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## High protein diets for horses

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The feeding of high-protein diets to horses in work has previously been “in vogue”, probably following the fashion of human athletes consuming diets with high amounts of protein. We now know that diets providing excessive crude protein offer no benefit to the athletic horse and in fact may even be detrimental:

- Protein is an expensive source of dietary energy compared to carbohydrates;
- Excess protein may elevate heart and respiratory rates;
- Horses on high protein diets may have electrolyte imbalances due to increased sweat loss;
- Diets supplying excessive protein may result in increased urinary ammonia in the horse’s stall from urea excretion which may contribute to increased respiratory disease;
- If protein replaces carbohydrate in the diet of horses in heavy work, then glycogen storage may be affected.



It is the *quality* rather than the *quantity* of protein that is likely to be of key importance. Research groups are currently investigating the specific amino acid supplementation for performance although little is known on the exact amino acid requirements of the athletic horse.