

COLEMAN

NATURAL FOODS



September 27, 2013

National Organic Standard Board
Livestock Subcommittee

**RE: National Organic Program; Synthetic Methionine in Organic Poultry Feed Proposal
Comment on Docket number AMS-NOP-13-0049-0002**

Dear Committee Members:

As a representative of Coleman Natural Foods, I am writing in support of the proposal currently under review by the Livestock Committee to expand the use of synthetic methionine to an average of 2.5 pounds per ton over the life of the animal instead of a maximum of 2.0 pounds regardless of stage of life.

I am a practicing poultry nutritionist with 25 years of experience in poultry production and nutrition. I am currently responsible for nutrition and feed formulations for Coleman's organic poultry in different regions of the US. Methionine is the first limiting amino acid for chickens and so the importance of methionine to the dietary needs of the chicken is well documented.

The ramification of the synthetic methionine cap of 2 pounds per ton in feed formulation is that the protein level of the feed is increased dramatically in order to meet the minimum methionine requirements of the birds. The National Research Council (1994) states the requirement of methionine for chickens from 0 to 3 weeks of age is 0.50 % of the total diet. It further states the protein requirement for the same period is 23.0%. When formulating diets with a 2 pound per ton limit on synthetic methionine with typical ingredients used in organic feeds the protein level required to meet this methionine requirement exceeds 27%. However, if the amount of synthetic Methionine is allowed to increase to 3 pounds per ton, then the protein level is reduced to just over 23%. An allowance of 2.5 pounds per ton average over life of the flock will allow 3 pounds per ton usage during the first 3 weeks of life due to the low rate of feed consumption during this period.

The excess level of dietary protein in the synthetic methionine limited diet has negative consequences for the health of the bird. A heavy metabolic toll is placed on the kidneys to dispose of the extra nitrogen from protein. The nitrogen eventually gets excreted into the litter and can volatilize into a form of ammonia causing irritation to the bird's eyes and respiratory system. A diet that is balanced allows for more of the nitrogen consumed to be used for tissue growth instead of being excreted into the litter and becoming an environmental issue. Before it is excreted the extra nitrogen can alter the intestinal microbial balance and leave birds more open to pathogenic bacteria. The period between 2 and 3 weeks of age is particularly critical as this is

when coccidiosis, a common parasitic infection of poultry, typically peaks and leaves the chick very sensitive to bacterial enteric infections such as necrotic enteritis.

Within a few weeks of the formulation changes in the fall of 2012 to the 2 pound limit, we started receiving feedback from farmers about deteriorating litter and environmental conditions. The changes became more serious as the weather cooled down. Reports of wet litter, footpad burns and increased enteric disease were similar across regions, although the cooler regions were more severely affected. I visited several farms in Pennsylvania in late fall of 2012 and found litter in very bad condition. I made formulation adjustments that improved the situation some, but even in the winter of 2013 conditions were still severe. In fact, some farms failed an important component of our welfare process with excessive ammonia concentration. These farms had been cleaned out the prior flock and had used the organically approved ammonia control products as well as increased ventilation rates. This operation had never failed an ammonia test during an audit previously.

Farms from all regions reported higher incidences and severity of enteric disease causing elevated mortality than before the formulation changes. While we have adjusted the available preventions and remedies available to us, the trend in enteric disease continues to be a problem that is associated directly to the change in dietary formulation.

An original assumption of the synthetic methionine restriction rule was it would spur interest and research in alternative natural sources of methionine. In fact some ingredients are better sources of natural methionine than others; however, these ingredients have other negative consequences and limited availability. Grains such as naked oats and barley are higher in methionine than corn, but the inclusion of these grains is limited due to viscous carbohydrates that can worsen litter conditions further and the availability of organic sources are limited. Fish meal is an excellent source of methionine, but some important organic retailers ban the use of fish meal and want only all vegetable diets. The organic availability of sesame meal, sunflower seed meal and canola meal is extremely limited. Furthermore these protein sources are higher in methionine, but very low in other critical amino acids such as lysine.

In summary, the options for organic poultry producers to provide a balanced diet for chickens based on the ingredients that are available to them are limited by the current maximum limit of 2 pounds per ton of synthetic methionine. Increasing flexibility by allowing a maximum average of 2.5 pounds use over the life of the animal would allow nutritionists to formulate a more balanced diet and have a positive impact on the health and welfare of organically raised chickens.

Sincerely,



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