

USE OF DL-METHIONINE IN HOLDING LATE-FINISHING PIGS

James Smith, Ph.D., Senior Technical Swine Nutritionist Michael Edmonds, Ph.D., Vice President, Swine and Poultry Nutrition

In the event of any market suspension that requires slowing the growth of finishing pigs, pork producers need dependable and economical diets that can reduce growth while maintaining carcass quality. Studies conducted at the Kent Research Farm have resulted in the development of four feeding regimens to reduce feed intakes over a 35 day period through the use of various levels of supplemental Methionine.

Regimen 1 - To achieve a daily gain of about 1.5 lb/day, add Methionine at 1% of the diet.

Regimen 2 – To achieve a daily gain of about 1 lb/day, add Methionine at 1% of the diet during week 1. Then add 1.2% Methionine during week 2; 1.4% Methionine during week 3, 1.6% Methionine during week 4 and 1.8% Methionine during week 5.

Regimen 3 – To achieve a daily gain of about 0.6 lb/day, add Methionine at 2% of the diet. Alternatively, the addition of Methionine at 1.5% of the diet during week 1 followed by 1.7, 1.9, 2.1 and 2.3% Methionine during weeks 2-5, respectively.

Regimen 4 – To achieve none or very little gain, add Methionine at 2% of the diet during week 1. Then add 2.2% Methionine during week 2; 2.4% Methionine during week 3, 2.6% Methionine during week 4 and 2.8% Methionine during week 5.

Proposed Holding Schemes for 35 Days			
Regimen	Average Daily Gain, Ibs	DL-Methionine, % Constant	DL-Methionine, % Weekly Step Up
1	1.32 - 1.76	1.0	
2	0.88 - 1.32		1.0 - 1.8
3	0.44 - 0.88	2.0	1.5 - 2.3
4	0 - 0.44		2.0 - 2.8

Literature Cited

Edmonds, M. S., and J. W. Smith II. 2021. Amino acid imbalance with excess methionine in late-finishing pigs: effects on performance and carcass quality. Transl. Anim. Sci. 5:1-11. doi:10.1093/tas/txab197.

