

Experiment 4  
(Final Report)

Preferences of Broiler Birds for Yellow Pellets and Other Feeds

Purpose: To test preferences of broiler birds for Larro broiler mash, broiler mash (3/32" pellets), broiler mash (3/16" pellets), and a high protein yellow pellet specially developed at the Research Laboratory.<sup>1</sup>

Subjects: Groups A and C (13 and 12 birds respectively) were approximately six weeks old at the start of the experiment. They were White Rocks of mixed sex, hatched at Glen Lake Hatchery, purchased at six weeks from a local broiler raiser. Prior to purchase they had been raised in a four-deck battery and fed on a locally prepared broiler mash (Connecticut formula). During the course of the experiment they were housed in the top and third deck of a four-deck broiler battery and were fed ad libitum from a trough divided into three sections. Larro broiler mash, powder form, was fed in one section, Larro broiler pellets (3/32") in another, and the yellow pellets in a third (a few were crushed on the first day). The positions of these three feeds in the trough sections were altered every two weeks, to avoid the formation of position habits.

Groups B and D (10 birds each) were approximately three months old at the start of the experiment. They were White Rocks and Wyandottes<sup>2</sup> of mixed sex, purchased from Glen Lake Hatchery, raised at our own farm at first in a battery brooder and later in floor pens. They had been fed exclusively on Larro broiler mash in its three forms; for about six weeks they had been on an all-pellet ration. For 3 or 4 weeks prior to the experiment about half their ration had consisted of 3/16" pellets. During the experiment they were housed in the second and bottom decks of the four-deck battery and were offered in divided troughs, ad libitum, 3/32" broiler pellets, 3/16" broiler pellets, and yellow pellets, a few of which were crushed on the first day. Positions of the feeds were changed every two weeks.

Grit and water were continuously available to all groups, except that no fresh grit was added to the troughs the day prior to feed weighing, since we wished to obtain weights of the feeds uncomplicated by varying amounts of grit.

Amounts of feed added were recorded at the time of each addition. The birds were weighed at the end of each week, and feed consumed during the week was measured at the same time.

The experiment was carried on for six weeks, until the yellow pellets were used up.

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<sup>1</sup> Made from a 50 percent starch and 50 percent casein preparation which was cooked and extruded. The finished pellet was intermediate in size between the 3/16" broiler pellet and the 3/32" broiler pellet.

<sup>2</sup> Reported as White Rocks only in the preliminary report. As the birds grew, a few rose combs became evident.