

# JointWise<sup>™</sup>

To support normal joint function in horses of all ages and classes.

# **General Information**

There are hundreds of joint supplements to choose from, but JointWise stands apart from the crowd. It contains high levels of the full complement of ingredients necessary to support optimal joint health: glucosamine HCL and glucosamine sulfate, chondroitin sulfate, sodium hyaluronate, and MSM. Added manganese and fermentation metabolites balance out this unique formula.

JointWise is a complete joint supplement. It supports normal cartilage growth, healthy synovial fluid, and the regeneration of damaged tissues. The maintenance of ample lubrication and durable articular surfaces within the joints is necessary to ensure long-term soundness and exceptional performance.

## **Indications**

## Maintenance of optimal joint function in exercising

horses. Wear and tear on joints begins at birth and continues throughout a horse's life. The joints of horses that are being routinely exercised, such as performance, race, show and trail horses, are exposed to higher levels of damage. The early training regimens experienced by many young, growing horses place additional stress on developing joints. These classes of horses are at greater risk for joint degradation. Supplementation with 20 grams per day of JointWise will help maintain strong joint structures and support the healing of damaged tissues. Research has shown that when used in combination, the ingredients in JointWise support resilient cartilage, functional synovial fluid, and reduced inflammation. Horses with healthy joints perform to their potential and stay sounder longer. When horses are first started on JointWise, offer 40 grams per day for 3 to 4 weeks, and then reduce the serving to 20 grams per day.

Layup, injury and post-surgical support. When joint structures have been damaged or compromised, supplemental nutrients can support healing, reducing layup time and increasing the chances for a positive outcome. The ingredients in JointWise provide nutrients that support healing and a reduction of damaging inflammation. In a study conducted by Bergin and coworkers (2006), oral HA was effective in reducing synovial effusion (an abnormal collection of fluid) following arthroscopic surgery for removal of osteochondritis dissecans (OCD) lesions in joints. When horses are first started on JointWise, offer 40 grams per day for 3 to 4 weeks, and then reduce the serving to a maintenance level of 20 grams per day.

# Age-related osteoarthritis and other joint diseases.

One way scientists view osteoarthritis is to consider it as an imbalance in a horse's immune system. When an imbalance occurs, specific immune factors lose the ability to recognize "self." These aggressive immune components begin to attack a horse's own cells, resulting in inflammation and tissue damage. Research studies have demonstrated the ability of fermentation metabolites to temper these excessive immune responses, maintaining a more balanced system. Further, several factors and compounds that caused the symptoms of arthritis were diminished in animals consuming fermentation metabolites. In combination with FM, the other ingredients in JointWise play a role in supporting the adequate shock absorption, lubrication, and cartilage regeneration necessary to keep joints functioning at an optimal level, while reducing the amount of stiffness and soreness caused by inflammation. Supplementation of 20 grams of JointWise per day in conjunction with other treatments supports a reduction in inflammation and supplies nutrients that maintain healthy tissues. When horses are first started on JointWise, offer 40 grams per day for 3 to 4 weeks, and then reduce the serving to a maintenance level of 20 grams per day.

# **Dosage and administration**

#### **SERVING INSTRUCTIONS**

1 scoop = 20 grams

Offer 2 scoops (40 g) daily for the first 3 to 4 weeks, and then reduce to 1 scoop (20 g) daily thereafter.

### **AVAILABLE SIZES**

2 lb jar (contains 45 scoops) 5 lb jar (contains 113 scoops)

## **SAFETY**

JointWise is recommended for use in horses of all ages and classes.

To ensure the efficacy of JointWise for the entirety of its shelf life, store it in a cool, dry place and reseal the lid during storage. Shelf life is 24 months from date of manufacture when stored under suitable conditions.

# **ACTIVE INGREDIENTS PER SCOOP (20 g)**

Fermentation Metabolites	5,000 mg
Glucosamine HCL	2,500 mg
Glucosamine Sulfate	2,500 mg
Chondroitin Sulfate	1,200 mg
Methylsulfonylmethane (MSM)	1,000 mg
Sodium Hyaluronate	100 mg
Manganese Sulfate	100 mg

The ingredients in JointWise provide the building blocks necessary for the maintenance of healthy joints and the healing of damaged tissues.

**Glucosamine and chondroitin sulfate** are key nutrients necessary for maintenance of normal joint function. Glucosamine is used as a substrate for certain components of the cartilage matrix, while chondroitin sulfate plays an important role in controlling the enzymes associated with inflammation and tissue destruction. Numerous studies have documented the benefits of combining these two ingredients to joint health.

Studies using equine cartilage explants (small pieces of actual living tissue) have shown these ingredients complement each other in inhibiting the production of inflammatory cells. Interestingly, when these ingredients were used independently of each other, they did not show similar benefits (Orth et al., 2002; Schlueter and Orth, 2004; DeChant et al., 2005).

Glucosamine and chondroitin sulfate have been evaluated in several field studies. In a double-blind placebo-controlled study (Hanson et al., 2001),

14 horses with progressive forelimb lameness showed significant improvement (evaluated by lameness specialists using standardized lameness scores) when administered a treatment of glucosamine and chondroitin for a 28-day treatment period when compared with the control group. In a more recent study (Rodgers, 2006), administration of glucosamine and chondroitin significantly decreased the necessity and frequency of intra-articular therapeutic injections of the hock joints in working show hunters and jumpers.

**Hyaluronic acid (HA)** is an integral component of synovial fluid and articular cartilage, and is responsible for lubrication of the joint surfaces and nourishing joint tissues.

**Manganese** is an important cofactor in the formation of the cartilage matrix and synthesis of connective tissue.

**Methylsulfonylmethane (MSM)** is a natural sulfur compound with anti-inflammatory properties. It supports the reduction of stiffness and soreness associated with inflammation.

**Fermentation metabolites (FM)** are produced from a proprietary yeast fermentation process. They have been shown in controlled research trials to support a positive immune response when the body is faced with a challenge.

Developed by:

