Effects of a blend of phytonutrients (Lean Fuel) on performance and market weight in finisher pigs during the late finishing phase when compared to a 1500 kcal and 1600 kcal diet

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The objective of this study was to determine the effects of Lean Fuel (LF) on performance in finishing pigs when compared to Negative Control (NC, 3306 kcal/kg) and Positive Control (PC, 3527 kcal/kg) diets. A total of 769 EBX Ultra finisher pigs (avg. BW=92.9 kg) were randomly allocated to NC, PC and NC + 0.25% LF. All diets met or exceeded NRC requirements. Pigs were allocated by sex, BW and pigs per pen (21 to 33 pigs/pen) and 10 replications/treatment. Pens of pigs were weighed and feed disappearance was recorded on d 0, 21, and 37, which were used to calculate ADG, ADFI, and G:F. Body weight was calculated by taking the pen weight divided by the pigs per pen. Pigs were marketed for slaughter on d 28 and 37. On d 28 the 4 largest pigs were marketed from all pens across all treatments, and the remainder in each pen marketed on d 37. All data were analyzed using the MIXED procedure of SAS with a randomized complete block design. Pen served as the experimental unit for growth performance, health status, and market weight. Pig served as the experimental unit for carcass characteristics. Differences among treatments were considered significant when $P \leq 0.05$. During d 0-21, prior to 1st marketing, there was no difference in ADG amongst treatments, including no difference between NC and PC. After the 1st marketing ADFI was affected by treatment ($P < 0.05$) with it being greatest for LF (2.80 kg/d) which was greater than PC (2.69 kg/d) that in turn was greater than NC (2.63 kg/d). Growth rate was the same for LF (934 g/d) and PC (934 g/d) and numerically greater than NC (875 g/d). Gain-to-feed was higher ($P < 0.05$) for PC (0.34) than both NC (0.33) and LF (0.32). Hot carcass weight for the first cut was affected by treatment with PC (95.4 kg) and LF (93.4 kg) being greater ($P < 0.01$) than NC (91.0 kg). For the 2nd marketing PC (92.2 kg) was greater ($P < 0.01$) than both NC (89.4 kg) and LF (90.3 kg). Overall carcass weight was greater ($P < 0.01$) for PC (93.1 kg) than LF (91.0 kg) and NC (89.8 kg). This trial suggests that high energy diets and LF may be beneficial for increasing ADFI, ADG and market weight in late finishing pigs.