

BIOLOGY TEXTS

Short Written Texts (Conference Papers)

Sneddon, L.U. and Gentle, M.J. '*Pain in Farm Animals*'. Research Consortium Sustainable Production (2001).

Lameness also affects broiler or meat chickens and turkeys. Meat birds are selected for rapid growth and become too heavy for their legs to carry their bodies and their skeleton becomes distorted. This increased weight places unnatural stresses on their joints and results in abnormal gait; impairs the ability to walk and the affected individuals spend less time standing (Duncan et al. 1991; McGeown et al. 1999). Studies have shown that a normal chicken takes an average 11 seconds to walk a set distance whereas a lame chicken takes 34 seconds. This time can be reduced to 18 seconds if the drug carprofen, an analgesic, is administered which presumably reduces pain associated with lameness.

Lameness is particularly prevalent in broiler chickens and turkeys and it has been shown that 90% of broilers at 7 weeks of age had detectable gait abnormalities (Kestin et al. 1992). These fast growing birds have more breast muscle and shorter wider legs with immature bones. This leads to a gait which is typified by short steps, feet positioned wide apart and the feet turned out resulting in abnormally large mediolateral forces required to move the bird's centre of gravity over the stance leg (Corr 1999). Affected chickens take shorter steps, walk more slowly and have greater stresses placed upon the musculoskeletal system resulting in an inefficient walking system. Broiler chickens, as a consequence, spend much less time walking and standing (Duncan et al. 1991; McGeown et al. 1999). The possible pain resulting from skeletal disease has been investigated using analgesics with some evidence of pain associated with lameness (McGeown et al. 1999; Danbury et al. 2000).

Minimising Pain and Suffering in Farm Animals

We have reviewed the various potentially painful practices and conditions that farm animals endure. Both behavioural and physiological measurements have demonstrated that these painful experiences have a detrimental effect on animal welfare and consequently decrease financial gain. It is perhaps impossible to totally eliminate pain in production animals but suffering should be minimised since it is in the farmer's best interest to ensure his animals' wellbeing. Any measures should take into account the profitability and practical nature of any proposed

changes but also should seek to reduce pain and distress. This means prompt diagnosis and effective treatment of damage or disease but in the situation where the problem is a result of selective breeding, the solution will be more complex. For example, broiler chickens, where skeletal disease is prevalent, can be fed a reduced diet thus slowing down their rapid muscle growth. To control pain we must know what pain is and how it arises during farming. Therefore we must invest in sound scientific research to assess pain and find methods of reducing it by using the least painful method available and also the promotion of the use of local anaesthesia and analgesia where appropriate. It is clear that the farmer's support is essential to any changes in practice and therefore, awareness of welfare issues should be promoted by a positive interaction between scientists, veterinarians, and farmers. Any changes, of course, have to be economically viable but there is increasing public demand for more welfare and environmentally friendly products and the public must be informed if the products go up in price that this is to pay for the reduction of pain and suffering in farm animals.