Whole Foods Vs. Processed

by Madalyn Ward, DVM

In the last 20 years, there has been a move away from whole grains to processed pellets. One reason for this is that whole grains do not contain the nutrients they used to due to depleted soils. Vitamins and mineral supplements that would sift out of grain can be incorporated into pellets. Unfortunately, usually synthetic vitamins and inorganic minerals are used in processed feeds, and these substances act more like drugs than nutrients in the body. The few remaining natural vitamins in grains or forage products are mostly destroyed during the pelleting process. The smaller and harder the pellet, the more heat was used when it was processed. Inorganic minerals are not as easy for the horse to assimilate as those derived from organic sources. Another problem with pellets is that generic labeling gives very little clue what the actual ingredients are. Using terms like "grain products" allows companies to alter feed formulas depending on what is cheapest and easiest to obtain. Generic labeling also allows the use of poor-quality ingredients. Pelleting destroys food enzymes. An enzyme is a specialized protein structure that carries with it an energetic charge. Enzymes speed up chemical reactions that normally take place very slowly or not at all. Foods that have not been heated or processed contain enzymes that speed up their digestion after they are eaten. These same enzymes will cause foods to spoil more rapidly, which is why processed foods tend to keep longer. Destroying natural food enzymes by processing will allow foods to keep longer, but these foods will require the body to produce extra enzymes to digest them. The enzymes required to digest these foods may deplete the enzymes that would normally be used to complete other chemical reactions. Feeding whole grains allows more consistency in the feeding program. Oats, barley and corn are the primary grains routinely fed to horses.

OATS

Oats can be fed whole or crimped. They have less energy per pound than barley or corn. Energetically, oats are warming with a sweet and slightly bitter flavor. They restore the nervous and reproductive systems; strengthen the spleen and pancreas; build and regulate Qi energy; remove cholesterol from the digestive tract and arteries; and strengthen cardiac muscles. Oats are digested in the stomach and will tend to put glucose into the circulation more quickly than corn or barley. For these reasons they should not be fed to horses with gastric ulcers or Cushings disease.

BARLEY

Barley is intermediate between oats and corn with respect to energy content. It is cooling with a sweet and salty flavor; strengthens the spleen-pancreas; regulates the stomach and fortifies the intestines; builds the blood and yin fluids and moistens dryness; promotes diuresis; benefits the gall bladder and nerves; and is easily digested.

CORN

Corn is higher in both energy content and density than oats. If fed in equal volume as oats, it contains twice as much energy. Corn is not a heating feed, however it can be added to the ration during cold weather when extra energy is needed. Corn has a neutral thermal nature; sweet flavor; diuretic action; nourishes the heart; influences the stomach;

improves appetite; helps regulate digestion; promotes healthy teeth and gums and tonifies the kidneys.

It is best to try each of these grains individually or in combination. See what works best for your horse. Wheat bran is another excellent food for horses. Due to its high phosphorus content, it is not a good feed for growing horses. Bran acts as a bulk laxative when given as a mash. It can contribute to impaction if fed dry in conjunction with inadequate water consumption. Whole grains can be supplemented as needed ideally with whole food sources of natural vitamins and organic minerals.

SUPPLEMENTS

There are several reasons one would want to supplement a horse's diet. One is to replace the nutrients that are lacking in the foods due to modern farming practices. Since this form of supplementation is for nutritional purposes, it is critical to use whole food sources. Synthetic and inorganic vitamins and minerals are not assimilated in the body in the same way as natural and organic nutrients. The body treats synthetic vitamins like drugs and utilizes them only if nothing else is available and must expend energy to excrete unused portions. Horses do not absorb or assimilate minerals well unless they are in their natural chelated form. Chelated minerals are naturally bonded to nonmetal atoms inside of larger peptides, protein or enzyme molecules.

A second reason to supplement a horse's diet would be to supply extra nutrients needed during heavy work or during recovery from illness or injury. In the second situation, synthetic supplements may have a place.

A third reason to supplement would be to enhance a horse's performance. Sythetic supplements are often very disappointing in this situation, but natural nutrients will provide the horse with the nutrition it needs to give maximum performance.