
Two experiments were conducted to evaluate dextrose, lactose, and whey sources for phase 2 diets. In Exp. 1, 228 pigs (7.8 kg) were used in a 14-d experiment. There were 6 treatments which included: 1) control (corn-soybean meal diet), or control diet with 2) 7.2% lactose; 3) 7.2% dextrose anhydrous; 4) 7.2% dextrose monohydrate; 5) 10% feed-grade whey; and 6) 10% food-grade whey. Pigs were blocked by BW and randomly allotted to treatment on d 7 after weaning, with 8 reps and 4 or 5 pigs/pen. Pigs fed lactose (381 g/d) or food-grade whey (376 g/d) had improved (P<0.05) ADG compared with pigs fed feed-grade whey (311 g/d) with pigs fed the control and dextrose sources (358, 358 and 363 g/d) being intermediate. Pigs fed food-grade whey had greater (P<0.05) G/F than pigs fed dextrose monohydrate. Feeding the control diet improved (P<0.05) margin-over-feed (MOF) compared to diets containing lactose, dextrose anhydrous, or either whey source. In Exp. 2, 352 pigs (7.8 kg) were used in a 14-d experiment to evaluate 7 sources of whey. There were 8 treatments consisting of a corn-soybean meal-based control diet and 7 diets containing 10% whey, each of a different source. Pigs were blocked by BW and randomly allotted to treatment on d 5 after weaning, with 8 reps and 5 or 6 pigs/pen. Pigs fed sources A and E had improved (P<0.05) ADG compared to the control and sources B and D with pigs fed other sources being intermediate (295, 349, 308, 327, 308, 349, 327, and 318 g/d for the control and sources A-F). Pigs fed source E had greater (P<0.05) ADFI than the control or sources B, C, D, and G. Pigs fed source A had improved (P<0.05) G/F compared to the control with pigs fed other sources being intermediate. Feeding the control diet improved (P<0.05) MOF compared to sources B, D, and G. In conclusion, differences in growth performance of pigs fed various lactose and dextrose sources exist. Feeding a Phase 2 diet without a lactose source provided the greatest margin over feed in these trials.

Key Words: Lactose, Dextrose, Whey