

Experiment 5
(Final Report)
Feed Preferences in Grown Chickens

Six New Hampshire hens about 2 1/2 years old were used in this experiment to test preferences for Larro egg mash (pelleted) as compared to the specially made yellow pellets, crushed yellow pellets, and whole corn. The method used was that of comparison to a standard; that is, pellet egg mash was offered every day in one section of a divided pan; in the other, yellow pellets were offered for eight days of the experiment, crushed yellow pellets for four days, and whole corn for four days.

Prior to the start of the experiment, the hens had been for months on a schedule of once-a-day feeding, their usual ration being 80 grams of egg mash and 20 grams of scratch grain. During the experiment, they were fed once a day in a special cage with an opening in the door through which they could reach the feed pan. The divided pan was placed on a platform on the outside of the door at a height convenient to the hen. Three hens were tested at once in cages of this type. Panels divided the cages so that the hens could not watch each other. Position of the standard egg mash was varied each day to prevent the formation of position habits. The hens were fed to satiation each day¹ and returned to the home cage where grit and water were available.

Table I, Part A, gives in grams the amounts of pellet egg mash and whole yellow pellets eaten by each hen on the eight days of this experiment. Part B gives the comparative figures for pellet egg mash and crushed yellow pellets, while Part C presents similar data for pellet egg mash as compared to whole corn.

Table II summarizes the grand totals for all chickens and all days in total grams and percentages for the three comparisons.

Table III is an auxiliary table presenting the data of Table I in a cross-tabulation by days and shows in addition the total grams eaten by each chicken on each day.

The results of this experiment show considerable variability, both among birds and on various days, with regard to the proportions of mash as compared to the test feed. Not one chicken consistently ate more yellow pellets than mash pellets. One bird (No. 26) started to eat large quantities of yellow pellets, ended the eight days eating none at all. Three birds (1, 25, and 27) consistently ate a fair number of yellow pellets each day, but no bird ate more yellow pellets than mash over the eight day period.

Crushed yellow pellets were even less popular with these grown hens. Whole corn, on the other hand, was markedly preferred by four of the birds after the first day. One chicken which had eaten a fair proportion of yellow pellets (No. 25) ate almost no whole corn.

¹ A minimum of 15 minutes during the first four days; subsequently the birds were left in the cages at least 30 minutes, although the birds which had previously finished eating in 15 minutes continued to do so.