:52-56.*
48. Sawyer, J. T., R. T. Baublits, **J. K. Apple**, J. –F. Meullenet, Z. B. Johnson, and T. K. Alpers. 2006. Lateral and longitudinal characterization of instrumental tenderness and sensory characteristics in the beef semimembranosus. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 545:43-46.*
47. Sawyer, J. T., R. T. Baublits, **J. K. Apple**, and Z. B. Johnson. 2006. Longitudinal and lateral characterization of color stability in the beef semimembranosus. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 545:47-51.*
46. **Apple, J. K.**, C. V. Maxwell, Jr., L. K. Rakes, S. Hutchison, W. A. Wallis, J. D. Stephenson, and Z. B. Johnson. 2005. Effects of dietary fat source and length of fat consumption on performance and carcass composition of growing-finishing swine. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 535:30-34.*
45. **Apple, J. K.**, C. V. Maxwell, Jr., L. K. Rakes, D. Galloway, and S. Hutchison. 2005. Effects of dietary fat source and length of fat consumption on degree of unsaturation of carcass composition samples. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 535:35-38.*
44. Kandaswamy, J., **J. K. Apple**, and S. G. Bajwa. 2006. *Ark. Anim. Sci. Dept. Rep., AAES Research Series 545:391-4.*

37. Davis, M. E., **J. K. Apple**, C. V. Maxwell, S. C. Arthur, Z. B. Johnson, and M. S. Dirain. 2004. Effect of weaning age and commingling after the nursery phase on growth performance, mortality rate, and behavioral indicators of welfare. Ark. Anim. Sci. Dept. Rep., AAES Research Series 522:160-165.
36. Hutchinson, S., E. B. Kegley, **J. K. Apple**, T. J. Wistuba, and M. E. Dikeman. 2004. Effect of poultry fat addition to finishing rations on beef quality during retail display and sensory panel evaluations. Ark. Anim. Sci. Dept. Rep., AAES Research Series 522:126-128.
35. Hutchinson, S., E. B. Kegley, **J. K. Apple**, T. J. Wistuba, and D. C. Rule. 2004. Poultry fat addition

5. **Apple, J. K.**, J. C. Davis, J. Stephenson, S. L. Beaty, and L. K. Rakes. 1998. Influence of body condition scores on carcass composition of culled beef cows. Ark. Anim. Sci. Dept. Rep., AAES Research Series 464:62-65.
4. **Apple, J. K.**, L. K. Rakes, and H. B. Watson. 1998. Cooking and shearing methodology effects on

6. **Apple, J. K.** 1991. Beef as food. In: Kansas 4-H Beef Curriculum, Kansas State University Cooperative Extension Service, Manhattan.
5. **Apple, J. K.** 1991. Determining live and carcass prices for market steers. In: Kansas 4-H Beef Curriculum, Kansas State University Cooperative Extension Service, Manhattan.
4. **Apple, J. K.** 1991. Calf to carcass, the slaughter process. In: Kansas 4-H Beef Curriculum, Kansas State University Cooperative Extension Service, Manhattan.
3. **Apple, J. K.**

38.

65. Tarrant, K., A. Culbertson, **J. Apple**, M. Donato-Molina, & D. Koltes. 2021. Create and implement bilingual poultry welfare curricula to enhance animal science education and increase underrepresented student employability. USDA, NIFA, HSI – \$999,998
64. Gadberry, S., K. Lawson, & **J. Apple**. 2018. Improving consistency in farm-finished beef sold at

found within the beef *semimembranosus*.

- pork quality. Prince Milling Co. - \$48,792
6. **Apple, J. K.**, & E. B. Kegley. 1998. Nutritional modification of stress response and formation of the dark-cutting condition. Arkansas E. P. S. Co. R. Program - \$284,023
 5. **Apple, J. K.**, K. G. Friesen, & C. V. Maxwell. 1998. The influence of spray-dried blood meal on pork quality. *Journal of Animal Science* 86:1206-1212

University of Arkansas

ANSC 1051	Introduction to the Livestock Industry	2019 (S)	49	5.00
ANSC 1051	Introduction to the Livestock Industry	2018 (F)	108	4.80
ANSC 1051	Introduction to the Livestock Industry	2018 (S)	51	4.82
ANSC 1051	Introduction to the Livestock Industry	2017 (F)	98	4.84

ANSC 4272	Sheep Production	2005	33	4.2
ANSC 4272	Sheep Production	2003	27	4.7
ANSC 410V	ST: Meat Selection and Grading	2002	30	4.6
ANSC 410V	ST: Meat Selection and Grading	1999	5	<i>n/a</i>
ANSC 410V	ST: Meat Selection and Grading	1997	11	<i>n/a</i>
ANSC 410V	ST: Meat Selection and Grading	1996	11	<i>n/a</i>
ANSC 5853	Advanced Meat Technology	2016	9	4.29
ANSC 5853	Advanced Meat Technology	2014	12	5.00
ANSC 5853	Advanced Meat Technology	2012	8	4.81
ANSC 5853	Advanced Meat Technology	2011	9	<i>n/a</i>
ANSC 5853	Advanced Meat Technology	2008	8	<i>n/a</i>
ANSC 5853	Advanced Meat Technology	2007	5	<i>n/a</i>
ANSC 5853		2014	8	<i>n/a</i>

J. Buchanan Boger		Tyson Foods, Inc.
M.S. (<i>non-thesis</i>)		
Jennifer Isaac	2022	Expected, May 2025
Brent Beverly	2022	Expected, December 2024
Ashley Garza	2022	Expected, May 2024
Paulo Lindsey	2022	Graduated, May 2024
Jacey Lorimer	2022	Expected, December 2024
Sharla Gilchrest	2019	Self-employed
Justin Bacon	2017	Food Technologist, Simmons Food, Inc.
Eric Bryant	2020	Tyson Foods, Inc.
Chantell Jernigan	2019	Simmons Food, Inc.
Brandon Benish	2015	Food Safety, Tyson Foods, Inc.
Yi Zhang	2014	Beijing, China
Darren Toczko	2011	Bar-S Foods Co.
Honors undergraduate research		
Eva Morgan	2023	S&P Global
Kelsey Johnson	2019	OU-TU School of Community Medicine
Mersady Redding	2019	University of Arkansas Medical School
Rachel Schaffhauser		College of Vet.Med., Louisiana St. Univ.
Callen Lichtenwalter	2018	Assistant Professor, The Ohio State Univ.
Zena Hicks	2018	Tyson Foods, Inc.
Justin Hamm	2018	Self-employed
Lensey Watson	2017	DVM, Mississippi St. Univ.
Rosalee Reese	2012	American SW Ichthyological Researchers LLC
Keely Trusell	2010	Deceased
Allison Cantrell	2008	Self-employed
Undergraduate research mentor		
Reagan Callahan	ANSC	Librarian, Texas A&M University
Chelsey Ahrens	ANSC	Arkansas 4-H Animal Science Specialist
Crystal Ahrens	ANSC	Director of Communications, AMSA
Nathan Tapp III	ANSC	Food Scientist, Simmons Foods, Inc.
Wendie Wallis	ANSC	Food Scientist, Cargill Meat Solutions
Shanna Hutchison	ANSC	PIC, Inc.

Gabriel Vera	ANSC	Small business owner
Cristian Rivas	ANSC	Graduated, December 2022
Gabriella Garcia	AGSC	Expected, January 2022
Lane Baker	AGSC	Instructor, James Madison Agriscience Magnet
Venus Wilson	ANSC	

- 1999 to 2001 Meat Evaluation Handbook Revision Committee
- 1999 National 4-H Meat Judging Contest Official Committee
- 1999 National Western Intercollegiate Meat Judging Contest (lamb carcasses official)
- 1998 Eastern National Intercollegiate Meat Judging Contest (beef carcasses official)
- 1997 Eastern National Intercollegiate Meat Judging Contest (pork carcasses official)
- 1996 Iowa State University Invitational Meat Judging Contest (beef cuts official)
- 1995 Eastern National Intercollegiate Meat Judging Contest (lamb carcasses official)
- 1992 Beef Empires Days Meats Judging Contest (committee chair)

PRESENTATIONS

- 2024 McPherson County Cow Calf School, McPherson, KS. Invited presentation entitled: "Marketing Farm-Raised Beef"
- 2023 Texas Agri-Life Path-to-Plate Program, Kingsville, TX
- 2022 Texas Livestock Ambassadors Training, Kingsville, TX
- 2021 Texas Agri-Life Path-to-Plate Program, Kingsville, TX
- 2021 American Society of Animal Science, ARPS Symposium, Louisville, KY. Invited presentation entitled: "Can regionalized livestock production and meat packing meet

- marketing strategies for beef cattle?"
- 2003 Marion County 4-H Steer Feed-Out, Fayetteville, AR. Invited presentation entitled: "Marketing beef cattle"
- 2003 Beef Carcass Fabrication Demonstration, Clarksville Packing Company, Clarksville, AR
- 2003 Keynote banquet speaker at Auburn University Meat Science Association Banquet, 2003
- 2003 Department of Animal and Dairy Sciences, Auburn University, 2003. Invited seminar entitled: "Fundamentals of writing a journal article."
- 2002 Cleburne County Cattlemen's Assn. Mtg., Drasco, AR. Invited presentation entitled: "Beef quality management"
- 2002 Arkansas Beef Council, Little Rock, AR. Invited presentation entitled: "Developing a reliable animal-model to study the dark-cutting condition"
- 2002 University of Arkansas Cooperative Extension In-Service Training, Fayetteville, AR. Invited presentation entitled: "What are my cattle worth?"
- 2002 Tyson Food, Inc., Corporate "Beef 101" Seminar, Springdale, AR. Invited presentation entitled: "The beef packing industry."
- 2001 Mena High School FFA Banquet Keynote Speaker, Mena, AR
- 2000 Kansas-Oklahoma-Missouri-Arkansas Beef Cattle Conference, Joplin, MO, 2000. Invited presentation entitled: "Cull cows: by-product or value-added commodity?"
- 2000 Polk County Forage/Beef Short Course, Mena, AR. Presentation entitled: "Realimentation and delayed marketing of culled cows can increase your cows' value"
- 2000 Arkansas Beefmaster Breeders Association Field Day at Hickory Ridge Farms, Paris, AR. Presentation entitled: "What affects the value of my cattle?"
- 1999 52nd Annual Reciprocal Meat Conference, Oklahoma State University, Stillwater. Graduate Student Opportunities – Industry/Government Panel Discussion. Invited question to address: "How important is it to complete projects by the suggested deadline in the research proposal, would you sacrifice the quality of the research to make the deadline, or are proposals written with unrealistic deadlines just to get an advantage over the competition during the proposal submission and review process?"
- 1999 13th Annual Arkansas-Oklahoma Border Beef Cattle Conference, Ft. Smith, AR, 1999. Invited presentation entitled: "Beef cattle marketing: What's the value my cattle?"
- 1999

entitled: "The history of beef grading system"