Culbac® Animal Dry Benefits Poultry

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Research trials conducted with broilers, layers and turkeys have shown that Culbac® Animal Dry:

- Reduces mortality
- Significantly improves feed conversion
- Increases the number of large-size eggs in laying hens

Like prophylactic levels of antibiotics, the benefits of Culbac® Animal Dry are most apparent when the animal is stressed, immunologically-challenged or experiencing less-than-optimal environmental or nutritional conditions. UNLIKE antibiotics, Culbac® Animal Dry does not produce resistant bacteria which may threaten human medicine. Culbac® Animal Dry is a non-viable or ABIOTIC functional feed supplement. It contains no live organisms which can mutate to pathogenic forms or harm immuno-compromised animals. Its beneficial effects on the bird's GI tract and immune system do not rely on live probiotic bacteria, so Culbac® Animal Dry has a longer shelf-life at room temperature and can be further processed into complete feeds.

Here are thumbnail summaries of Culbac® Animal Dry poultry research projects:

BROILERS

Siriwan P (1977) Effect of probiotic feeding on the performance of broiler chicks. Master's Thesis, Mississippi State University. p. 21 (P16): ***"(Broiler) chicks fed Culbac® Animal Dry at 0.5 or 2.0 g/kg supplement with only 90% of the recommended amino acids were equal in body weight to chicks fed at 100% levels."***

McNaughton J (1977) Effect of Culbac® on Broiler Performance in Normal, Warm and Cold Environments. South Central Mississippi USDA Regional Lab (P2): **"In a two-week battery**

study, Culbac® Animal Dry had a slight improvement in feed conversion in normal and warm temperatures (+ 1.5%). It had a much larger improvement in cold temperatures (+ 7.2% in 60 to 90°F).”

Charles OW (1977) The Biological Evaluation of Culbac® with and without antibiotics. University of Georgia; Athens, GA (P6): **“In 2 out of 3 studies, significant growth responses were observed when Culbac® Animal Dry was added to broiler diets.”**

Formica SD, Hendricks M (1977) Commercial Broiler Trial; Nashville Arkansas (P4); and Independent Broiler Trial (1978) (P29): **“Culbac® Animal Dry improved performance of broilers under commercial conditions.”**

Vest L (1982) Effects of a nonviable *Lactobacillus* species fermentation product on performance of Broiler Breeders. Presented at World Poultry Congress, Poland (P3): **“Two field trials confirmed that broiler breeder hens laid better during heat stress when they were receiving the nonviable culture (Culbac® Animal Dry)”**

TURKEYS

Harris JR (1976) Culbac® Turkey poult study. North Carolina State University Poultry Science Dept. (P24): **“Turkey poults fed 1 lb/ton Culbac® Animal Dry from 0 to 4 weeks of age had significantly lower mortality and significantly better feed conversion than control poults and those fed live probiotics.”**

LAYERS

Laying hens produced significantly more large-size eggs with Culbac® Animal Dry in the following studies:

Effect of Culbac® on Egg Production and Size in Hi-Line W-36 Caged Layers (Trial JHT-PL-77-6) Cornbelt of Arkansas; Hope, Arkansas (P19): **"42% large eggs with Culbac® Animal Dry versus 13% with control."**

Flieg FX (1975) Missouri Layer Test; Ste. Genevieve, MO (P33): **"Culbac® Animal Dry treated layers also had lower mortality and more eggs per hen housed."**

Hargis P, Creger CR (1977) Lactobacillus fermentation products in laying hen rations. Texas Agricultural Experiment Station; College Station, TX. (P5): **"...more large eggs were produced on the same amount of feed".**

These academic and industry trials were performed in the 1970s. Later studies on other livestock such as dairy and beef cattle, swine and sheep also indicated better production performance, especially under stress.

Since the middle of the twentieth century, Culbac® Animal Dry has been a proven alternative to antibiotics.