

**COMPLIANCE WITH PHYSIOLOGY AS THE FOUNDATION  
FOR ANIMAL WELFARE GUIDELINES:  
Exemplified by the rehabilitation of the horse's foot & mouth**

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Cruelty is defined as the infliction of avoidable suffering. Recent advances reveal that horseshoes and bits deny four of the five freedoms and are, by definition, cruel. Simple, physiologically compliant and realistic management changes permit removal of these metal impediments, enhancing welfare, improving performance, preventing disease, and reducing accidents.

Horseshoeing and housing that restricts movement cripples horses. Lameness is regrettable enough but navicular syndrome and laminitis are diseases often terminated by euthanasia or death. Removal of the cause being a prerequisite of treatment, this requires:

1. Cessation of shoeing
2. Management that complies with physiology (e.g. adequate movement, hoof hydration, and judicious trimming to return a deformed hoof to its correct anatomical shape).

When years of shoeing have deformed the hoof, rehabilitation may sometimes cause temporary discomfort. A decision over whether barefoot management or euthanasia is appropriate requires answers to two questions. First, based on the clinical evidence, does the shod horse have a fighting chance of recovering? Secondly, can the professional caretaker and owner provide the necessary knowledge, commitment and resources? When transition to barefoot management results in abscess formation during the necessary remodelling it is unavoidable. Being unavoidable, it is not cruel.

The recently developed crossover bitless bridle provides uniquely painless communication that is safer and more humane than the bit. Currently, FEI rules mandate use of the painful bit for most disciplines. Often, the rules require two bits and a chain. Amendments are required so that these international rules comply with welfare guidelines and permit painless communication.