

NEWtraStart™ Feed Enhances Palatability and Gut Wellness

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A field trial was conducted from May to Sept '07 in Iowa to evaluate NEWtraStart™ Feed on grow-finish pig performance and survival. Two barns containing ~ 1,200 head each and located ~20 ft apart were used for the experiment. Pigs in barn one received the control diet; pigs in barn two received the control diet **plus 5 lb of NEWtraStart™ Feed** per ton of complete feed. Diets were fed from ~50 lb till market and contained Denagard for the first 2 weeks after fill & then contained NO antibiotics. All pigs received sulfa drug via the water for 4-5 days after placement. About 3-4 weeks after barns were filled, pigs were diagnosed with: PCV2, H3N2 SIV, PRRSV, bacterial pneumonia, *Pasteurella multicoidea* type A, *Streptococcus suis*, & *Bordetella bronchiseptica*.

Overall, supplementation of 5 lb per ton of NEWtraStart™ Feed resulted in pigs **gaining 4.1% faster, weighing 11 pounds more**, and achieving **16.2% better feed conversion** when compared to pigs receiving a control diet (Table 1). Additionally, mortality rate was reduced 43.3% when pigs received NEWtraStart™ Feed.

Table 1. Supplementation of NEWtraStart™ Feed at 5 lb per ton to growing-finishing pigs' diets improves overall performance and mortality when fed from ~50 lb body weight till market.

Item	Treatments		Improvements
	Control ^{ac}	Control + 5 lb of NEWtraStart™ Feed ^{bc*}	
Overall Performance			
ADG, lb	1.45	1.51	4.1%
Avg. Gain, lb	167.27	178.35	11.08 > lb
Feed:Gain	3.45	2.89	16.2%
Pig Weight, lb			
Initial	58.08	49.75	
End of trial	241.06	234.92	
Days on trial	115	118	
Mortality, %	21.30	12.07	43.3%

^aRepresents 1,188 pigs placed 29-30 pigs per pen. ^bRepresents 1,243 pigs placed 30-31 pigs per pen.

^cAntibiotics were fed for the first two weeks after placement and then NO antibiotics were used within the diets.

*NEWtraStart™ Feed was added at 5 lb per ton from 50 lb till slaughter (235 lb).

NEWtraStart™ Feed improves pig performance and mortality by **enhancing palatability and gut wellness**.

- The essential oils component of NEWtraStart™ Feed are thought to act as an appetizer to stimulate feed intake and improve nutrient digestion and retention.
- The flavonoid component of NEWtraStart™ Feed has anti-oxidant and anti-inflammatory properties resulting in reduced cell death in the intestinal tract. This may lead to better absorption of nutrients and protection at the gut level against bacterial or viral pathogens.
- The mucilage component of NEWtraStart™ Feed helps to improve intestinal health by:
 - Enhancing the mucus layer on the gut lining (first barrier to pathogens at the gut level). The mucus layer is responsible for trapping bacteria, viruses, and toxins before they reach absorption cells lining the gut. If these cells are not protected, pathogens (viral or bacterial) invade the cells lining the gut and destroy them, leading to reduced absorption of nutrients and barrier function, resulting in diarrhea→morbidity→the worse case--death.
 - Acting as a “prebiotic” or a food source for beneficial bacteria in the gut thus increasing the populations of “good” bacteria while reducing the populations of “bad” bacteria.

**NEWtraStart™
Feed**

For further information, please see your local feed sales representative at a Land O'Lakes Feed Co-op or Purina Mills Dealer. Visit us on-line at www.LOLFeed.com, or www.PurinaMills.com.

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