

# Technology Developed for Humans Now Used To Repair Hooves

Copper peptides have been in cosmetic and medical products for years, but now they are also being put to use to heal hooves.

By Ron Perszewski, American Farriers' Journal

A new, spray-on hoof repair product based on human health and skin care chemicals is being offered to the hoof-care industry.

Toe Grow from SBS Equine Products is said to promote faster healing and growth of cell-damaged hoof, hair and skin. The product contains copper peptides, which are microscopic proteins used in human health care and cosmetic products such as anti-aging skin creams, hair loss formulations, burn treatments, fingernail growth stimulators and organ transplant facilitators.

Richard Shakalis, an SBS co-founder and researcher, notes that proteins are the essential building blocks for human and animal tissue, including muscle, bone, hair, ligaments, tendons and fingernails (or in the case of horses, hooves). He says peptides are identical to proteins in that they are composed of amino acids.

“Peptides are usually found inside cells in many forms and act as antibodies, hormones or cell function facilitators. Copper peptides are a specific type of peptide that has a copper ion attached to it and is found naturally in cells. In this form, copper peptides act as messengers at the cellular level signals to ‘switch on’ cells several significant ways,” Shakalis says.

This is not the first time that SBS, based in Naples, Fla., has produced hoof-care products based on the technology behind human products. About 20 years ago, the

company adapted the technology from human tooth bonding to produce hoof sealants, now marketed as Hoof Armor and Farrier's Hoof Sealant.

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Shakalis says copper peptides are effective on horse's hooves because they stimulate the coronary band to produce a stronger, healthier hoof in the same way copper peptides activate the production of new human skin and hair.

Loren Pickart of Switzerland is credited with the discovery of copper peptides and their uses during the 1970s. Pickart studied the effect of copper peptides skin remodeling and wound healing. He found that copper peptides act as powerful antioxidants that help protect damaged tissue from further harm and speed up healing.

Today, copper peptides are used ointments for burns, medicaments to help organ and tissue transplants and as salves for post cancer irradiated skin. They also are commonly found in human cosmetic products such as anti-wrinkle creams and hair growth formulas.

The U.S. Food and Drug Administration's Center for Veterinary Medicine does not list copper peptides as a class of regulated drugs, and the FDA does not impose any rules on cosmetic products intended for use on animals.

There is, however, evidence that copper peptides have proven their effectiveness in products produced for human use. For example, the MayoClinic.com site says in an October 2004 report: "Copper peptides enhance wound healing. They also stimulate production of collagen and may enhance the action of antioxidants. Some small studies show that copper peptides may modestly improve fine wrinkling, age spots and sun damage with no side effects. More research is needed, however."

Another product review site, [www.smartskinicare.com](http://www.smartskinicare.com), notes, "Copper peptides have been particularly effective in healing wounds and skin lesions as well as some gastrointestinal conditions," and it notes that the FDA has approved a copper peptide gel for the treatment of acute and chronic wounds and ulcers.

The report states that a distinctive feature of copper peptides is that they reduce scar tissue formation while stimulating normal skin remodeling.

Shakalis says, “We have seen the use of copper peptides go full circle. They were first used on horses only on an experimental basis with production of human treatments as the final result. Copper peptides were found to be very effective and beneficial for these horses, but no equine products were ever produced.”

Now such equine products are available, he says, adding, “We look to copper peptides, in conjunction with good nutrition, to help solve many chronic structural hoof problems. The copper peptides will wake up and switch on the cells of the coronary band to grow strong, healthy hoof as long it has the proper building blocks of nutrition to refuel these critical cells.”

HEALING AND GROWTH NEEDED. Copper Peptides, which are contained in Toe Grow Spray from SBS Equine Products, combined with good nutrition can go a long way toward restoring damaged hooves, according to researchers with SBS Equine Products. They "switch on" the cells at the coronary band to draw the nutrition they need to refuel from the blood supply for faster healing and growth.

SBS recommends that Toe Grow be sprayed on to the coronary band generously once a day, and on to damaged areas of the hoof, hair, and skin to promote faster healing and growth. For more information contact SBS Equine Products, [info@sbsequine.com](mailto:info@sbsequine.com), [www.sbsequine.com](http://www.sbsequine.com), 239-354-3361.

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