New Guidelines on Feeding Forage to Horses

Increasing research into conditions such as obesity, insulin resistance, metabolic syndrome, laminitis, colic, stomach ulcers, rhabdomyolysis, feed hygiene as well as behavioural abnormalities have often pointed towards one common important factor in their prevention and management: the correct feeding of forage. Therefore, a number of top experts in equine nutrition and health in Europe have come together to review the large body of updated and new knowledge which has come to light in the past 15 years.

This review paper defines the types and treatment of preserved forages for horses, evaluates latest knowledge on nutrient and hygienic quality of forages across Europe, on the digestive processes in relation to the microbiome health and on our latest understanding of energy supply for maintenance and work. In addition, the importance of feeding forage for prevention of health issues and the facilitation of natural feed intake behaviour are discussed. The paper culminates in clear novel recommendations and guidelines on feeding volume, specified feeding times, hygiene and minimum as well as optimum requirements for horses. The ultimate aim is to provide a resource which will help to support better welfare in relation to feeding horses, wherever they are in the world.

Key recommendations include a change in daily ‘volume’ intake, highlighting that a minimum of 1.5% of BW should be fed as DM forage. In addition, horses should be provided with the opportunity to spend a minimum of 8 hours/24hours on foraging behaviour. It is also now apparent that good quality forage can supply 80-100% of energy requirements of horses in heavy work. Of course, exceptional situations to these recommendations are also discussed.

Reference


Abstract Pubmed; Publisher
The relationship between the welfare quality and stress index in working and breeding horses

Welfare assessment of kept horses is gaining more attention in various countries. This observational study executed in Romania addressed the question if a relationship exists between the calculated overall individual welfare score and the neutrophil: lymphocyte (N:L) ratio in working and reproduction horses (total \( n = 1482 \)) in two different seasons. The N:L ratio was used as an indicator for stress in this study. The welfare of the horses was assessed by a protocol which included additional health and behavioural parameters. Horses at work were more prone to injury. Further, the N:L ratio increased when horses were in a poor welfare state. The authors further state that a balance between work and welfare is needed which can be fulfilled by understanding and fulfilling the horse needs and allocating resources for their welfare.

Reference

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The diagnosis of equine insulin dysregulation.

In the last decade a relative large amount of studies have been dedicated to equine glucose and insulin metabolism. Alterations in glucose and insulin metabolism play a role in various disease conditions like equine metabolic syndrome, laminitis, etc. A variety of glucose and insulin tests are used in practical and research settings and applied in various studies. For nutritionists, vets and non-vets the variety of tests available may make the outcome of these tests but also the results of study outcomes difficult to interpret. The review of Bertin and de Laat (2017) provides an overview of tests that are currently available to diagnose insulin dysregulation in horses. It also includes definitions and descriptions of various conditions related to insulin dysregulation. Confounding factors like horse factors and environmental factors that may alter the outcome of diagnostic tests are also briefly discussed.

Reference

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