LEG HEALTH IN BROILERS

Leg problems are estimated to affect 2 million of the 800 million broilers produced each year in the UK, at a cost to the industry of over £2M. There are two classes of leg problem: non-infectious and infectious. Non-infectious leg problems usually stem from breeding or nutritional causes and cannot easily be influenced by the producer. Infectious leg problems account for about 60% of all problems and the affected birds must be culled as the effects are irreversible. High standards of hygiene and biosecurity can eliminate a large proportion of these problems.

NUTRITION

- Nutrient deficiency predisposes birds to skeletal problems
- Feed manufacturers must make statutory declarations of feed quality, and vitamin / mineral content should be optimal
- If you are experiencing leg problems in your flock, get the feed analysed for key nutrients including calcium, phosphorus, vitamin D and zinc, rather than relying on the statutory declaration (mistakes in feed manufacture are rare, but they can happen)
- Remember that if you add whole cereal grains to your compound feed, you are effectively diluting the compound feed and its vitamins and minerals

BIOSECURITY

- This is the easiest area in which improvements can usually be made
- Many biosecurity measures are really simple common sense
- Always ensure that your water supply is clean
- Do not allow stale water to accumulate in bell or cup drinkers - these can be breeding grounds for bacteria that can contribute to leg and joint abnormalities
- Chlorination or treatment of water with UV light can benefit water quality
- Nipple drinkers are the most hygienic system - but do not allow them to drip. Replace any faulty valves at once to avoid litter problems
- Maintain all feed in a dry and fresh state
- Inspect bulk bins on a regular basis to reveal whether any leaks, holes or corrosion are present. Ensure that any bin repairs receive urgent priority
- Use feed as quickly as possible - long storage is makes deterioration more likely

BIRD HEALTH

- Immunosuppressive viruses (IBD, CAV and Marek’s disease) make birds more vulnerable to infection
- Check levels of maternal antibodies in the young broiler and, with the help of a veterinary advisor, plan a comprehensive vaccination policy which is best suited to your farm.
MANAGEMENT / COMMUNICATION

- Good management is about communication and vigilance
- Inform fieldsmen and managers as soon as a leg-related problem is found
- Have post mortem examinations done to find out if the problem is infectious or non-infectious. The treatment and remedies will differ, so veterinary advice is essential
- Implement a high standard of biosecurity including personal hygiene and foot baths
- Review your whole farm management periodically to identify weaknesses or areas for improvement
- Put yourself in the position of a visitor to your farm - what things would you improve?

CAUSES OF LEG PROBLEMS

**Infectious**
- Femoral Head Necrosis
- Bacterial Synovitis
- Arthritis
- Osteomyelitis
- Viral Arthritis
- Synovitis

**Non-infectious**
- Tibial Dyschondroplasia
- Angular Bone Deformity
- Perosis
- Crooked Toes
- Spondylolisthesis
- Scoliosis

WELFARE

- Lameness leads to poor welfare for the birds concerned
- In the worst cases birds can become dehydrated and starve to death
- Hock and breast damage can occur from the increased amount of time the birds spend sitting on the litter
- Lame birds may be trampled and scratched by other birds - particularly during panic movements
- Producers should comply with the requirements of the welfare legislation protecting broilers (The Welfare of Farmed Animals (England) Regulations 2000) and the Welfare Code for Domestic Fowl. A new welfare code specifically for broilers (meat chickens) is currently being finalised

MORE INFORMATION

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