($P < 0.05$) ADG (0.87, 0.89, 0.90 and 0.91 kg/d in diets 1–4, respectively) and G:F (0.30, 0.31, 0.31, and 0.32 kg/kg in diets 1–4, respectively) compared with pigs fed the control diet. Pigs fed diets containing DFM had a 5.4 and 4.2% larger ($P < 0.05$) LEA and greater ($P = 0.06$) FFL, respectively, compared with pigs fed the control diet. In conclusion, *Bacillus* spp. DFM supplementation enhances fecal VFA concentrations, ADG, and G:F as well as increases carcass LEA and FFL in pigs fed diets containing multiple fiber sources.

Key Words: direct-fed microbials, lean accretion, pigs

127 **Effect of *Bacillus* spp. direct-fed microbials on fecal VFA concentrations, growth performance, and carcass characteristics of growing–finishing pigs.** N. W. Jaworski[1,]*, A. Owusu-Asiedu[2], A. A. Awati[2], H. H. Stein[1], [1]*University of Illinois at Urbana-Champaign, Urbana,* [2]*DuPont Industrial Biosciences- Danisco Animal Nutrition, Marlborough, Wiltshire, United Kingdom.*

An experiment was conducted to determine effects of *Bacillus* spp. direct-fed microbials (DFM) on fecal VFA concentrations, growth performance, and carcass characteristics of growing–finishing pigs. A total of 256 pigs (initial BW: 35.0 ± 3.7 kg) were randomly allotted to 1 of 4 dietary treatments in a randomized complete block design with 4 diets and 16 replicate pens per treatment. There were 3 experimental periods: grower, early finisher, and late finisher. Diets were based on corn, soybean meal, distillers dried grains with solubles, wheat middlings, corn germ, and soybean hulls and were formulated to be isocaloric and isonitrogenous (ME = 3116, 3143, and 3151 kcal/kg and SID Lys = 0.98, 0.85, and 0.67% for grower, early finisher, and late finisher diets, respectively). The 4 dietary treatments were the control diet with no DFM and 3 additional diets containing 250 or 500 g/MT *Bacillus* spp. DFM or 500 g/MT of a different *Bacillus* spp. DFM (BAC). Pigs and feed were weighed at the start and end of each growing period, and ADG, ADFI, and G:F were determined. Fecal samples were collected at the end of the grower and late finisher periods and analyzed for VFA. At the end of the experiment, back-fat depth and loin eye area (LEA) were measured using ultrasound on pigs within the final 9 replicate pens per treatment and fat free lean (FFL) was calculated. Data were analyzed using the Mixed procedure of SAS. During the growing period, pigs fed DFM containing diets had greater ($P < 0.05$) total fecal VFA concentrations (422.0, 457.4, 466.3, and 481.3 μg/g in diets 1–4, respectively) compared with pigs fed the control diet. Pigs fed the diet containing 250 g/MT BAC had greater ($P < 0.05$) ADG and final BW during the growing period compared with pigs fed the control diet. During the early finishing period pigs fed DFM containing diets had greater