

Table 1  
Mean Weights and Gains in Ounces of Experimental and Control Groups

	Group A: Pellets every 30 min. N = 17		Group D: Ad lb. pellets N = 17		Gr. C: Mash, pel. every 30 min. N = 21		Gr. B: Mash, pel. twice a day N = 18	
	Mn. Wt.	Mn. Gn.	Mn. Wt.	Mn. Gn.	Mn. Wt.	Mn. Gn.	Mn. Wt.	Mn. Gn.
Initial	15.94		16.88		16.38		15.83	
End Wk. 1	20.82	4.88	21.76	4.88	20.95	4.57	20.61	4.78
End Wk. 2	26.00	5.18	27.58	5.82	25.52	4.57	26.28	5.67
End Wk. 3	30.06	4.06	30.29	2.71	29.62	4.10	30.17	3.89
Total gain		14.12		13.41		13.24		14.34
Mean weekly gain		4.71		4.47		4.41		4.78

Results. It will be noted from Table 1 that the birds were at the start of the experiment (in fact were at the time of their purchase) and still are somewhat substandard in weight for their age. They turned out, in addition, to have marked cannibalistic tendencies, and to be very wild and easily startled by any movement near their cage, in spite of continual exposure to conditions which should lead to quick emotional adaptation.

The main result of the experiment to date is that practically no differences have been obtained between any of the groups. Statistical tests will be made at the conclusion of the experiment, but they are hardly necessary to demonstrate the near identity of all the procedures for putting weight on the chickens. The groups were at most only an ounce different in weight (Groups D and B) at the start of the experiment, and even less difference can be observed at the end of the third week. Group D (Ad lib. pellets) was somewhat heavier to start with and their gains for the first two weeks were somewhat greater, but some unknown variable cut their weight gain for the third week so that they end up very little ahead of the other groups in mean weight and somewhat lower than Groups A and B in mean gain for all three periods.

It would seem that within the conditions of this experiment, at least, varying schedules and time intervals between feedings make little difference in the rate of gain of broiler birds at these ages. The experiment is being continued with some variations, and a more detailed report will be presented at its conclusion.

In view of the difficulties encountered with this particular strain of birds and the necessarily experimental stage of the apparatus, the study must be considered as purely exploratory. It has, however, demonstrated to us the reliability of the special timing and feeding apparatus developed and opens the way for additional experiments on the temporal variable.