



# HOOVES AND NUTRITION

Some problems James and Yvonne Welz have seen through years of barefoot horse care on hundreds of horses and their suggested solutions

**T**his is a huge topic. We urge you to read all the nutrition books, and seek information from every available source. Educate yourself about nutrition in the same way that you are educating yourself about horsemanship. There is no substitute for this vital and necessary information, but be prepared for confusion. Once you have done your research, you will then be astounded at the differences of opinion when it comes to 'correct' equine nutrition. Very simply put, there is not one right way to feed a horse.

While we can break down the nutritional requirements of an equine into mathematical figures, the truth is there are many different ways to provide those requirements. Equines are hugely adaptable to a wide variety of diets, some good and some not so good, yet the horses still manage to survive and, in some cases, even thrive. It is part of their inherent physiology. They had to adapt quickly to whatever was available, wherever they were, or they would die.

Once you understand the horse's basic requirements, the details of what you feed or don't feed will then be a matter of your personal opinion. We have some basic guidelines outlined overleaf. The problem we are now seeing is that nutrition is being blamed for a variety of barefoot problems that are actually caused by poor or inadequate trimming.

Yes, there are often cases where nutrition plays a key role, especially if there are mineral deficiencies or imbalances. There are some horses who have severe metabolic problems, and their hooves cannot improve without a nutrition programme to address this. Then there is the simple fact that a horse who is overweight will put extra stress upon his hooves. Don't let your horse get overweight!

What has been frustrating to us is to receive so many calls for help from horse owners seeking an answer to their ongoing or recurring hoof problems, even after being barefoot for many, many years. They are usually looking

for nutrition advice, or some chemical or product to fix their problem. However, the photos they provide show trims that are simply grossly inadequate. The owner was usually told by their hoof care professional that the horse has some sort of nutrition problem or fungus and that's the reason for the ongoing problem. People are soaking hooves in harsh chemicals, buying expensive supplements, laboriously soaking hay, confining horses off grass and going to extremes trying to do whatever it takes to fix those hooves when all that is really needed is good, consistent trimming.

You can feed and care for your horse perfectly, but if the trim is insufficient you are not going to have healthy hooves, and all the expensive supplements or chemical treatments in the world are not going to fix that.

If your horse is not overweight and does not have a metabolic problem yet suffers from ongoing hoof problems, there is so much more to look at than just diet. Don't misunderstand us, diet

## THE HORSE'S HOOF DIET

How do you keep your horse's diet as natural as possible if you don't have 100 acres of varied terrain to supply your horse with the different plants and minerals that he requires to fulfil his nutritional needs? These recommendations are based on our own trial and error experiences and our latest nutritional research findings.

- **FORAGE.** Forage should be the basis of the equine diet. Feed free choice grass hay or pasture as much as possible. Try to provide something for your horse to munch on 24 hours a day. Provide lower quality grass hays to the easy-keepers. We highly recommend slow-feeding systems. Some horses with hoof problems are very sensitive to sugar content of hay, and some grass hays can be high in sugar.

Try to limit alfalfa or legume hays to no more than 10-20% of the total daily hay quantity. It may be a good idea to feed a very small amount of alfalfa daily to any horse not on grass pasture, for the extra nutrients it provides. We have personally observed no ill effects on hooves from the feeding of small amounts of alfalfa but it is high in calories, has a poor mineral balance and too much protein for horses, so feed it sparingly.

- **ENERGY SOURCES**

**Grain.** Grain should be considered more of a supplement than a food due to the many problems caused by excess starch in a horse's diet. A handful of grain a day fed for variety will not be a problem for most horses. Whole grains should be clean and from a trustworthy source. Ideally buy organic or pesticide free and non-GMO. As long as the amounts fed are kept to a minimum, all grains can be fed to some horses in very small quantities for variety. Horses with Insulin Resistance, Metabolic Syndrome, or EPSM/PSSM or other grain-sensitive disorders should usually avoid all grains.

**Grain substitutes.** If you need something to mix supplements in, try using soaked grass hay pellets, or grass and alfalfa mix pellets. Many people use beet pulp or rice bran, but those two by-products have very heavy pesticide levels, and most beets are now GMO.

**Fats.** Horses do not usually require high amounts of fat in their diet and green grass will supply all the fatty acids that they need. Non-grazing horses should probably receive a supplement to provide the necessary Omega-3 fatty acids. Our absolute favourite are chia seeds, which can be fed without any worry about preparation or safety. Other suitable products include whole extruded soybeans which must be properly prepared, whole fresh-ground flaxseed, or a stabilised flaxseed meal fed in small amounts. We recommend that you avoid feeding liquid vegetable oils in general to horses and to yourself, except for olive

## GUIDELINES

oil and coconut oil.

● **VITAMINS AND MINERALS.** If your horse lives on an organic pasture with grass and herbs grown in virgin soil that produces plant life with correct nutrient values, it may not be necessary to provide supplements. However, over-farming, over-grazing, pesticides, chemicals, harsh fertilisers and acid rain have all contributed to a decline in nutrient values of our soils. Ideally have your pasture and hay analysed to determine your area's deficiencies. Once you know your hay's deficiencies, you can look for a supplement that will complement that. Find a nutritionist to help you with this.

As a precaution against over-supplementation always choose chelated mineral supplements, which are better absorbed and handled in the body. Additionally chelation prevents a mineral from interacting with other minerals and causing problems.

Free-choice minerals can be provided to the horse either routinely or with free access at all times. Although their use is debated, there is anecdotal evidence that horses can regulate their minerals and we have had good experiences with high quality free-fed minerals within a complete supplement programme.

Provide free choice plain loose salt at all times for all horses.

● **OTHER SUPPLEMENTS.**

**Probiotics.** Use a probiotic or prebiotic daily. It is cheap insurance for keeping your horse's digestion in top condition. It is indispensable for horses that are stressed, underweight, going through changes such as de-shoeing and de-toxing, any horse prone to colic or digestive upsets, and even for the easy-keeper whose system may not really be working correctly. It works!

We also recommend that you feed your horse fresh food as often as possible. Besides the standard carrots and apples (keep quantities small for overweight horses), offer vegetables, fruits and very small amounts of nuts and seeds.

Beyond these basics, supplements become a very individualised situation. We always prefer to keep it as simple as possible.

We provided the above information in a generic format, without reference to specific brands. With that in mind, we feel there are two general overall approaches to nutrition: scientific and analytical or intuitive and artistic.

If you love graphs and grids and flow charts, you might really enjoy going the scientific and analytical direction with graphs and lots of numbers to crunch. The second approach will appeal to you if you are interested in learning techniques like muscle testing, testing reflex points, and other ways to gain insight into what your horse needs nutritionally.



A healthy hoof - side



A healthy hoof - sole

is hugely important. If you are feeding lots of grains, sugar or all-alfalfa hay, a diet improvement could change things for the better.

Environment is also crucial and is probably playing a larger role than diet, especially if the horse is on a typical adequate diet of mostly grass or grass hay and vitamin and mineral supplement. If he is standing in urine or muck holes, coping with extremes of climate or shut in a stable for 23 hours a day, these things can and do lead to poor hoof health. Exercise is key and the more movement your horse gets, the better the circulation to his hooves and, voila! better hooves.

So you've cleaned up the diet, and made sure your horse's living area is acceptable. He receives adequate exercise but there are still hoof problems. Typically, these problems include: white line disease, seedy toe, thrush, footiness on gravel, chipped or cracked hooves and constant flare-ups of laminitis. Most of the time, these problems can be remedied simply with an adequate trim. How do we know? Because we have done just that over and over again, with horses on a wide variety of diets, living in a wide variety of conditions, even stables.

### WHAT TRIM?

With over 14 years of experience, we refer to our style as a generic barefoot trim. We strive for physiologically correct hoof form. We do not actually advocate any method, and we feel that many roads lead to Rome. We have

taken the best of what we have learned from every source during our journey; however, much of our current technique centres around our personal study of wild horse hooves and how their form can be applied to the situations of domestic horses. Horses in our care do not have white line disease. If they come to us with it, it simply goes away through trimming. They don't have thrush. We have never resorted to the use of any chemical to treat thrush. Our hooves don't chip or crack, and horses that come to us with large cracks simply grow them out. If a horse comes to us with unhealthy feet, they may be tender while the hoof improves, but with consistent trimming, the tenderness or laminitis episodes simply go away, without endless diet adjustments or going to extremes. If there is a nutritional or environmental issue, we will certainly advise on that, but the key is that correct, consistent trimming establishes a healthy hoof form.

Nutrition is important, it affects the entire body of the horse, not just his hooves, so a horse with poor nutrition will show symptoms in more areas than just the feet. The trim directly affects the hoof. If you are having a hoof problem, know that the trim is not unimportant.

**James and Yvonne Welz** are owners of The Horse's Hoof Magazine. Printed with kind permission of [www.TheHorsesHoof.com](http://www.TheHorsesHoof.com)