

Not all oils are created equal...and some can actually help reduce inflammation!

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Horse owners, breeders and trainers are continuously searching for new ways to ensure their horses are healthy and performing well. New trends emerge, especially those related to nutrition, and with time and research, some of these contemporary concepts become accepted throughout the industry. For example, the once novel idea of utilizing fats along with grains as a more appropriate energy source for horses than grains alone is now widely accepted and the associated benefits are common knowledge. Including fat in the ration provides safe calories and there are a number of high fat feeds and supplements available on the market today. But not all fats are created equal. Can fats that are now often included in equine diets provide any additional benefits in addition to adding calories?

Explanation of Omegas & Sources

Both omega 3 and omega 6 fatty acids are essential fatty acids (EFA's). This means that they are not produced within the body and, therefore, must be provided in the diet. EFA's can be found in varying concentrations within a number of sources. The best sources of omega 3s, or the sources with the highest concentrations, are fish oils (which are often recommended for human benefit) and flax seed. Omega 3 fatty acids have some very beneficial health benefits when consumed on a daily basis, most notably a powerful antioxidant effect as well as immune stimulation. Soybean and rice bran oil contain a blend of both, but lean higher toward Omega 6. However, corn, canola, cottonseed, and peanut oil, on the other hand, are high in omega 6 fatty acids so adding these fats do not increase the omega 3 content of the ration. Equine feeds containing high amounts of these high Omega 6 stabilized oils as a source of calories can actually cause an increase in any type of inflammation the horse may be experiencing

Inflammatory Response

Inflammation is the body's response to injury or physical stress. Dilation of the blood vessels in the affected area increases blood flow in order to aid the healing process. The excess blood causes both the heat and swelling that serve as outward signs of inflamed tissue. Extended periods of inflammation can cause actual damage to the tissues involved, and therefore it is important to employ various techniques in an attempt to reduce or, if possible, prevent heat and swelling before they have a chance to occur.

Horses in training undergo strenuous exercise on a routine basis. Working at such a physically demanding level will most often lead to a degree of inflammation, particularly

of the joints and other structures within the leg. Omega 3 fatty acids also help reduce inflammation in the body while Omega 6 fatty acids have the opposite effect: they increase the inflammatory process in the body.

All cells, including red blood cells, have a membrane that regulates movement of materials into and out of the cell. Omega 3 fatty acids help to make the membrane more permeable which helps to move nutrients into the cell and waste products out of the cell much easier.

Research conducted at Texas A&M University indicated that horses fed oils higher in omega 3's than omega 6's demonstrated less inflammation following exercise. Ratios and ideal levels of these fatty acids continue to be explored in the equine and could lead to a greater understanding of how supplementation could reduce damaging inflammation.

Feeding EFA's have also been shown to improve respiratory conditions and help accelerate the healing of quarter cracks and other skin and hoof disorders. Several studies have also shown improved quality of semen characteristics in stallions supplemented with omega 3 fatty acids. The addition of EFA's to the diet will help to not only keep horses healthier and performing well, and may help contribute to reduced veterinary costs. So before you add corn oil to your horses ration, think about the physiological effects of too much Omega 6 fatty acids: inflammation. Better to reach for the Triple Crown Rice Bran Oil Plus, Triple Crown Fish Oil or, coming soon, Omega Max Stabilized Flax seed.