

Hoof Armor - Hoof Health Benefits

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I so often think about Hoof Armor acting as a sole protection against the ground surface that I forget about all its other benefits. Originally Hoof Armor was designed with the primary goal of protecting the sole from abrasion and stones, but over the years, it has developed to do much more. The concept was, and is, that the hoof can fix many problems on its own if provided with adequate protection. Natural healing includes protection from the elements (Hoof Armor) and unrestricted circulation while it recovers. The goal is to help each hoof become as strong and healthy as it can, given genetics and environment.

When I was in grade school, we had play shoes and school shoes. School shoes were leather and not waterproof. So, to keep the school shoes nice on a snow-day we wore galoshes, on a rainy day we wore rubber overshoes until we got to school. When I was designing Hoof Armor that concept came to mind. The rubber overshoes provided a layer of protection against pretty much everything but were still flexible enough to not be restrictive.

Hoof Armor was designed to be tougher than a hoof while still being more flexible than a hoof. It will help protect against the typical abrasions and adversities of daily movement. The original design concept was simply to act as an alternative to metal horseshoes, which were really the only alternative in 1996. Two patents later, what began as a wear protection for the bottom of the hoof wall, like horseshoes, became sole protection, dorsal wall protection, frog and heel bulb protection.

The hoof has a natural protective coating on the upper wall called the periople. This clear layer grows out with the hoof wall from the coronet and, if it is not removed by rasping or sanding, is designed to protect the new hoof wall against abrasion and excessive environmental moisture and dryness. Hoof Armor can be used to replace or enhance that natural protection up to the coronet if environmentally necessary. Similarly, it was found in a study by New Bolton Center, University of Pennsylvania, that the hoof wall is nourished and moisturized from within, rather than needing to

“breathe”, because the cells grow larger and closer together as they grow closer to the surface thereby also helping to seal the hoof against the environment.

Somewhere around the fourth formula improvement it was decided to use an additive that was also a natural antimicrobial made from non-GMO plants. It is also used in cosmetics and skin care products. With this ingredient included Hoof Armor has been used to prevent and treat White Line Disease, Thrush and to prevent any bacterial infections... emphasis on “prevent.” My years of experience has shown me that it is much easier and cheaper to prevent hoof problems than to treat them after they take hold.

Much of our Research and Development knowledge is comes from Hoof Armor users and often after nothing else worked. This was the case with White Line Disease and with applying Hoof Armor on the frog and heel bulbs. Endurance and trail riders saw that the frogs and heel bulbs were getting abraded when going through rocks and streams with or without hoof boots. So, riders started applying Hoof Armor to the frogs and heel bulbs as prevention. Hoof Armor is more flexible than either and, being non-toxic and with the added skin care ingredient, it is safe to use in those areas.

Basically, by bonding with the areas of the hoof where applied, Hoof Armor acts as a flexible, yet tough, protective coating against environmental stressors the hoof encounters on a daily basis. The anti-microbial properties help prevent and/or remediate both aerobic and anerobic exposures. Studies, like the Cornell University WLD study, have shown that the hoof is exposed to many microbial threats. In the Cornell study it was found that White Line Disease can be caused by one or a combination of forty-one different molds, fungus and both aerobic and anaerobic bacteria. By bonding with the hoof and sealing off oxygen, Hoof Armor prevents and treats aerobic bacteria while its antimicrobial agent prevents and treats anaerobic bacteria. Hoof Armor works similarly against other infections such as Thrush.

One additional benefit to note is that Hoof Armor lends its hoof health benefits to booted and shod horses alike. For those horses in boots for rehabilitation issues, the hoof is protected from the moisture and matter that can accumulate in a boot.

And for shod horses, Hoof Armor can be applied over nail holes to help keep out moisture and matter.

A foundational concept discovered early on the Hoof Armor journey is to leave as much healthy sole as possible for stone protection... comparable to walking across sharp stones wearing boots versus just socks. Applying Hoof Armor after removing live sole is defeating the purpose of continual hoof improvement, which is to help the hoof become as strong and tough as it is genetically capable of becoming. It has been my experience that the combination of conservative trimming and Hoof Armor are the best combination of tools for the healthiest hooves.

**New Research Says Hoof Armor® Ingredient is Antimicrobial
Helps Grow a Thicker, More Elastic Hoof**

Hoof Armor is an adhesive coating originally designed to protect against wear and chipping. For many years, which was all there was to it. Hoof Armor by itself (no horseshoes or boots) has been used to prevent excessive wear for endurance rides of 50, 75 or 100-miles in all performance disciplines. and everyday trail riders. Hoof Armor works well to protect against wear and abrasion, but I always thought there was more functioning on a molecular level I could not see.

The present formula, the sixth, is as safe as I can make it for horses and the people who are applying it. It is an epoxy base which is similar to the plastic milk jugs you see in the stores and also similar to the linings of metal fruit and vegetable cans which you don't see. Obviously, those containers are approved by the FDA for use in contact with food. Another ingredient is Kevlar™ which is an inert material that you could probably eat with no serious effects, although it is not recommended. Another ingredient is a natural one made from non-GMO plants and used in food and skin care. All as safe as possible.

Then, there was a horse that was going to be put down for White Line Disease. As a last resort, a farrier slathered Hoof Armor over the infected areas three times over a period of two months and cleared it up. Another trial cleared up White Line Disease with two applications over 8-weeks applied by the farrier.

Then there was a veterinarian at the San Diego Zoo who used Hoof Armor to treat toenail canker on an elephant. More user trials proved that, not only Hoof Armor could treat White Line Disease, but it would also prevent it.

Research has shown an ingredient in Hoof Armor to be an effective antimicrobial:

Inactivation of bacteria can be as brief as 30 seconds and, it could safely and completely inhibit the growth of bacteria such as Salmonella, E. coli and Listeria.

The success with White Line Disease led to trials of treating Thrush and as a preventative for horses that were historically prone to Thrush. These trials are on-going.

Now, further research has proven this ingredient has additional benefits.

This ingredient and been shown to improve elasticity, increase collagen density, and actually increase dermal thickness. Another study reported 4-weeks of treatment resulted in up to 19% increase in epidermal thickness.

This research leads me to propose that Hoof Armor not only be used to prevent excessive wear on the bottom of the hooves; not only as a treatment and preventative against infections over all the hoof surfaces; but as a hoof conditioning agent that is safer than anything on the market. I would suggest the application of Hoof Armor with every trim as an integral part of a continual and progressive hoof care development plan. Hoof Armor can be used with horseshoes to protect the sole like a pad, except it will not grow out with the hoof wall or allow dirt to enter from the back. Hoof Armor can also be used with hoof boots as additional protection in case the boots come off or to prevent the hooves from excessive moisture and abrasive particles inside the boot.