# **UCII** & JOINT SUPPORT





### A Unique Way to Support Joint Health

Works by targeting the horse's immune system to stop the cycle of joint pain and discomfort.

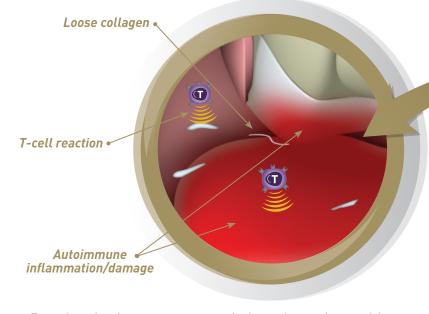


### UCIL A MAJOR LEAP IN THE QUEST TO SUPPORT JOINT HEALTH

Scientific findings show that the horse's own immune system can play a significant role in impacting normal joint function.

Normal wear and tear on cartilage can take a toll on joints. Loose bits of collagen released from cartilage in the joint fluid can be recognized as foreign bodies which activate the immune system.

As normal joints are sterile and free of any debris, immune cells (specifically T-cells) will mount an aggressive response to destroy these collagen fibers.



Despite the immune system's best intentions, this reaction may cause more harm than good.

In fact, the whole cascade can escalate as these mediators cause more cartilage damage, resulting in more foreign material in the joint fluid along with subsequent swelling and soreness.

It's a vicious cycle that can perpetuate the condition and impair healthy joint functions.

#### **UNIQUE MODE OF ACTION\***

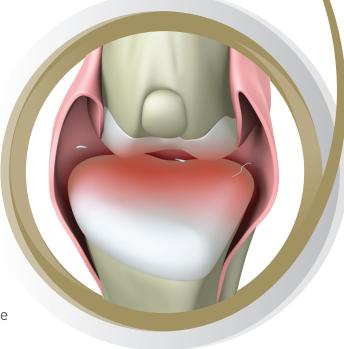
UCII is a unique and proprietary form of undenatured type-II collagen<sup>†</sup> that works differently than traditional supplements such as glucosamine and chondroitin to support normal joint health in horses. The unique and patented manufacturing process retains the main patterns of the original molecular structure of collagen II: the triple helical helix and glycosylated epitopes.



**Oral tolerization** works like many other allergy treatments (think peanut, ragweed, or whatever else may cause an allergic response in a person). Small exposure to the causative problem source over time gradually allows the immune system to desensitize and respond less aggressively; allowing for reduced clinical signs, irritation and inflammation.

UCII targets the horse's immune system in a process called "oral tolerization". Once UCII is ingested, it interacts with gastrointestinal Peyer's patches. This consistent exposure causes immune cells to become more tolerant and less reactive to type-II collagen. Immune cells can then remotely "learn" to ignore collagen when they encounter it in joints.

UCII helps to support healthy immune system function and make immune cells less sensitive to the damaged collagen within the joints.



<sup>\*</sup> Gupta RC, Canerdy TD, Lindley J, Konemann M, Minniear J, Carroll BA, Hendrick C, Goad JT, Rohde K, Doss R, Bagchi M, Bagchi D.: Comparative therapeutic efficacy and safety of type-II collagen (UC-II), glucosamine and chondroitin in arthritic dogs: pain evaluation by ground force plate. J Anim Physiol Anim Nutr (Berl). 2012 Oct; 96(5):770-777.

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Bagchi D, Misner B, Bagchi M, Kothari SC, Downs BW, Fafard RD, Preuss HG.: Effects of orally administered undenatured type II collagen against arthritic inflammatory diseases: a mechanistic exploration. Int J Clin Pharmacol Res. 2002; 22(3-4):101-10.

## **UCII** KEY POINTS



- Unique mode of action targets the immune system to aid in joint health and reduce further damage.
- ➤ Works similarly to allergy treatments small exposure to the causative problem helps moderate the immune response.
- > Helps stop the cycle of joint pain and discomfort in horses.

**UCII** works differently from traditional supplements, such as glucosamine and chondroitin.

#### **ABOUT VETOQUINOL**

### Focused exclusively on animal health for more than 80 years.

Since 1933, Vetoquinol has been a pioneer in the animal health field and has developed hundreds of innovative treatment options for use by veterinarians around the world. We embrace the challenge of finding better ways to help animals achieve the maximum quality of life through the duration of their years. Currently, Vetoquinol is the 8th largest veterinary pharmaceutical company worldwide and the 4th largest veterinary-only company.

