

But it can be for many horses...

Arthritis is a painful condition

There are two major forms of arthritis. Rheumatoid arthritis is a common form of arthritis which involves inflammation of the joints, swelling, pain, and loss of function. The primary symptom of rheumatoid arthritis is inflammation of the synovial membrane. The membrane thickens and synovial fluid accumulates. The resulting pressure causes pain and tenderness.

The most common form of arthritis, osteoarthritis, is a degenerative joint disease that is far more common than rheumatoid arthritis. It is characterized by the deterioration of articular cartilage and the formation of new bone in the subchondral areas and at the margins of the joint. The cartilage slowly degenerates and as the bone ends become exposed small bumps of new osseous tissue are deposited on them. These bumps decrease the space in the bone cavity and restrict joint movement.

Gyclooxygenase Enzymes

Two isoforms of cyclooxygenase exist:

- Cyclooxygenase-l (COX-1)
- Cyclooxygenase-2 (COX-2)

Both catalyze the reaction that converts arachidonic acid into a class of hormones known as eicosinoids, which include prostaglandins, prostacyclins, and thromboxanes.

is expressed in all mammalian tissues, and serves a variety of homeostatic physiologic functions. It is responsible for the production of protective prostaglandins in the kidney and the stomach, as well as the functional thromboxane of platelets.

is not normally found in most tissues, and is expressed under conditions of tissue damage. COX-2 leads to the biosynthesis of prostaglandins, triggering pain and inflammatory responses.

COX Selective Inhibitors

A form of non-steroidal anti-inflammatory drug (NSAID) that directly targets COX-2, an enzyme responsible for inflammation and pain. Selectivity for COX-2 reduces the risk of peptic ulceration when taken over extended periods of time.

Phycocyanin

It has been discovered that a blue-green algae extract and, more particularly, phycocyanin functions as a COX-2 inhibitor that is effective in treating arthritis and other inflammatory conditions in animals. The use of phycocyanin is now patented and effective in reducing inflammation in animals through its ability to selectively inhibit the COX-2 enzyme.^{1, 2, 3}

Clinical Study

- 41 horses with moderate to severe arthritis and inflammatory conditions showed statistically significant, owner-perceived improvements in:
 - mobility
 - alertness
 - activity level
 - ability to change position from lying down to standing
 - pain level
 - general activity
- 80% of the horses experienced some benefit within thirty days of Phycox® use
- 93% responded after four months ²

Phycox[®] is a registered trademark of and U. S. Patent No. 7,025,965 is the property of Pharma Chemie, Syracuse, NE. (402) 269-3195



A New Use Patented Product Found to Function as a Natural COX-2 Inhibitor

Scientific research has shown that Phycocyanin is effective at treating arthritis and other inflammatory conditions. 1, 2, 3



Horses Love the Taste

Phycox®-EQ Palatability is GUARANTEED

Sweet Apple and Molasses Flavor

Readily accepted by horses in 99% of the instances they were offered in a free-choice palatability study.³

If any clients are not completely satisfied with the palatability of Phycox[®]-EQ Granules, Pharma Chemie will unconditionally replace any product returned to the clinic.

Phycox[®]-EQ Directions for Use

Initial Administration (4 to 6 week period)

Average Horse — 2 scoops daily Over 1200 lb — 3 scoops daily

Maintenance Administration

Average Horse — 1 scoop daily Over 1200 lb — $1\frac{1}{2}$ scoops daily

Available Package Sizes

960 grams (30 scoops) 2.88 kg (90 scoops)

Safe for Use in Horses

In testing, horses fed up to 12 times the recommended label dosage of Phycox[®] for 120 days experienced no dose-related adverse effects.³

- US Patent Number 7,025,965. Method of Use and Dosage Composition of Bluegreen Algae Extract for Inflammation in Animals.
- 2. Data on File. Pharma Chemie the patent holder.
- 3. Data on File. Pharma Chemie the patent holder.



Phycox®-EQ has all the joint support benefits of many commonly used products, plus scientific research has shown Phycox® to be effective at reducing pain and inflammation in horses.^{1, 2, 3}

Joint Support Formula

For healthy synovial maintenance as well as bone and muscle support.

- Glucosamine HCl
- Methylsulfonylmethane (MSM)
- Creatine Monohydrate
- Alpha Linolenic Acid (Flaxseed Oil sourced)
- Turmeric
- Omega-3 Fatty Acids
- Boron
- Selenium
- Alpha Tocopheryl Acetate (Vitamin E)

Also contains a proprietary blend of Citrus Bioflavonoids, Calcium Phosphate, Manganese Sulfate, Ascorbic Acid (Vitamin C), Zinc Sulfate, Alpha Lipoic Acid and Grape Seed Extract.

Dynamic Antioxidant

Has powerful free radical scavenging properties. It can help enhance the body's defense against degradative effects that cause cellular damage and play a role in a host of degenerative conditions in horses.