

Feeding trial

HP AviStart reduces footpad lesions and improves FCR in all-veg diet



Summary

Replacing part of soybean meal (SBM) in starter diets by 5% **HP AviStart** results in equal performance and lower footpad lesion scores compared to 5% fish meal. With a significant improvement in footpad lesion scores, trial results indicate that **HP AviStart** is the vegetable protein of choice when feeding broiler chickens all-veg diets.

Objective(s)

To confirm that HP AviStart is the protein of choice when feeding all-veg diets to broiler chickens in the starter phase.

Results

- HP AviStart results in equally good performance as fish meal, evident by no significant difference in FCR between HP AviStart and fish meal at day 42 (figure 1).
- At day 42, FCR is significantly improved by 3.3-3.9% by feeding 5% HP AviStart in the starter diet compared to alternative vegetable protein sources (figure 1).
- Replacing part of SBM by 5% HP AviStart in starter diets significantly improves the average footpad lesion score by 44.7% (figure 2) compared to SBM (control), also evident in the distribution of chickens on the four footpad lesion scores (table 1).
- HP AviStart significantly improves footpad lesion scores by 21.2%, 22.4% and 41.6% compared to potato protein, fish meal and corn gluten meal, respectively (figure 2).



Image from Hamlet Protein database.
Not specific for this trial.



Healthy Animals - Healthy Business
hamletprotein.com

HP AviStart in starter diets improves FCR at day 42

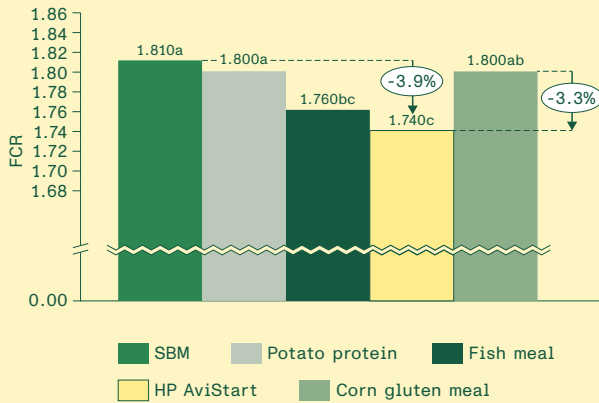


Figure 1. Feed conversion ratio (FCR) at day 42 of chickens receiving one of five dietary treatments day 0-11. Different letters indicate significant difference (p<0.05).

HP AviStart reduces the incidence of footpad dermatitis

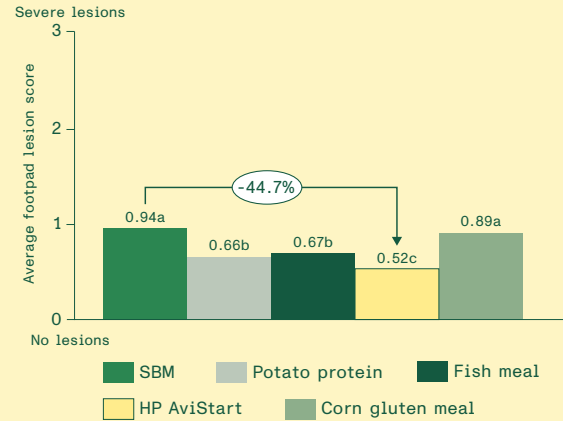


Figure 2. Average footpad lesion score at day 42 of chickens receiving one of five dietary treatments day 0-11. Different letters indicate significant difference (p<0.05).

Total number of chickens in each treatment and distribution of chickens on the four footpad lesion scores* at day 42

	Total broilers	% of broilers with lesion score day 42			
		0	1	2	3
SBM	210	28.1	50	21.9	0
Potato protein	214	43.9	45.8	10.3	0
Fish meal	218	41.7	50	8.3	0
HP AviStart	220	51.8	44.1	4.1	0
Corn gluten meal	213	28.6	54	17.4	0

*Footpad lesion score 0=no lesions; 1=small lesions; 2=affecting skin, no ulcers; 3=lesions extending through the skin.

Materials and methods

1,110 day-of-hatch Ross 308 male chickens.
 6 replicates/dietary treatment, 37 chickens/replicate.
 5 treatments in the starter phase (day 0-11): SBM (34.4%), 5% potato protein (24.2% SBM), 5% fish meal (24.4% SBM), 5% HP AviStart (27.2% SBM), 5% corn fish gluten meal (28.0% SBM).
 All birds received the same grower (day 12-28) and finisher diets (day 29-42).
 Starter, grower and finisher diets were formulated to contain 1.30%, 1.15% and 1.09% Lys, respectively

Location

University of Novi Sad, Serbia, 2014.