

South Dakota State University
**Open PRAIRIE: Open Public Research Access Institutional
Repository and Information Exchange**

South Dakota Poultry Field Day Proceedings and
Research Reports, 1973

Animal Science Reports

1973

Turkey Performance as Influenced by Egg Dipping

E. Guenther

C. W. Carlson

Follow this and additional works at: http://openprairie.sdstate.edu/sd_poultry_1973

Recommended Citation

Guenther, E. and Carlson, C. W., "Turkey Performance as Influenced by Egg Dipping" (1973). *South Dakota Poultry Field Day Proceedings and Research Reports, 1973*. Paper 13.
http://openprairie.sdstate.edu/sd_poultry_1973/13

This Report is brought to you for free and open access by the Animal Science Reports at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in South Dakota Poultry Field Day Proceedings and Research Reports, 1973 by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

South Dakota State University
Brookings, South Dakota

Department of Animal Science
Poultry Section

A.S. Series 73-24

Turkey Performance as Influenced by Egg Dipping

E. Guenther and C. W. Carlson¹

This experiment has not been completed. The data shown were obtained at 12 weeks. Eggs from a breeder flock with a known history of *Mycoplasma gallisepticum* infection were dipped in a solution containing a combination of 2800 ppm Tylan and 2000 ppm Neomycin before incubation. The eggs were first dipped in warm water (98° F) for 5 minutes and then into the cold (38° F) antibiotic solution for 10 minutes. Batches of 50 eggs increased in weight from 6 to 18 grams from this treatment, thus showing an average uptake of 0.68 mcg of tylosin and 0.49 mcg of Neomycin for the younger eggs and 0.61 and 0.43 mcg for the older eggs, respectively. Some of the eggs were 3 weeks old when set and the balance 1 week. Therefore, the old and young eggs were set separately. Results would indicate that the age of the eggs and dipping affected 7-day fertility and hatchability. Last year the eggs were dipped using a vacuum method.

The poults all were fed the same standard turkey starter and grower diets. All hens were eliminated at 8 weeks of age. Gains of the toms have been about average for 12 weeks. However, the nondipped stock were significantly lighter than those dipped by 150 grams. Feed conversion was the same for all treatments. The flock appears to be in good health and mortality has been minimal.

¹Assistant Professor and Professor and Leader, Poultry Research and Extension, respectively.

Table 1. Turkey Performance as Influenced by Egg Dipping

	Egg Treatment			
	Old	New	Not dipped	Dipped
Fertility, 7 day, %	73.0	86.8	82.3	77.5
Hatchability, %	45.8	58.3	57.4	46.7
Weight, 12 wk., kg	5.41	5.47	5.36a ¹	5.51b
Feed/gain, 12 wk.	1.9	1.9	1.9	2.0
Mortality, %	8.0	5.0	6.0	4.0

¹Data followed by unlike letters are different at the 0.05 level of significance.