

# TECHNICAL SERVICE



# BULLETIN



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## FURTHER EVIDENCE OF IMPROVED POULTRY PERFORMANCE WITH PROTEK-ALL AND AQUALYTE

Technical Service Bulletin 272 reported the benefits of adding **PROTEK-ALL®** to poultry drinking water for the first five days of life. Birds that received Dawe's multi-vitamin supplement out-performed control birds for feed consumed (2.0%); weight gain (2.4%); and feed conversion (0.7%), over the 17-day test period.

In two subsequent trials, **PROTEK-ALL** again improved the performance of young chicks. As in the previous test, one-day old Ross/Ross make chicks were used. The chicks were weighed individually and allotted so that replicate groups weighed approximately the same. There were 18 replicates (pens) per treatment, with ten chicks per pen.

The test consisted of a control and treatment group. The chicks were placed in Petersime brooding batteries and offered identical broiler mash (22.5% protein, 1419 M.E. Cal/lb).

### PROTEK-ALL AND AQUALYTE®

In one follow-up study, **PROTEK-ALL** was again added at 2 oz/128 gallons drinking water. The treatment group also received **AQUALYTE** at 8 oz/128 gallons. **AQUALYTE** is an electrolyte/trace mineral powder, proven effective in decreasing poultry heat stress and in improving yield (TSB's 193, 257, 260, 262).

The treatment group received **PROTEK-ALL** and **AQUALYTE** for the first five days of the test. Fresh water was offered to both control and treatment chicks every day. After the fifth day, all chicks began receiving water without **PROTEK-ALL** and **AQUALYTE**. The test was ended at 17 days of age.

Chicks receiving **PROTEK-ALL** and **AQUALYTE** outperformed control birds for the full 17-day period. The results were in fact better than in previous test (TSB 272) with **PROTEK-ALL** alone:

TREATMENT	GAIN/BIRD GRAMS	FEED/BIRD GRAMS	FEED/GAIN
CONTROL	386.9	565.9	1.46
TREATMENT	404.6	582.9	1.44
% IMPROVEMENT	4.5	3.0	1.3

Both GAIN/BIRD and FEED/BIRD were significantly improved ( $P < .07$ ) in birds receiving **PROTEK-ALL** and **AQUALYTE**. This confirms the results reported in TSB 272, that **PROTEK-ALL** aids newly-hatched poultry in greater feed intake, greater weight gain and more efficient feed consumption. It also suggests that **AQUALYTE** enhances the benefits of **PROTEK-ALL**.

### **PROTEK-ALL REDUCES MORTALITY**

In the preceding two tests, birds were grown in an environment free of many stresses typical of commercial production. Even, so, micronutrient supplementation of drinking water with **PROTEK-ALL** and **AQUALYTE** resulted in superior performance.

Another test was conducted in the same environmentally controlled facility, using the same protocol, except that day-old chicks received only **PROTEK-ALL**, and for all 17 days of the test. In this trial, mortality was unusually high. Virtually all deaths occurred during the first four days.

While weight gain suffered greatly in both control and treatment groups, nevertheless chicks receiving **PROTEK-ALL** demonstrated far better livability:

TREATMENT	AVERAGE GAIN GRAMS/PEN	TOTAL BIRDS COMPLETING TEST	FEED/GAIN	MORTALITY %
CONTROL	2771.2	143	1.53	20.6
TREATMENT	3130.4	163	1.51	9.4
% IMPROVEMENT	13.0	14.0	1.3	54.1

**PROTEK-ALL** birds suffered less than one-half the mortality of the control group. Clearly **PROTEK-ALL** reduced mortality of stressed poultry. The lower mortality also indicates that more total body weight eventually was processed.

Both tests reported in this Technical Service Bulletin confirm previously conducted research and indicate that the use of Dawe's proprietary water-dispersible supplements serves the economic interest of poultry producers.

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