

HOOFPEP – Why does it work?



Two main factors influence the strength and resistance to damage of the horses hoof, growth rate and horn quality. Both of these may be subject to nutritional influences, though not all horses with poor hooves will respond to nutritional supplementation.

Hoof horn is comprised largely of strands of collagen, which also provides structural strength in other connective tissues such as tendon and cartilage. At the molecular level the strength of collagen is related to chemical bonds or cross linkages between strands and these in turn are related to its organic Sulphur content.

Organic Sulphur is found in the B Vitamin **Biotin** which is especially important in the maintenance of healthy hoof horn, as well as skin and hair. Like all the water soluble B Vitamins, Biotin cannot be stored, except for small amounts in the liver, and must be constantly replenished from the diet.

Another source of organic Sulphur is the amino acid **Methionine** which is important in producing normal tendon, cartilage and ligament tissue, as well as good quality hoof horn. **Methionine** is also needed for the production of two other Sulphur containing amino acids, taurine and cystine. HOOFPEP contains both these sources of organic Sulphur without which the formation of the all important cross links between collagen strands cannot form adequately.

HOOFPEP also provides another source of organic Sulphur which occurs naturally as a metabolic by product in the horse's body, **Methyl Sulphonyl Methane** or MSM. Present in fresh plants it is lost during drying.

The interactions between these Sulphur containing organic compounds and the production of good quality collagen are facilitated by enzymes and the trace element **Zinc** is important in these chemical processes. Zinc deficiency is one of the most common trace mineral deficiencies and low Zinc levels will produce poor quality hoof horn. **Zinc** from both organic (Zinc Amino Acid Complex) and inorganic sources (Zinc Oxide) is present at high levels in HOOFPEP.

The causes of poor quality horn resulting in broken, crumbly or weak hooves, are many and varied. The importance of good farriery and regular hoof trimming to maintain the correct hoof shape and balance cannot be over emphasized. However, nutrition plays a significant part in providing the essential building materials for horn production, especially where these may be deficient in the normal diet. HOOFPEP contains all these building materials in abundance, even for performance horses where demands may be increased. As a bonus, these same materials are equally necessary for the structural strength of the collagen found in tendons, ligament and cartilage.

A horses hoof takes about 5 to 8 months to grow from the coronary band to the ground surface. Any supplement designed to promote sound hoof growth must therefore be long term if the real benefits are to be realized

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