Joint Pain Supplements

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Many horse owners use joint supplementation on their active or performance horses. Joint supplements are also excellent for older horses. Joint care supplements include ingredients such as glucosamine, chondroitin, MSM, hyaluronic acid, and others. These ingredients work on different aspects of your horse's joints. Some, like glucosamine and hyaluronic acid, work on supporting the joint matrix and increasing the thickness of joint fluid. Some others, such as chondroitin, inhibit enzymes that destroy cartilage, and still others, such as MSM, are thought to work as anti-inflammatories. If your horse needs joint supplementation, you may wish to compare the ingredients below so you can determine what your particular horse needs.

SUPPORTING HEALTHY JOINTS

Supporting healthy joints is a multi-approach process. It often involves mild exercise and weight control, as recommended by your veterinarian. Intra-articular (IA) injections of corticosteroids, hyaluronic acid, and polysulfated glycosaminoglycans are often used as aggressive therapy to decrease inflammation and swelling. Intra-articular injections should ALWAYS be done by your horses veterinarian. Oral supplementation is often used as an adjunct to IA injections.

Several oral supplements are used in equine joint conditions.

- ### GLUCOSAMINE

  Glucosamine provides the building blocks to synthesize new cartilage. Glucosamine is a substance normally found in the body of living animals. The highest concentration is in cartilage. Through normal wear, cartilage is constantly being broken down and replaced. In normal, healthy animals, the body is able to synthesize enough glucosamine to keep the existing cartilage healthy. However, when the horse's joints age or there is damage to joint cartilage, the horse cannot produce enough to keep up with the body's needs. This is when a supplemental form of glucosamine is recommended.

  Glucosamine also appears to have some mild anti-inflammatory effects.

  Glucosamine is often obtained from chitin, an ingredient found in the shell of crustaceans. Crustacean shells have a very high concentration of chitin and because the shells are often discarded, this provides a reliable and cost effective source of glucosamine.

- ### CHONDROITIN

  Chondroitin is also one of the building blocks necessary for the production of cartilage, but it probably plays a more important role by combating and neutralizing destructive enzymes in the joint. There is always a low level of destructive enzymes found in the joint, but when injury or abnormal wear occurs, the destructive enzymes and agents increase, accelerating cartilage destruction. When chondroitin is given, it helps to reduce the level of these

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destructive enzymes.

Supplemental chondroitin is derived primarily from bovine (cow) cartilage, particularly the cartilage rings of the trachea. It is also derived from shark and whale cartilage. The source does not appear to have any impact on its action.

Glucosamine plus chondroitin work better together than either ingredient alone.

- **MSM**
  Methylsulfonylmethane (MSM) contains sulfur in a form the horse's body can readily use. Sulfur is necessary for the production of collagen, glucosamine, and chondroitin, which are the building blocks of cartilage. Sulfur is also necessary in the formation of glutathione, which functions as one of our body's best natural antioxidants. In addition, MSM has been promoted as having anti-inflammatory and pain reducing properties.

- **HYALURONIC ACID**
  Hyaluronic acid is a main component of synovial fluid. With joint injury, destructive enzymes break down the hyaluronic acid and the joint loses the cushioning effect of the synovial fluid. Sodium hyaluronate or Hyaluronic acid (HA) may protect the joint by increasing the viscosity of the joint fluid, reducing inflammation and scavenging free radicals. This nonsulfated glycosaminoglycan (GAG) is made by cells in the cartilage and joint lining and is designed to act as a lubricant. It has been found not only to increase the thickness of the joint fluid, therefore offering more cushion to the joint, but HA also inhibits damaging enzymes as well as jump-starting the body into manufacturing its own sodium hyaluronate.

  This supplement can be given orally as well as administered directly into the joint through injection. Studies have shown that oral supplementation of hyaluronic acid can achieve positive results in horses. It can be effective on horses in training, competition, or any situation when they may have a lot of wear and tear on their joints. HA can also be effective for horses with osteoarthritis. Horse owners rely on this supplement and include it either alone or in supplements with other nutraceuticals like glucosamine for the management of their horse's joint conditions.

- **PERNA MUSSEL**
  Perna canaliculus, or green-lipped mussel, is an edible shellfish found off the shores of New Zealand. The soft tissue is separated from the shell, washed several times, frozen, and freeze-dried. It is then processed into a fine powder and added to joint supplement products. It contains glucosamine and glycosaminoglycans (which are also building blocks of cartilage). Supplements such as Glyco-Flex II EQ combine perna mussel with other joint ingredients like glucosamine, MSM, and manganese to support proper structure and function of synovial fluid, joints, and connective tissue health.

- **VITAMIN C**
  Vitamin C is an antioxidant that protects joints from free radical damage. It also works synergistically with MSM.

- **MANGANESE**
  Manganese is a mineral that is needed by the body to synthesize cartilage and joint fluid.

- **YUCCA**
  Yucca is thought to have some anti-inflammatory properties.

USE OF JOINT SUPPLEMENTS WITH OTHER MEDICATIONS

In general, joint supplements can be used with other medications including nonsteroidal anti-inflammatory drugs (NSAIDS) such as aspirin, phenylbutazone and flunixin, as well as steroids such as dexamethasone. Always consult your veterinarian before using a joint supplement in combination with any other supplement or medication. Also, consult your veterinarian and show officials before using any supplement or medication in a performance horse.

If your horse is showing any signs of lameness or joint pain, it is always recommended to have your horse examined by a veterinarian so an accurate diagnosis can be made. Relying on a joint supplement instead of obtaining an accurate diagnosis may delay appropriate treatment for some conditions and result in permanent damage or longer recovery.

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