Supplementing Vitamin D in Young Pigs

Larger litter sizes and increased indoor production has created an increased awareness of suboptimal vitamin D status in young pigs. While rickets is a common ailment associated with Vitamin D deficiency, more producers and veterinarians are discovering that the peri-weaning failure to thrive syndrome (PFTS) is also a symptom of suboptimal Vitamin D levels.

Pigs are born with a small reserve of vitamin D, a fat soluble vitamin needed for bone growth and development and proper immune function. Extra supplementation of sows with vitamin D will not increase the level in newborn pigs. Nursing pigs receive only a little vitamin D from the sow’s colostrum and almost none from sow’s milk. In addition today’s genetics and later weaning age are producing a larger number of heavier pigs, so the limited supply of vitamin D in the sow’s colostrum is spread out over more pigs. The nursing pigs use this vitamin D before weaning, often creating a deficiency situation. Pigs can use sunlight to produce vitamin D, but moving them indoors has also contributed to the low levels measured in the blood of weaned pigs.

What might producers expect to see if they have pigs experiencing suboptimal levels of vitamin D? “I had customers that were experiencing poor nursery performance that was not being corrected with ventilation, feed or medication changes.” says Dr. Stewart Galloway. “In one case, the pigs looked great at weaning, and then declined through the nursery phase. The farm veterinarian had ruled out several possibilities and was ready to try vitamin D supplementation.”

Oral supplementation appears to be the best approach to get vitamin D to the young pig both efficiently and cost effectively. Another benefit is that with oral supplementation vitamin D is classified as a nutrient and not a pharmaceutical. This eliminates the time and expense of having to register the product with the FDA.

Hubbard Feeds recently introduced a new liquid form of Vitamin D called Liqui-D which is designed to be mixed with water to make a stock solution and is administered based on anticipated water consumption levels. Dealing with suboptimal vitamin D levels can be very frustrating. “A couple producers that I work with have begun supplementing vitamin D to their pigs”, reports Dr. Galloway. “They’ve noticed more activity in the pigs and better intake and growth. They’ve also experienced less individual pig treatments and fewer cull pigs, all of which is very encouraging.”

For more specific information on Liqui-D, contact your Hubbard Feeds representative.