“Feed all the hay your horse will eat,” said a University of Nebraska-Lincoln educator, “but recognize that may not meet all the animal’s needs.”

Monte Stauffer, Extension educator in Douglas and Sarpy counties, compared grass and legume hay at a recent extension equine conference in North Platte. Stauffer discussed several feedstuffs that are commonly fed to horses.

Grass hay—The advantage of grass hay in a dry ration is its lower susceptibility to mold, he said. Because there’s fiber in the stem, it dries more quickly than alfalfa. This makes harvest timing more flexible. The leaf-to-stem ratio is a good indicator of quality, Stauffer said. Most of the plant’s nutrition is in the leaves. The hay should retain its green color and it should be free of mold and foreign matter like sticks, cardboard or other debris.

Legume hay—Alfalfa contains about twice as much protein and 20 to 30 percent more energy than grass. It also contains a lot more calcium for colts and lactating brood mares. That additional nutrition can be a disadvantage, however, when owners can’t limit the amount of it their horses eat. In “easy keepers” too much alfalfa hay can lead to obesity. Legume hay is a little harder to harvest because it’s more susceptible to mold and harvest must be timed so that it dries effectively without getting so dry it loses its leaves. To get good quality legume hay, again, look for green color. Make sure the leaves are still intact and that it’s free of foreign matter.

Grain—If hay alone will not maintain a horse’s condition, the owner can supplement with grain, Stauffer said. Since alfalfa hay is high in calcium, the grain supplement should contain less calcium than phosphorus. Grass hay contains less calcium, so a grain supplement can have equal parts calcium and phosphorus. Stauffer advised starting with no grain and adding it a little bit at a time. If the horse starts to gain weight, reduce the amount of grain; if it’s still not in good condition, add more. More than 50 percent grain in a ration is likely to be too much.

Roughage—Horses need plenty of roughage to keep their digestive systems healthy and to keep them from chewing on other things, like fences, gates and other horse’s manes and tails.

Crop residues—Grazing crop residues can be a cheap way of providing roughage in the winter. Consider the horse's age and condition. Cornstalks may not provide enough protein and energy for growing colts or horses in their geriatric years. Make sure the site has a good water source and some kind of shelter or windbreak. If there's a lot of grain on the ground, it might cause the horse to founder.

Horses that get proper nutrition will live longer and perform better, so be sure to meet their needs throughout their lives.