

## Skimping on Hay?

Most people do not feed their horses the appropriate amounts of hay.

By Dr. Ed Ott

Q. The books always say feed your horse quality hay. How is hay quality defined and how can I assure myself that I have quality?

A. There are really two aspects to this question. First, quality is defined as hay that is free of weeds, mold and dust. It should be green in color and palatable to the animal. Maturity of the hay at harvest is also important. The more mature the plant, the lower its nutrient content and the lower the digestibility. Storage is also important. Hay loses some of its value with time in storage. If the hay has been stored over a year it will have lower value than hay that has been in storage only four to six months. Storage conditions will also influence the quality of the hay. Round bales that are stored outside or even weathered for a few weeks before being put in the barn will have lower value than hay that has been put in storage without getting wet or excessively bleached.

The second aspect of quality is the nutrient content of the forage. This is influenced by plant species, maturity at harvest, growing conditions, including fertilization programs and storage. Legume forages such as alfalfa, clovers and peanut, are generally higher in nutrient content, (especially protein and calcium) than grasses. In fact, their nutrient content may be considerably more than the animal really need. Grass hays, such as the Bermuda grasses, pangola, timothy, orchard grass, brome grass and fescue are lower in nutrients such as protein and calcium than the legumes. However, their nutrient content may match very well the needs of many horses. Legumes are best fed to animals with high protein and calcium needs such as the broodmare and the growing horse. However, even for these animals, a combination of legume and grass hays may make the best match. Grasses are best fed to horses with lower demands, such as the pleasure horse, idle animals, mares in early gestation, etc.

Assessing quality of the hay may require several tools. First look at the hay. Is it clean, fresh and of suitable maturity. Maturity assessment requires different information for the various species. For alfalfa, look at the stem thickness. Large, thick stems mean excessive maturity. For the grasses, plant length may be the best indicator. If the hay is less than 12 inches long it is very immature and should possibly be avoided because the horses eat it too fast. However, grass hays 3 foot long are generally very mature and digestibility and palatability may be low. Timothy hay can be assessed by the size of the seed head. Seed heads 2 inches long suggest optimum maturity while seed heads 4 inches long are common in

very mature plants.

Q. My horse is stalled most of the time. He gets 2 to 4 hr of turnout daily and does graze part of the time. How much hay does he need?

A. Horses generally need 2 to 2.5 pounds of air dry feed per 100 pounds body weight daily. For a 1,200 lb. gelding, this would be 24 to 30 lb. of feed daily. The amount of hay needed will be the difference between his total need and the amount of concentrate you feed. If he needs 24 lbs. of feed and you are feeding 8 lbs. of concentrate daily, he will likely need at least 16 lbs. of hay daily. A small amount of the hay may be replaced by the grass he consumes at turnout. An even better approach is to provide your horse with all of the hay he will consume. Don't let him waste it. Reduce the allocation if he leaves some in the stall.

Q. Are four flakes of hay enough for the above-mentioned horse?

A. Hay flakes vary greatly in their weight. A 4-inch flake of alfalfa might weigh 5 lbs., while the same size flake of Bermuda grass hay might weigh only 3 lbs. Weigh your hay to be sure that you are feeding the correct amounts.

If you like, put an average flake of your hay in a plastic bag and take it to the feed store. They will be glad to weigh it for you. Another technique is to weigh the bale and then determine how many flakes you can get from the bale. Dividing the weight by the number of flakes tells you how much each flake will weigh. Repeat the process when you get a new batch of hay or change suppliers.