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CAUSES AND PREVENTION METHODS OF CANNIBALISM IN POULTRY

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Annotation: This article briefly summarizes the problems, causes, and prevention methods of cannibalism in poultry farming.

Keywords: Chicken, cannibalism, improper feeding, calcium, manganese sulfate, sulfur, sodium bromate, vitamin, protein, amino acid, light.

Relevance of the Topic:

In our country, consistent measures are being implemented to develop the poultry industry, increase the volume and diversify the types of finished products intended for export, as well as to provide the population with high-quality and affordable locally produced poultry products. On January 30, 2025, the resolution "On Additional Measures to Support Livestock and Poultry Farming and Create High Added Value in the Sector" outlined the priority tasks for the development of the poultry sector.

Cannibalism - is a disease characterized by pecking among birds, which can occur at any age and in any group.

Chickens and turkeys usually feed on grains and plants, but under certain conditions, they may become carnivorous and even reach the level of cannibalism. In chicks, pecking often starts with the legs, followed by feather pecking. Soft feather shafts are particularly attractive to cannibalistic chicks. The small feathers on the back and wings are common targets for pecking in birds affected by cannibalism. Feather pecking also occurs around the cloaca and tail areas.

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The main causes of cannibalism in chickens include an excess of animal-based feed in the diet, deficiencies in amino acids (methionine, lysine, cystine), calcium, sulfur, cobalt, manganese, iodine, and table salt, overcrowding of birds, lack of water, and stress factors. These stressors include excessive lighting (more than 7–8 hours), prolonged confinement in dark conditions, injuries that lead to bleeding, which attracts pecking behavior, and unsanitary conditions. (Bessarabov B.F., 2007)

1.Nutritional Deficiency or Improper Feeding – A lack of protein, minerals (especially calcium and sodium), or other essential nutrients can lead to pecking behavior among chickens. Protein deficiency, particularly when only plant-based proteins are used, can trigger cannibalism.

Sources: Fish meal, meat and bone meal.

- Chicks require 18–22% protein.
- Laying hens should have a diet containing 16–18% protein.

Calcium deficiency leads to the production of eggs with thin shells and may cause hens to start pecking at eggs. Eventually, they begin pecking at each other's feathers, eyes, wounds, and cloaca. The disease can spread rapidly in floor-reared flocks. Sodium deficiency has also been associated with increased aggression.

2. Excessive or Improper Lighting – Excessive or continuous lighting can increase aggression in chickens, leading to pecking behavior. Very bright lights (e.g., 40 watts or more) cause restlessness, stress, and exacerbate cannibalism. If lighting exceeds 16 hours a day, it increases the risk of cannibalism in hens. Uneven distribution of light in the rooms is also one of the important contributing factors.

3. Crowded Housing – Overcrowding in housing increases stress and aggression in chickens, which can lead to cannibalism. The effect of overcrowded housing on cannibalism is significant:

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- Limited Movement – Chickens naturally need to move and change their position. If there is insufficient space, cannibalism can become more prevalent. The recommended minimum space for chickens is as follows:

Broiler chickens: 0.1–0.15 m² per chicken

Laying hens: 0.2–0.25 m² per chicken

Pasture-based housing: 1–1.5 m² per chicken

- Air Pollution – In cramped and crowded spaces, oxygen deficiency occurs, and the increase in ammonia gas levels exacerbates stress in chickens.

- Increased Competition – As competition for food, water, and space increases, chickens become more aggressive and begin attacking each other.

4. Climate and Environmental Conditions – Extreme heat or cold temperature fluctuations can lead to cannibalism in chickens. The relative humidity should be maintained at 65-70%. If the temperature is elevated, it should be reduced, and the ventilation in the room should be improved.

Cannibalism is characterized by chickens pecking each other's skin, combs, wattles, and cloacas. It primarily occurs in laying hens during the peak egg-laying phase and in young chicks during the rapid growth phase (25-60 days old).

To prevent cannibalism in chickens, attention should be given to the protein content in the diet, avoiding rapid changes in the type of feed, and meeting the birds' needs for vitamins and minerals. The diet should provide 0.2-0.3g of sulfur and 2-10mg of manganese sulfate per chicken. Red lamps should be installed instead of white lamps in poultry houses. (Eshburiyev B.M., 2006)

Conclusion: To prevent cannibalism in poultry, it is crucial to adhere to proper management practices, such as avoiding overcrowding, providing a balanced diet, replacing white lighting with red lamps, and ensuring the correct air composition. Today, the early detection of cannibalism in chickens and the development of effective treatment and prevention methods remain one of the primary tasks for veterinary professionals.

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