## Improving hoof quality and health

Nutrition plays a vital role in hoof quality and health – we strongly recommend feeding horses a totally balanced diet that will give overall health gains. Targeted supplementation specifically for hoof health will often result in poor outcomes due to continuing imbalance of nutrients.

Horses will show dietary deficiencies and imbalances in many different ways – some, for example, will present with poor quality hoof while others will have faded coats, poor feed conversion or reduced performance. Hoof quality can be reflective of the horses overall health for the previous twelve months. It can take up to twelve months for full recovery of hoof quality after the diet has been corrected. Farriers can often notice a marked improvement within six to eight weeks of being on a balanced diet as the new hoof grows down from the coronet.

Poor quality hooves are characterised by a loss of structural integrity and typically have a slow growth rate. Hooves are composed of 90% keratin which is an insoluble protein. The amino acids methionine and cysteine form bonds with the keratin molecules to provide the structure of the hoof. A diet deficient in protein can therefore cause poor hoof quality and poor muscling. Good quality protein sources such as soybean and alfalfa are recommended to help correct protein deficiencies in the diet.

Minerals are critical for hoof health as well. Calcium is needed for binding keratin but excess can interfere with zinc absorption. Zinc is needed for healthy skin, hair and hooves but excess zinc can interfere with copper absorption. Copper is needed to bind with keratin and ensure the structural integrity of collagen. Manganese is required for the formation, maintenance and repair

of cartilage. Selenium is also essential for hoof health, care needs to be taken in the levels fed as it can be toxic in excess. These are just examples of the complexities of nutrition and the risks of just feeding one or two minerals to the exclusion of others.

Biotin is a vitamin needed for hoof health – a deficiency will lead to poor quality shelly hooves (brittle horn). Horses manufacture their own B Group vitamins (including biotin) in the hind gut. Horses with a healthy digestive system will manufacture adequate levels of biotin for their needs. A healthy digestive system requires high roughage, low concentrate diet with a complete mineral –vitamin supplement such as Equilibrium LexveT Mineral Mix.

Horses that are stressed through illness, high workloads, and low hay-high grain diets may benefit from additional Vitamin B supplementation.

Improving hoof health requires a diet that will improve the overall health and wellbeing of the horse – the Equilibrium LexveT feeding program recommends always feeding good quality hay or pasture on an ad lib basis , minimal use of grains, pellets and coarse mix, and use a multimineral vitamin supplement at all times such as Equilibrium LexveT Mineral Mix.

## **EQUILIBRIUM**

AUS1300 720 377sales@equiaustralia.com.auwww.equiaustralia.com.auNZL0800 442 450sales@equiaustralia.com.auwww.equiaustralia.com.au

## LEXVET INTERNATIONAL

UK 0800 334 5856 sales@lexvetsupplements.com
USA 877 215 4644 sales@lexvetsupplements.com
IRL 087 2227 382 allequestriantack@hotmail.com
EUR +47 9229 5555 nena.bjerke.ltd@gmail.com

www.lexvetsupplements.com www.lexvetsupplements.com www.allequestriantack.com www.hestespesialisten.no

