

"Fat" The Other Energy Source

By Dr. Wm. Tyznik

Fat is a concentrated source of energy containing 2.25 times as many calories per unit of weight than is true for any other nutrient. Most fats are readily digested by horses and used for a variety of systems in the metabolism. The unsaturated fats such as corn oil and linseed oil have functions in providing essential fatty acids that are instrumental in structure of cells by providing phospholipids. Another side benefit is condition of skin and hair. Horses provided with vegetable oil will shed their coats in 30 - 40 days thus providing a sheen to the coat. Most horses do not require fat in the ration. Not the case for horses that are being worked severely such as event horses, distance horses as well as cutting and reining.

No horse should be fed more than 1% of it's body weight in grain for the simple reason that feeding higher levels will be tempting colic and founder. Halter horses that need to carry considerable amounts of body fat will also benefit from addition of fat to the ration. Fat addition does not cause founder or colic.

The only difficulty that may develop is looseness of bowel if fat is introduced to rapidly. To avoid the problem, start with two ounces per day and increase at two ounces every three days until the desired level is reached.

Horses that are debilitated because of a lack of feed can be fed grain with fat and they will easily gain three pounds per day. Contrary to some advertisements, fatty acids do not put on muscle.

Metabolically there are three essential fatty acids namely linoleic, linolenic and arachadonic. Horses require linoleic and linolenic acid, which has been termed an omega 3 oil. The essential fatty acids are present to varying degrees in all fats but are found in highest concentrations in vegetable and fish oil.

Recently there seems to be an increase of diagnosed Cushings Disease which is a condition in which a horse does not seem to be able to metabolize carbohydrates. Fat can be used to replace some of the calories as an energy source for these animals.