

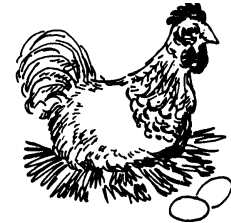


The University of Georgia

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COMMERCIAL EGG TIP . . .

HOW TO SAVE MONEY ON POULTRY FEED

Those formulating poultry feeds continually walk a tightrope between trying to save money on the formula while avoiding a decrease in the production of eggs or meat. While the cost of feed/ton can be calculated to the nearest cent, the consequences of a marginal nutrient deficiency are usually invisible. A slight decrease in case weight or shell quality, or a several tenths of a pound increase in feed intake per hundred hens per day, will likely pass unnoticed. Perhaps the best way to minimize feed costs is to fully appreciate the nutritive contribution of under-utilized feed ingredients in a given region. In the southeastern United States, special attention should be given to both peanut meal and pearl millet.

Peanut meal has traditionally been severely undervalued in the ingredient market. As of this writing, the quoted price for peanut meal is \$140/ton, versus \$225/ton for soybean meal (including basis). Most peanut meals have about the same protein content as dehulled soy, although lysine and threonine content is lower. Metabolizable energy, on the other hand, is about 100 kcal/lb higher for peanut meal than soy. One source of concern regarding peanut meal is its possible contamination with aflatoxin. This concern is valid, but of limited practical significance. Even at 200 ppb aflatoxin, if 5% peanut meal is used in the diet, the level of aflatoxin in the mixed feed is much too low to be of practical concern.

Research at the University of Georgia has demonstrated that peanut meal is a perfectly acceptable feed ingredient for laying hens (1). The nutrient value of currently available peanut meals has now been well documented (2). For those interested in using peanut meal in their feeds, a confirmatory protein analysis is recommended, along with the use of the higher metabolizable energy values documented for modern peanut meals. If ME values from older tables of nutrient composition are used, excess body fat may result.

Pearl millet is being actively considered by farmers in the southeast as an alternative to other row crops. Work by Dr. Wayne Hanna and colleagues in Tifton, GA has led to the development of strains of millet suitable for cultivation in the southeastern U.S. Pearl millet is of particular interest because its metabolizable energy approximates that of corn, while its protein

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content is much higher. A typical protein value for pearl millet in Georgia is about 11%, with 0.38% lysine. This compares very favorably with corn which typically contains 7-8% protein and 0.24% lysine.

While the amount of pearl millet available to the feed industry is currently very limited, encouragement of its cultivation could lead to a significant feed savings for commercial egg producers. Based on current ingredient prices, the value of pearl millet based on its nutrient content was found to be 18% higher than corn. While it is recognized that shadow prices do not take into account issues such as bin storage, a need to grind pearl millet is not a concern. Research at the University of Georgia has found that whole pearl millet is satisfactorily digested by both broilers (3) and laying hens (4). The use of large particle calcium in laying hen diets clearly facilitates this process. This aspect of millet usage is clearly of importance as few feed mills have more than one post-grinding ingredient bin.

References

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2. Batal, A., N. Dale, and M. Café, 2005. Nutrient composition of peanut meal. *J. Appl. Poultry Res.* 14:254-257.
3. Hidalgo, M.A., A.J. Davis, N.M. Dale, and W.A. Dozier, III, 2004. Use of whole pearl millet in broiler diets. *J. Appl. Poultry Res.* 13:229-234.
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****Consult with your poultry company representative before making management changes.****

“Your local County Extension Agent is a source of more information on this subject”