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Cutting Costs in Poultry Feeding

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Scarcity of poultry feeds, which is usually followed by high feed prices, always brings up the question, "What changes can be made in present rations or feeding practices to reduce the cost of feeding?" While it is always good business to keep feeding costs at a minimum, and while it would be possible in some cases to make money-saving adjustments, it should be remembered that quality in the ration must not be sacrificed if profitable production is to be maintained.

Very often in an attempt to reduce feed costs, the tendency is to reduce or leave out higher priced ingredients in the ration, which are in most cases the protein and vitamin supplements. Rations composed of the cereal grains and mill by-products alone, altho cheaper, do not supply these necessary proteins and vitamins in sufficient quantity either for high or economical production. In other words, the ration must be at least reasonably well balanced even tho it is necessary to buy some of the more expensive ingredients. This is especially true in the winter when the laying hens do not have access to green range and direct sunshine.

Choice of Grains

What then can be safely done to keep the cost of the ration at a minimum? Since the feeding value of the cereal grains and some of their by-products is similar, and since they make up a large part of the ration, there is considerable opportunity to include more of the cheaper or more available grains or by-products with little or no reduction in the feeding value of the ration.

For example, barley can be substituted for oats; it can also be used to replace at least part of the corn, provided additional vitamin A supplements are used. Ground wheat or good quality wheat feed can replace the wheat middlings in the mash. Altho the millets and sorghum grains are not commonly recommended, when readily available and cheap they can be used up to 10 per cent of the mash to replace oats, barley, or middlings. Thus, so long as the bulky feeds such as oats and bran are not used to excess, there is a wide range in the proportions in which the feeds can be used, and substitutions can be made or the proportion of the present ingredients shifted to include less of the more expensive feeds and more of the cheaper ones.

Protein Combinations

While the protein supplements are not all of equal value for production, it is sometimes possible to use combinations in which cheaper or more available supplements are included. Meat scrap is the most commonly used and probably the most available in most cases, but soybean oil meal is a good protein supplement and if available it could be economically used with meat scrap as indicated in Mashes Nos. 1 and 3, or to replace the meat scrap in Mash No. 2, if 1 pound of bonemeal is added with each 5 pounds of soybean oil meal. A good grade of tankage may also be used with meat scrap if it is cheaper. Where fish meal is cheap, it can also be used up to 10 per cent of the mash to replace meat scrap. Milk products are excellent sources of protein, but dried milk is usually quite expensive and in most cases it will increase rather than reduce the cost of the ration. However, liquid skim or buttermilk are often cheap and available in large quantities and can be used to good advantage. Thus Mash No. 2 is for those who have liquid milk available for the birds to drink.

The following mashes, designed to be fed with approximately equal parts of scratch grain, will illustrate how some of the above suggestions may be used in making up a laying mash, if the suggestions given below are followed.

	No. 1	No. 2	No. 3
	Cornless mash	Cornless mash with liquid milk	Mash with corn
Ground yellow corn	..... lbs.	..... lbs.	200 lbs.
Wheat middlings	200 "	210 "	100 "
Ground barley	250 "	350 "	250 "
Ground heavy oats	200 "	200 "	125 "
Soybean oil meal	100 "	.....	100 "
Meat scrap	100 "	70 "	100 "
Alfalfa leaf meal	100 "	100 "	75 "
Steamed bone meal	20 "	30 "	20 "
Ground oyster shell	.....	10 "	.....
Salt	10 "	10 "	10 "
Cod liver oil	20 "	20 "	20 "
	1,000 "	1,000 "	1,000 "

Mashes Nos. 1 or 2 can be used by those who have no yellow corn or can buy barley cheaper than corn. Since barley is low in vitamin A, ample amounts of alfalfa meal and cod liver oil must be added.

Mash No. 2 is for those who have ample liquid skimmilk or buttermilk which are excellent sources of protein. When meat scrap is more than $3 a hundred, milk up to 2 cents a gallon will prove an economical substitution. If this ration is used, at least 3½ gallons of liquid milk per 100 hens per day must be fed. If only 2 gallons can be fed, either increase the meat scrap to 120 pounds or add 60 pounds of soybean oil meal if it is cheaper than meat scrap and is available. In Mash No. 3 corn is included but it is otherwise much the same as Mash No. 1.

Milk for Breeders

If eggs are to be saved for hatching, 50 pounds of dried skimmilk or buttermilk should replace 50 pounds of meat scrap or soybean oil meal in Rations 1 or 3.

Cod liver oil or sardine oil should be fed from October 1 to May 1.

Oyster shell or high-grade limestone grit should be fed in separate hoppers.

It is advisable to have granite grit or fine gravel available.

A grain mixture similar to one of the following should be used with the above mashes:

	No. 1	No. 2	No. 3	No. 4
Whole yellow corn	500 lbs.	700 lbs.	700 lbs.	700 lbs.
Whole wheat	300 "	300 "	.....	.....
Whole oats	200 "	.....	300 "	.....
Whole barley	.....	.....	.....	300 "
	1,000 "	1,000 "	1,000 "	1,000 "

Will It Pay to Feed Pullets This Winter?

The question has often been asked, "Will it pay to feed pullets this winter in view of the high feed prices?" This question cannot be satisfactorily answered without some "ifs."

The question can be answered yes—

If the pullets come from reasonably well-bred stock.
If they are well matured and in good flesh.
If they are reasonably free from diseases and parasites.
If they are housed in comfortable quarters that provide ample space.
If they are well fed and managed.
If good sanitation practices are followed to keep down mortality.

It is safe to say that they should not be kept *unless* they are well fed, in view of the probability that egg prices will likely not be exceptionally high.

Additional information may be obtained by addressing your inquiry to the Division of Poultry Husbandry, or the Agricultural Extension Division, University Farm, St. Paul.

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