

Effect of High and Low Protein Starting Rations on Later Growth
 A preliminary trial was conducted last season and another is now underway to determine the effect of a drastic reduction in the protein content of the starting ration on later development. In each trial two lots of Broad Breasted Bronze geese received a 25 percent protein starting ration during the first two weeks. The control lot was continued on this ration to 12 weeks. From 2 to 4 weeks the other lot received an 18 percent protein ration and from 4 to 12 weeks a 17 percent protein ration. After 12 weeks both lots received the same growing ration, containing about 16 percent protein.

In the first trial, at 12 weeks of age there was a difference of 2.5 pounds in the average weights of the males and of 2.1 pounds for the females in favor of the higher protein starting ration. These differences increased to 2.8 pounds for the males and 2.4 pounds for the females at 16 weeks, after which there was a gradual reduction in the spread between the two rations. At 30 weeks of age there was still a difference of 1.9 pounds for the males and 1.1 pounds for the females in favor of the birds which had received the higher protein starting ration.

In the trial now underway, the differences in favor of the higher protein starting ration at 12 weeks were 2.8

pounds for the males and 2.2 pounds for the females. These differences increased to a maximum of 3.5 and 2.1 pounds for the male and female respectively at 16 weeks. At 28 weeks there is still a difference of 1.6 pounds for the males and 0.9 pounds for the females. Since 14 weeks the males and females in each lot have been kept in separate pens so that when the experiment is completed the feed efficiency for each sex in the two lots can be determined.

In addition to retarding the rate of growth, the drastic reduction in the protein content of the starting ration produced white feathers instead of normal colored plumage. Several of the birds on the low protein ration were almost white in color. Males on the high protein (Figure 1) and the low protein rations (Figure 2) are shown at 12 weeks of age. While all of the birds on the low protein ration did not have as much white in the plumage as the bird in Figure 2, this bird was not as white at 12 weeks as he had been earlier. As can be seen the new feathers coming in on the neck are normal in color. On the same ration which had produced white feathers, later the birds were able to grow normal colored feathers. After a few weeks all of the plumage was normal in color except for some white in the primary and secondary wing feathers.

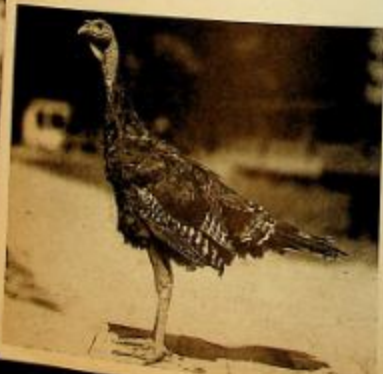


Figure 1. Male from lot receiving high protein starting ration. 12 weeks of age. Weight, 14 pounds. Plumage normal color.

**Broad Breasted
Bronze Poulters**
 Produced by
Indiana's Largest Turkey Grower
 James H. Shultz and Stella C. Inc.
 MARTINSVILLE, INDIANA

I'M GOING TO MARTINSVILLE TO GET SOME OF THOSE TUBE-TESTED TURKEY POULTS AND BABY CHICKS MY NEIGHBORS HAVE BEEN TALKING ABOUT.

CAN'T GO CLEM! BUT GET ME AN ORDER BLANK.