

ProsperEO™ Improves Gain and Efficiency When Fed to Turkeys Starting at 3 Weeks of Age in Place of Coccidiostat

A recent research trial conducted at a commercial turkey research farm tested the addition of **ProsperEO™**, replacing the coccidiostat, starting at 3 weeks of age to determine if it would improve performance.

RESEARCH SUMMARY

The research trial determined that feeding **ProsperEO** to turkeys starting at 3 weeks of age and replacing the coccidiostat in the feed improved both rate of growth and feed efficiency.

BACKGROUND

A traditional coccidiostat program was fed to both groups for the first feeding period. For the second to third period the control group was fed a traditional coccidiostat program. The treatment group then received **ProsperEO** at 0.6 lbs. per ton during feeding periods 2-5, and at 0.5 lbs. per ton for feeding periods 6-7. The flock was diagnosed with Reovirus and the birds were processed at 18 weeks and 6 days. Each group consisted of 10,600 Hybrid Converter Toms. This study was conducted at a commercial research facility with two identical brooder barns and two identical finisher barns.

TABLE 1. FEED TREATMENTS

Ration	Control	Treated – ProsperEO™	Approx. Age (weeks)
Feed 1 (crumble)	90.7g Avatec®	90.7g Avatec®	0-3
Feed 2 (pellet)	90.7g Avatec®	ProsperEO 0.6 lbs./ton	3-6
Feed 3 (pellet)	81.63g Avatec®	ProsperEO 0.6 lbs./ton	6-9
Feed 4 (pellet)	no AGP or coccidiostat	ProsperEO 0.6 lbs./ton	9-12
Feed 5 (pellet)	no AGP or coccidiostat	ProsperEO 0.6 lbs./ton	12-14
Feed 6 (pellet)	no AGP or coccidiostat	ProsperEO 0.5 lbs./ton	14-16
Feed 7 (pellet)	no AGP or coccidiostat	ProsperEO 0.5 lbs./ton	16-18
Feed 8 (pellet)	no AGP or coccidiostat	ProsperEO 0.5 lbs./ton	18-Mkt

Feed programs for the trial. Both groups were fed the same amount of Avatec® during the first feeding period.

RESULTS

- When **ProsperEO** is used starting at 3 weeks of age replacing the coccidiostat in the feed it improves both growth rate and feed efficiency.
- Turkeys fed **ProsperEO** were 1.22 pounds heavier.
- When the feed conversion was adjusted to a 40-pound standard weight the birds fed **ProsperEO** feed conversion was 19 points better.
- Using **ProsperEO** starting at 3 weeks of age replacing the coccidiostat in the feed, resulted in 27,160 additional pounds at the plant.

TABLE 2. RESULTS

	Control	Treated - ProsperEO™	Advantage
Age	18 weeks, 6 days	18 weeks, 6 days	
Weight lbs.	35.43	36.65	1.22
Weight Adj. FCR*	2.67	2.48	-0.19
Barn Mortality %	15.05%	11.06%	-3.99%
Gross lbs. at plant	317,020	344,180	27,160

*Adj. FCR to 40 lb. tom (0.04 per lb.)

CONCLUSION

Essential oil products have demonstrated improvements to gut health and performance in poultry. **ProsperEO** contains a blend of essential oils and a prebiotic to improve performance and mitigate low level disease challenges. A traditional coccidiostat program was fed to both groups for the first feeding period, however **ProsperEO** was utilized in the diet from week 3 until market in place of a traditional coccidiostat program. Turkeys fed **ProsperEO** gained 1.22 lbs. per bird more than turkeys on a traditional coccidiostat program. Additionally, mortality was reduced in toms given **ProsperEO** by 3.99%. Increased body weight gain and reduced mortality yields 27,160 more gross pounds in the processing plant in toms fed **ProsperEO**. In order to compare efficiency between the two flocks, feed conversion ratio was standardized to a 40 lb. tom. **ProsperEO** improved feed conversion by 19 points when given in place of a traditional coccidiostat program. Turkeys fed **ProsperEO** increased weight gain, decreased mortality, and improved feed efficiency, demonstrating that **ProsperEO** can be used to supplement traditional coccidiostat programs and decrease coccidiostat usage in turkey flocks.