From these results it appears that the experimental group maintained a slight edge over the control in food consumed but the difference is very slight and no doubt statistically insignificant.*

On the days xtedrin the table, the feeder clogged in such a way that it made its usual sound but delivered no pellets. Hence some extinction of the eating responses conditioned to the sound of the feeder took place. The effects of this are most apparent following April 16, after two days of such mishaps. These unfortunate occurrences are of course an inherent weakness of any mechanical means of feeding.

Table II presents mean weights in ounces and average gains for the two groups from the beginning to the end of the experiment.

Table II
Mean Weights and Gains in Ounces for Both Groups from Beginning to End of Experiment

| | Mean Weight in Ounces | | Mean Gain in Ounces | | |
|---|---|---|---|---|---|
| | Control | Experimental | Control | Experimental | Diff. (E - C) |
| Initial | 19.3[X] | 18.5[X] | | | |
| | | | 4.4 | 6.5 | 2.1 |
| 3-26 | 23.7[X] | 25.0[X] | | | |
| | | | 12.3 | 13.2 | 0.9 |
| 4- 6 | 36.0 | 38.2 | | | |
| | | | 10.8 | 10.5 | - 0.3 |
| 4-17 | 46.8 | 48.7 | | | |

[X] These means exclude the sick birds noted in the previous report. The means including the rejects were slightly lower. See Table II of report dated 4-1-49, Conditions of Feeding.

From this table it can be seen that although the experimental group maintained its advantage in average weight, its rate of gain steadily dropped until the control group finally surpassed it in gain.

Because of the difficulties involved in the mechanical features of this experiment (clogging, and the inability of this particular feeder to deliver the hen-size pellets), and the failure of the experimental birds to maintain their advantage in weight gain over the control group, it was decided to abandon this experiment and put the birds on a different schedule. However, the early marked differences between these two groups suggest that this experiment should be repeated with new birds and an attempt be made to iron out some of the problems encountered.

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* Since no individual food consumption records were kept for each bird, it was, of course, impossible to test the significance of this difference.