

stopped after the chicken had been given 1 1/4 pounds, as she was beginning to have difficulty in keeping her balance. She was then placed in a cage with 500 grams (1 pound, 2/3 ounces) of pellet mash, of which she ate 160 grams (5 1/3 ounces).

This experiment indicates that weight of the crop contents as such is not the variable which leads the chicken to stop eating. Other factors such as distention of the crop or chemical action of the crop walls must be considered (we hope to deal with these in the near future). The 1 1/4 pounds of shot did not occupy in the crop anywhere near the space that a similar weight of food would require (specific gravity of lead = 11 $\frac{1}{4}$), and apparently, as long as there is room for food, the chicken will eat.

Feeding to Satiation

Eight chickens, on a feeding schedule which gave them once a day 80 grams (2 2/3 ounces) of pellet mash and 20 grams (2/3 ounces) of growing grain, were allowed at their usual feeding time to eat to satiation. Four (Group A) were allowed to eat all the pellet mash they would consume; then their food cups were cleaned out and they were given growing grain. The other four (Group B) were given all the grain they would consume, then pellet mash. All had water available all through the experiment. Under these circumstances, Group A ate an average of 167 grams (5 1/2 ounces) of pellet mash and 12 grams (2/5 ounces) of growing grain. Group B ate an average of 292 grams (9 2/3 ounces) of grain and 5 grams (1/6 ounces) of mash. There is very little difference in the weight per volume of these two types of feed. It should be noted that the number of chickens in each group is quite small and not too much importance can be attached to the difference between them in amount of feed consumed. Group A averaged 39 minutes, Group B 47 minutes to eat to satiation.

This experiment indicates that a chicken is capable of eating more than the usual daily ration (1/5 to 1/4 pound, or 100 to 120 grams) and under proper circumstances will eat more. There were no instances of harmful results in any of the chickens. Other side phenomena were observed: every time fresh feed was added to the cup, the chickens ate with more vigor. The chickens which had had mash to start with ate the grain quite avidly, even though their crops were considerably distended. Those who had been fed grain first were considerably less eager about the mash; they had, of course, on the average, eaten more feed at this point. The grain eaters became quite selective as they neared satiation, picking out certain grains and leaving others.