

Poultry Industry Data Summary

Comparing 25-OH D3 Product Performance Over One Year

Background

To help the poultry industry better understand the use of 25-OH D3 products, usage and performance, DSM obtained one year of data from Agri Stats and analyzed the data to compare Hy•D® from DSM and “Other OH-25 D3”. Hy•D is the only pure form of 25-OH D3 on the market today, and the only 25-OH D3 that follows FDA’s regulations. “Other 25-OH D3” is another product that entered the market and claims to be the equivalent of Hy•D.

The data analyzed represents 6.1 billion birds fed at 101 complexes between January 2018 through December 2018. Of those birds, 2.6 billion were fed 25-OH D3 at 42 different complexes. The data was collected, analyzed and summarized by DSM North American poultry technical team.

Objective

Compare Hy•D and “Other 25-OH D3” in key poultry performance areas, including:

Feed conversion ratio (FCR), weight gain, field condemnns and yield

Birds Compared

Comparisons reviewed	
Feeding diets without 25-OH D3 vs. Hy•D in starter phase only	Feeding Hy•D only in starter vs. Hy•D beyond* the starter phase
	Feeding Hy•D beyond the starter vs. “Other 25-OH D3” beyond the starter
Data broken down by bird size	
Small birds	3.6 to 4.4 lb
Medium birds (summary of four subgroups)	4.4 to 5.2 lb; 5.2 to 6.0 lb; 6.0 to 6.8 lb; 6.8 to 7.5 lb

*Beyond would encompass those that fed starter, grower or throughout all phases

Results

Hy•D impact on broiler performance*

Agri Stats 2018: Small birds (3.6 to 4.4 lb)

Variable	No 25-OH D3	Hy•D starter only	Hy•D beyond starter
# of Birds	1,237,051,746	592,461,554	147,487,733
# of Complexes	20	7	2
Average Age, d	34.87	35.34	33.47
Average Weight, lb	3.94	3.99	3.81
Actual FCR	1.63	1.67	1.61
Field Condemn, %	0.408	0.411	0.192
WOG Yield, %	75.80	76.22	76.95
BM Yield %	20	20.6	21

Hy•D in starter only vs. Hy•D beyond the starter phase results in improvements:

- 6 pts FCR
- 0.7% WOG yield
- 0.4% BM yield

Hy•D compared with No 25-OH D3 beyond the starter phase results in improvements:

- 2 pts FCR
- 1.15% WOG yield
- 1% BM yield

*Based on Agri Stats (2018) review of Hy•D usage

Hy•D impact on broiler performance*

Agri Stats 2018: Small birds (3.6 to 4.4 lb)

Variable	Hy•D starter only	Hy•D beyond starter
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WOG Yield, %	76.22	76.95
BM Yield, %	20.6	21

*Based on Agri Stats (2018) review of Hy•D usage

Feeding Hy•D beyond the starter phase results in improvements:

- 6 pts FCR
- 0.7% WOG yield
- 0.4% BM yield

Hy•D impact on broiler performance*

Agri Stats 2018: Small birds (3.6 to 4.4 lb)

Variable	No 25-OH D3	Hy•D beyond starter	"Other 25-OH D3" beyond starter
# of Birds	1,237,051,746	147,487,733	172,484,678
# of Complexes	20	2	2
Average Age, d	34.87	33.47	36.5
Average Weight, lb	3.94	3.81	3.9
Actual FCR	1.63	1.61	1.69
Field Condemn, %	0.408	0.192	0.665
BM Yield, %	20	21	22.7

*Based on Agri Stats (2018) review of Hy•D usage

Feeding Hy•D beyond the starter phase compared with "Other 25-OH D3" results in improvements:

- 8 pts FCR
- Better field condemnation %
- Better BM yield %
 - 21% at 33 d vs. 22.7 at 36.5 d

Hy•D impact on broiler performance*

Agri Stats 2018: Medium birds (4.4 to 7.5 lb)

Variable	No 25-OH D3	Hy•D starter only	Hy•D beyond starter
# of Birds	2,238,857,666	464,978,829	524,104,970
# of Complexes	39	9	10
Average Age, d	46.39	45.93	43.97
Average Weight, lb	6.003	5.935	5.733
Actual FCR	1.790	1.777	1.764
Field Condemn, %	0.424	0.249	0.973
BM Yield, %	23.75	25.45	23.67

*Based on Agri Stats (2018) review of Hy•D usage

Hy•D in starter only compared with No 25-OH D3 results in improvements:

- 1.3 pts FCR
- Better field condemnation %
- 1.7% BM yield

Hy•D shows improved FCR in the starter phase and even better improvement beyond the starter

Hy•D impact on broiler performance*

Agri Stats 2018: Medium birds (4.4 to 7.5 lb)

Variable	No 25-OH D3	Hy•D starter only	"Other 25-OH D3" starter only
# of Birds	2,238,857,666	464,978,829	341,161,947
# of Complexes	39	9	6
Average Age, d	46.39	45.93	46.84
Average Weight, lb	6.003	5.935	5.955
Actual FCR	1.790	1.777	1.788
Field Condemn, %	0.424	0.249	0.337
BM Yield, %	23.75	25.45	24.73

*Based on Agri Stats (2018) review of Hy•D usage

Feeding Hy•D in the starter compared with feeding "Other 25-OH D3" in the starter results in improvements:

- 1.1 pts FCR
- Better field condemnation %
- 0.7% BM yield

Hy•D impact on broiler performance*

Agri Stats 2018: Medium birds (4.4 to 7.5 lb)

Variable	No 25-OH D3	Hy•D beyond starter	"Other 25-OH D3" beyond starter
# of Birds	2,238,857,666	524,104,970	415,046,709
# of Complexes	39	10	6
Average Age, d	46.39	43.97	45.26
Average Weight, lb	6.0025	5.7325	5.635
Actual FCR	1.790	1.764	1.790
Field Condemn, %	0.424	0.973	0.257
BM Yield, %	23.75	23.67	23.05

*Based on Agri Stats (2018) review of Hy•D usage

Feeding Hy•D beyond the starter compared with feeding "Other 25-OH D3" beyond the starter results in improvements:

- 2.6 pts FCR
- 0.6% BM yield

Hy•D impact on broiler BM yield*

2018 North America Industry Statistical Report

Bird size	Bird weights	BM Yield Hy•D improvement vs. No 25-OH D3
SMALL birds	3.6 to 4.4 lb	+ 0.6%
MEDIUM birds	4.4 to 5.2 lb	+ 2.0%
MEDIUM birds	5.2 to 6.0 lb ¹	- 0.35%
MEDIUM birds	6.0 to 6.8 lb ¹	+ 0.8%
MEDIUM birds	6.8 to 7.5 lb	+ 1.4%
Average of small & medium birds		+ 0.89

¹Based on feeding Hy•D beyond starter

*Based on Agri Stats (2018) review of Hy•D usage

Hy•D showed a consistent improvement in BM yield compared to No 25-OH D3 across all groups

Executive Summary

- Hy•D birds outperformed "Other 25-OH D3" birds in FCR in every customer scenario, with as much as 8 points improvement from using Hy•D in small birds beyond the starter
- In small birds, Hy•D beyond the starter outperformed Hy•D in the starter
- Hy•D birds showed consistent improvement in yield compared to the no 25-OH D3 birds, and outperformed "Other 25-OH D3" birds in yield in all medium sized birds (in the starter and beyond)