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farm and home

POULTRY
NO. 25

FACT SHEET

TURKEY BREEDERS AND REPLACEMENTS:

FEEDING HENS AND REPLACEMENTS

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REPLACEMENTS

Most turkey breeders are selected from flocks of market turkeys and the feed requirements for early growth of potential breeders and market birds are the same.

For later growth and development of breeders, range is desirable. However, the year-round demand for hatching eggs has also created a year-round demand for turkey breeders. Obviously those that mature during winter and early spring get no pasture. Breeders can be reared successfully in complete confinement but probably will not lay quite as well or produce eggs that hatch quite as well as will range reared birds.

Turkeys that mature during late spring, when days are longest, may start to lay and then go into an early molt. Artificial lighting is the best way to control time of sexual maturity, but a properly selected feeding schedule will help also.

Feed holding mash (see table 1) to potential breeders after the age of 15 to 16 weeks.

The same mash is suitable for mature birds which have finished the breeding season and are being held over another year. It should be fed as an all-mash to birds between the ages of 15 to 20 weeks, and may be fed as an all-mash to older birds. However, after 20 weeks limited quantities of a 50-50 mixture of whole corn and whole oats could be fed with this mash. The quantity of whole grain should not exceed one-fourth to one-third the total feed intake.

Table 1. Holding mash

Contents	Holding mash, pounds per ton
Ground yellow corn	740
Ground oats	600
Wheat middlings	300
Dehydrated alfalfa meal (17% protein, 100,000 units vitamin A per pound)	100
Soybean oil meal, solvent, (44% protein)	120
Meat and bone meal (50% protein)	40
Fish solubles	20
Dicalcium phosphate	25
Calcium carbonate	45
Salt, iodized	7.5
Manganese sulfate (27% manganese)	0.25
Vitamin A supplement (10,000 units vitamin A per gram)	1.0
Vitamin D_3 supplement (3,000 I. C. U. per gram)	1.0
Riboflavin supplement (4 grams riboflavin per pound)	0.25
Antibiotic supplement (10 grams antibiotic per pound)	1.0
	2001.00

TURKEY BREEDER HEN

The all-mash feeding program is the system best suited to mechanical feeders. It gives the most foolproof insurance that all birds will get a uniform, adequate diet, especially important for turkey breeding stock.

In some all-mash feeding programs all nutrients except water are provided in the mash. One difference is to provide oystershell-free choice and reduce the level of calcium in the mash. This system is commonly called all-mash feeding even though not quite all the nutrients are provided in the mash.

Some breeding flocks are fed according to a mash and grain program. A mash is always available to birds, and limited quantities of whole grain are provided daily. The amount of whole grain must be carefully regulated. Too much grain and not enough mash will reduce egg production and hatchability. The greatest advantage of the mash and grain program is the easy use of home-grown grain without the expense or labor of grinding and mixing.

Home-grown grains can be used in an all-mash program by grinding the grains and mixing them, or having them mixed, with a concentrate.

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Table 2. Types of feed for breeding stock

Contents	All-mash	Mixing Concentrate	Mash to be fed with grain
	pounds per ton		
Ground yellow corn	1172	115	882
Ground oats	200		
Dehydrated alfalfa meal (17% protein, 100,000 units vitamin A per pound)	50	150	100
Soybean oil meal, solvent (44% protein)	300	900	550
Meat and bone meal (50% protein)	50	150	100
Fish solubles	50	150	100
Dried whey	50	150	100
Dicalcium phosphate	40	120	80
Calcium carbonate	74	222	60
Salt, iodized	7.4	22.2	15
Manganese sulfate (27% manganese)	0.25	0.75	0.5
Zinc sulfate (32% zinc)	0.1	0.3	0.2
Vitamin A supplement (10,000 units vitamin A per gram)	1.0	3.0	2.0
Vitamin D_3 supplement (3,000 I.C.U. per gram)	1.0	3.0	2.0
Vitamin E supplement (acetate 20,000 I.U. per pound)	0.4	1.2	0.8
Riboflavin supplement (4 grams riboflavin per pound)	0.3	0.9	0.6
Pantothenic acid supplement (4 grams Calcium pantothenate per pound)	2.5	7.5	5.0
Vitamin B_{12} supplement (9 milligrams B_{12} per pound)	0.4	1.2	0.8
Antibiotic supplement (10 grams antibiotic per pound)	1.0	3.0	2.0
	2000.35	2000.05	2000.9

Table 2 gives, in column 1, the formula of an all-mash feed for breeding stock. Column 2 shows the formula for a mixing concentrate which could be mixed with ground grain to make the same formula as the one in column 1. The mash in column 3 is to be used in a program that provides equal parts of mash and grain, plus free choice of oystershell.

To make the all-mash in column 1 from the mixing concentrate, use the following proportions:

Ground yellow corn	1133 pounds
Ground oats	200 pounds
Mixing concentrate	667 pounds
	2000 pounds

Excellent commercial all-mash feeds for breeding stock, and excellent commercial concentrates designed to be mixed with home-grown grain are available.

NUTRIENT REQUIREMENTS

Table 3 shows how each of the two feeding programs meets the breeding turkey's requirements for the most critical nutrients.

WHOLE GRAIN

The whole grain in a mash and grain feeding program may be 100 percent corn, or a 50-50 mixture of corn and oats or any combination in between.

This is one of a series of Poultry Fact Sheets on turkeys produced as a joint project by the University of Minnesota and the University of Wisconsin. Faculty and staff members of both institutions cooperated in the planning and production of the series.

Table 3. Comparison of feeding programs

	Requirement, per 100 pounds feed	Provided by all-mash 100 pounds	Provided by mash and grain program: 50 pounds mash	50 pounds* grain	100 pounds total
Protein, pounds	15	15.9	10.9	4.8	15.7
Vitamin A, units	240,000	477,000	477,000	--	477,000
Vitamin D, I.C. units	40,000	66,100	66,100	--	66,100
Riboflavin, milligrams	150	186	165	25	190
Pantothenic acid, milligrams	730	950	776	185	961
Calcium, pounds	2.25	2.29	1.46	0.02	1.48+
Phosphorus, pounds	0.75	0.86	0.73	0.15	0.88

* Figured as 3/4 corn and 1/4 oats

\+ To be supplemented by free choice of oystershell

The whole grain should be fed once or twice a day, in separate hoppers or on top of the mash. It is necessary to keep records of mash consumption, so that quantity of whole grain fed can be kept equal to quantity of mash eaten.

INSOLUBLE GRIT

Turkeys fed whole grain should have insoluble grit available continuously in separate hoppers. Use "turkey-size" grit. Smaller sizes are likely to be eaten in too large quantity.

WATER

Turkeys consume about twice as much water as feed. A temporary lack of water is likely to be more harmful than a temporary lack of feed. Be sure good water is always available.

FEEDING RECOMMENDATIONS

Start feeding breeder mash at least 3 or 4 weeks before eggs are to be saved for hatching.

Feed a turkey breeder mash, not a breeder mash intended for chickens. Turkeys have higher requirements than chickens for some nutrients.

Feed according to directions. Feeding whole grain with a mash intended for all-mash feeding increases the risk of poor hatchability.

Adult breeding birds consume feed according to body weight and egg production. A rule of thumb is 3.3 pounds of feed per week for females and 5.9 pounds per week for toms.

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ST. PAUL 1, MINNESOTA

Cooperative Extension work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and United States Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

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