**Bioactive additives in Poultry Health and Production**

**Chapter 1: Poultry Production in the world**

* 1. Introduction
  2. Poultry Industry
  3. Poultry Nutrition
  4. Probiotics and Prebiotics in Poultry Diet
  5. Anatomy and Histology of the Bird Gastrointestinal Tract
  6. Ecology of Microbiota in the Chicken Gastrointestinal Tract
  7. Conclusions
  8. References

**Chapter 2: Probiotic for the health of Poultry**

* 1. Introduction
  2. Gastrointestinal Microflora and Interactions with Gut Mucosa
  3. Concept of Probiotics, Definition, Criteria, Methodologies and Products
  4. Action of Probiotics in the Gastrointestinal Tract of Poultry
     1. Competitive Exclusion
     2. Bacterial Antagonism
     3. Immune Modulation
  5. Conclusions
  6. References

**Chapter 3: Role of Prebiotic in Poultry Nutrition**

* 1. Introduction
  2. Concept of Prebiotics, Definition, Criteria, Methodologies, and Products
  3. Action of Prebiotics in the Gastrointestinal Tract of Poultry
  4. Source of Prebiotics
  5. Conclusions
  6. References

**Chapter 4: Postbiotics as a new Additives**

* 1. Introduction
  2. Concept of Postbiotics
  3. Characteristics an ideal Postbiotics
  4. Action of Postbiotic in the Gastrointestinal Tract of Poultry
  5. Conclusions
  6. References

**Chapter 5: Role of Synbiotic in Poultry Nutrition**

* 1. Concept of Synbiotic
  2. Action of Synbiotics in the Gastrointestinal Tract of Poultry
  3. Characteristics of Synbiotics
  4. Conclusions
  5. References

**Chapter 6: Effects of Probiotics, Prebiotics, Postbiotics and Synbiotics on Poultry**

* 1. Introduction
  2. Growth Performance
  3. Gut Microbiota
  4. Gut Histology
  5. Short-Chain Fatty Acid in the Gastrointestinal Tract
  6. Meat Quality
  7. Hepatic IGF-I and GHR mRNA gene expression
  8. Haematological Parameters
  9. Cholesterol Content
  10. Immune Modulation
  11. Conclusions
  12. References

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