



# The Pros and Cons of Leg Protection

I'm sure you're aware of the Pros and Cons of leg products such as boots and wraps and how riders and trainers need to balance their use for protection along with the danger of overheating. There are a number of studies on the topic and there are others concerning the danger of overheating with ceramic boots and wraps used for injury prevention and recovery. One important theme veterinarians and professionals emphasize is the need for breathable protection.

Another important topic concerns whether or not icing is still a valid treatment for injuries. Numerous advances in sports medicine have been realized to treat amateur and professional athletes. One discovery includes the progression of the natural healing process, particularly the importance of the lymphatic system and lymph flow, which carries away debris caused by the injury. Essentially, swelling and inflammation are part of the natural healing process due to lymph flow and a necessary component in the natural healing process. Icing stops lymph flow and can even reverse it. In other words icing stops the natural healing process.

I know icing is a procedure recommended by many veterinarians and trainers but that is primarily due to the absence of having any other sort of remedy. I'm trying to inform people about a specific remedy that not only enhances lymph flow but also enhances blood flow and oxygenation, reduces swelling and inflammation by increasing the lymph flow, reduces pain through direct action on both free nerve endings in tissues and actually accelerates the entire, natural healing process, far infrared.

Marly Coppens of Equine Science in The Netherlands conducted a study to compare the skin temperature of the distal limb under a bandage or a tendon boot with that of a bare limb, at rest and after 20 minutes of lunging by use of sensors and thermography. Ten horses wore a closed tendon boot made of neoprene and a polypropylene fleece with incorporated ceramic particles bandage that enclosed the fetlock joint.

No significant differences were detected in skin temperature at rest and after exercising of the bare limb. Temperatures increased significantly when a bandage or a tendon boot was used during exercise. After exercising with a bare leg the mean maximum temperature was 57.2°F (14°C), with a bandage 77°F (25°C) and with tendon boot 69.8°F (21°C).

One of the main mechanisms of thermoregulation is heat loss from the body via convection from the surrounding air. Earlier research looked at the effect of hyperthermia on tendon cell death and found that after heating at 113°F (45°C) for 10 minutes' tendon fibroblast cell survival percentage was 99%. Heating at 118.4°F (48°C) for 10 minutes decreased cell survival to 22%. SDFT core temperatures of 113°F (45°C) have been recorded during gallop, with tendon surface temperature reaching 104°F (40°C).

There are two recommendations to riders and trainers based on the study:

1. It is best to use well ventilated or breathable leg protection
2. Remove the leg protection as soon as possible after exercising

There is a far infrared product with a proprietary, non-ceramic, environmentally safe, natural compound embedded directly into a breathable, medical grade, non-slip foam backed by a breathable, Velcro



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receptive textile made by EyeOn Equine Care in Chester County, Pennsylvania. Skin wear tests were conducted on test subjects wearing these products for 28 straight days to ensure breathability and any possible sort of irritation.

The benefits of Breathable Far Infrared Products:

1. Increase blood flow by promoting dilation (expansion) of the micro-circulatory system of capillaries.
2. Increase metabolism between blood and tissue.
3. Increase oxygen in the blood cell
4. Reduce muscle spasms as muscle fibers are heated
5. Remove toxins from the site receiving FIR waves
6. Assist in the reduction of swelling and inflammation by improving lymph flow
7. Reduce soreness through direct action on both free nerve endings in tissues
8. Accelerate the natural healing process
9. Permit the natural thermoregulation of heat loss
10. Ideal to help prevent injuries by warming up tendons and muscles as well as recovering rapidly from exercise and competition



This thoroughbred suffered from a bone chip in her hock that unfortunately broke up into many small pieces before it could be surgically removed. The Lanse, PA owner was faced with constant swelling that the EyeOn far infrared wrap resolved. The wrap was worn on the hock overnight in her stall and never had a single problem with sweating, migration or sawdust bedding interfering with the Velcro tab. Carmel and Carey are enjoying their rides once again. Her testimonial is listed on the EyeOn Equine Care website.



Breathable, far infrared products have been used on thousands of horses and people around the world with 100% satisfaction. No animal or person ever had a problem with overheating, blistering, tendon damage, etc. In fact many veterinarians, trainers and owners call it magic. Horses that have been lame for over thirty days realized an 80% recovery in less than 24 hours. One horse with horrendous swelling for more than eight months had the swelling reduced fifty percent in less than 24 hours. This breathable product can be used overnight or for as long as needed. One veterinarian treated a thoroughbred racehorse with a high suspensory ligament issue by keeping him wrapped up in the stall and only removing it after taking it out for training. The list goes on.

Please visit our website to learn much more about the EyeOn Equine Care products.

Thank you. I sincerely look forward to hearing from you with any questions.

EyeOnEquineCare.com