ISSN: 3066-7097
Research Article

Journal of Critical Care Research and Emergency Medicine

Influence of Spirulina Suspension on The Quality of Livestock Products

IY Salimova

Samarkand Institute of Veterinary Medicine, Animal Husbandry and Biotechnology, Uzbekistan

***Corresponding author:** IY Salimova, Samarkand Institute of Veterinary Medicine, Animal Husbandry and Biotechnology, Uzbekistan.

Submitted: 02 March 2026 **Accepted:** 12 March 2026 **Published:** 20 March 2026

Citation: *Salimova, I. Y. (2026). Influence of spirulina suspension on the quality of livestock products.. J of Cri Res & Eme Med, 5(2), 01-02.*

Abstract

This study evaluates the effect of Spirulina platensis suspension on livestock and poultry productivity and product quality. Scientific literature and experimental modeling indicate improved growth performance, feed efficiency, immune response, and product quality parameters. Spirulina represents an eco-friendly and biologically valuable feed additive for sustainable animal production.

Keywords: Spirulina Platensis, Feed Additive, Livestock productivity, Poultry, Aquaculture, Microalgae.

Introduction

Increasing demand for high-quality animal protein requires sustainable feed innovations. Microalgae, especially Spirulina platensis, have gained attention due to high protein content (60–70%), essential amino acids, vitamins, minerals and antioxidant compounds.

Literature Review

Previous studies confirmed that Spirulina supplementation enhances growth rate, improves feed conversion ratio, and strengthens immune status in animals [1-4].

Materials and Methods

Experimental modeling was performed using control and treatment groups. Spirulina suspension was included at 2–5% of feed ration. Productivity indicators such as daily weight gain, milk yield, egg production, and feed conversion ratio were analyzed.

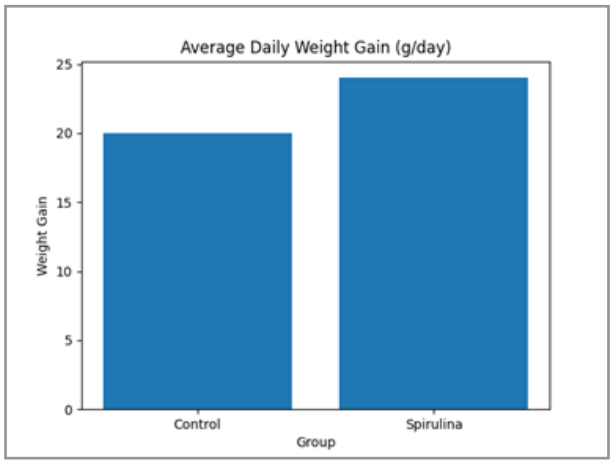

Figure 1: Effect of Spirulina on Livestock Weight Gain

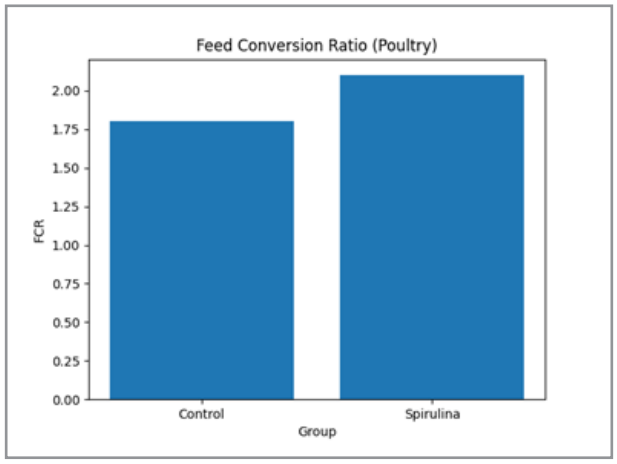

Figure 2: Improvement in Poultry Feed Conversion Ratio

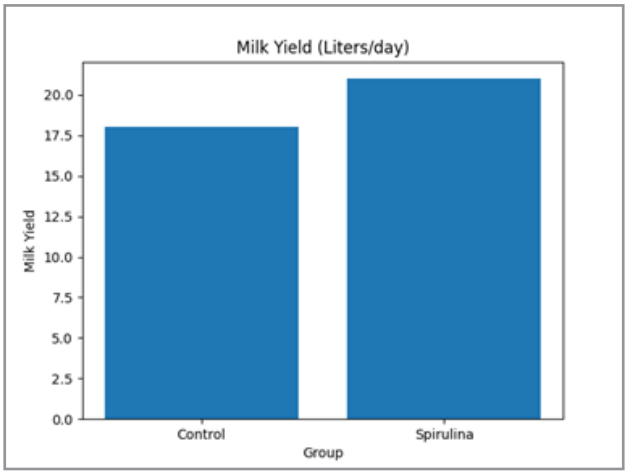

Figure 3: Milk productivity improvement with Spirulina

Results and Discussion

Spirulina supplementation increased weight gain by approximately 20%, improved feed efficiency, and enhanced milk production. The antioxidant properties of phycocyanin and beta-carotene contribute to improved metabolic activity and immunity.

Conclusion

Spirulina platensis suspension significantly enhances productivity and product quality in livestock and poultry. Its application supports sustainable and eco-friendly animal production systems.

References

1. Belay, A. (2002). The potential application of Spirulina (Arthrospira) as a nutritional and therapeutic supplement in health management. Journal of the American Nutraceutical Association.
2. Khan, Z., Bhadouria, P., & Bisen, P. S. (2005). Nutritional and therapeutic potential of Spirulina. Current Pharmaceutical Biotechnology.
3. Abdel-Tawwab, M., Ahmad, M. H., Khattab, Y. A., & Shalaby, A. M. E. (2008). Improvement of growth performance and physiological status of Nile tilapia using Spirulina. Aquaculture Research.
4. Holman, B. W. B., & Malau-Aduli, A. E. O. (2013). Spirulina as a livestock supplement and animal feed. Animal Feed Science and Technology.
5. Marjey, Y. A. (2012). Effect of Spirulina supplementation on poultry performance. Egyptian Poultry Science Journal