

# FACT SHEET

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## FEEDING TURKEY BREEDERS

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The turkey breeder should receive nutritionally adequate feed for at least 3 weeks before egg production begins. Hatchability of turkey eggs is extremely sensitive to diet fortification with vitamins and minerals. Avoid excessive medication since many drugs have depressing effects on fertility and hatchability of turkey eggs. Never give medication to turkey breeders unless recommended by a qualified serviceman or veterinarian. Poor fertility and low hatchability during the latter part of the turkey laying season are still considered serious problems. They can be caused by genetics, diet, bird and egg mismanagement or a combination of these. This leaflet deals with the nutrition and management of feeding turkey breeders in and out of season.

### IN-SEASON BIRDS

Feed breeder hens so they will weigh approximately 18 pounds at 27 to 28 weeks of age, depending on the size of the particular strain. At 18 weeks of age hens should weigh approximately 14 pounds. To reach 18 pounds at 27 to 28 weeks, place the hens on a holding ration containing approximately 15 percent protein at 18 weeks of age and feed this ration until 3 weeks before laying starts.

The hen should receive 15 hours of light per day for 3 weeks before the start of egg production. From the time the first egg is laid it takes only about 10 to 14 days for the hens to peak at approximately 70 to 78 percent. Birds should peak within 2 weeks after egg production begins.

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Feed hens a diet containing 18 percent protein at the time they are lighted. Keep them on this diet until peak production occurs. Then change to a diet containing 19 percent protein. As the weather becomes progressively warmer, place the birds on a diet containing 21 percent protein. This increase in protein with a subsequent decrease in energy levels is necessary as the birds tend to eat less when temperatures rise.

### OUT-OF-SEASON BIRDS

Feed out-of-season breeder hens so they will weigh approximately 15 pounds at 19 weeks of age. Place the birds in a dark house with 6 to 9 hours of light per day depending on the type of dark house. While in the dark house, feed a diet containing 18 percent protein fortified with vitamins and minerals.

Birds should gain approximately  $\frac{1}{2}$  pound per week while in the dark house. It is essential that a sample of hens be weighed weekly to ascertain proper weight gain. The birds should be in the dark houses for approximately 6 to 8 weeks and should weigh 18 to 19 pounds at 25 to 27 weeks of age, at which time the birds should be given 14 to 15 hours of light per day depending on outside day length. *The number of hours of light which the breeder hens receive should never decrease.*

Hens should be placed on a 20 percent protein diet at 25 weeks of age. Feed this diet until peak production is reached. At this point, place the birds on a diet containing 21 percent protein for 3 weeks and then increase the protein level to 22 or 23 percent, depending on outside temperature.

Lower the ration's energy levels as the protein content of the diet increases during warmer months.

## DIETS

Diets included in table 1 are examples of quality ingredients for a breeder hen ration. Protein level adjustments can be made depending on stage of production and temperatures.

## VITAMINS

Feed the turkey breeder a diet with adequate vitamins and minerals before egg production begins. The hen will then come into production with an adequate storage of these nutrients, which are essential for maximum hatchability and fertility. The vitamin levels suggested for a turkey breeder diet on a per ton basis are: 18 million IU of vitamin A, 4 million ICU of vitamin D<sub>3</sub>, 40,000 IU of vitamin E, 2 grams of vitamin K, 6 grams of riboflavin, 50 grams of niacin, 16 grams of d-calcium-pantothenate, 1,000 grams of choline chloride, 40 milligrams of vitamin B<sub>12</sub>, 500 milligrams of biotin and 2 grams of folic acid. For mixing convenience, incorporate the above amounts into a 10-pound package so that one package can be added to each ton of diet.

Table 1. Turkey breeder hen formulas

| Ingredient                       | 18% protein<br>dark house<br>ration | 19% turkey<br>breeder hen<br>ration | 22% turkey<br>breeder hen<br>ration |
|----------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
|                                  | lbs/ton                             | lbs/ton                             | lbs/ton                             |
| Yellow corn                      | 500.00                              | 500.00                              | 500.00                              |
| Sorghum grain                    | 917.75                              | 717.25                              | 553.25                              |
| Soybean meal (44%)               | 375.00                              | 445.00                              | 610.00                              |
| Fish meal (60%)                  | 100.00                              | 100.00                              | 100.00                              |
| Dehydrated alfalfa<br>meal (17%) | 50.00                               | 100.00                              | 100.00                              |
| Oyster shell flour<br>(38% Ca)   | 10.00                               | 90.00                               | 90.00                               |
| Defluorinated rock<br>phosphate  | 30.00                               | 30.00                               | 30.00                               |
| Salt                             | 4.00                                | 4.00                                | 4.00                                |
| DL-methionine (98%)              | 2.00                                | 2.50                                | 1.50                                |
| Manganese sulfate                | 0.75                                | 0.75                                | 0.75                                |
| ZnSO <sub>4</sub>                | 0.50                                | 0.50                                | 0.50                                |
| Vitamin mix                      | 10.00                               | 10.00                               | 10.00                               |
| % protein                        | 18.00                               | 19.00                               | 22.00                               |
| Calories (ME/lb)                 | 1,338.00                            | 1,250.00                            | 1,210.00                            |
| % methionine                     | 0.47                                | 0.45                                | 0.45                                |
| % Ca                             | 1.00                                | 2.75                                | 2.75                                |
| % P (total)                      | 0.75                                | 0.73                                | 0.80                                |

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