



# Livestock Knowledge Transfer

a **DEFRA** initiative

operated by ADAS/IGER/University of Bristol

## 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
- Lamé 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



Andrew Walker (ADAS Gleadthorpe) 01623 844331.

For a full list of available factsheets contact Deborah Courtney 01970 823 028 or email [kt@bbsrc.ac.uk](mailto:kt@bbsrc.ac.uk)



[andrew.walker@adas.co.uk](mailto:andrew.walker@adas.co.uk)  
[www.agriknowledge.co.uk](http://www.agriknowledge.co.uk)