Horse Feeding Behavior

Horses devote more time to eating than to any other behavioral activity. Behavior has direct effects on consumption patterns and the selection of feeds. Probably no other single factor is as important to the well-being and productivity of the horse as the feed and forage it consumes. Horses, like humans, need food and water to survive.

**Ingestive Behavior** The time a horse spends consuming feed is controlled by a number of factors. Grazing time depends primarily on:

- type and availability of forage
- consumption behavior
- level of nutrient demand.

In times of limited feed or during periods of drought when feed is restricted, horses will eat when feed is present or can be found. When feed is abundantly available, horses will develop patterns of consumption behavior.

Patterns of eating are developed in response to daylight/darkness cycles and other environmental cycles. These patterns are apparently influenced by learned behavior as the horse grows and develops. Most research indicates that the heaviest grazing occurs in the hours surrounding dawn and the late afternoon near sunset. Night grazing sometimes occurs and is observed more in the summer months. Temperature can also alter grazing times. During the hot summer afternoons, horses will stop their grazing. On extremely hot days, horses will stop their grazing earlier in the morning. Cold weather alone apparently has little effect on daily grazing patterns; however, heavy rain, strong wind, and/or snow cover may significantly alter grazing patterns.

Researchers estimate that the amount of time a horse spends grazing is between five and 10 hours per day. In general, horses will spend less time grazing good-quality pasture, but this is not always true. For example, although horses may graze poor-quality pasture longer to meet nutritional requirements, horses on high-quality pastures may consume forage for much longer than is necessary to meet nutritional needs. Overgrazing can lead to horses becoming overconditioned (fat) on pasture because they are consuming more than they need to meet their nutrient requirements. Horses do not have the ability to control their eating so that they will stop eating when they have met their nutrient requirements. They will continue to eat, which can lead to digestive and lameness problems.

**Selectivity**
Horses have very mobile lips and a large mouth. They typically eat the part of the pasture plant they have selected by biting it off between their upper and lower incisors, unlike cattle, which use their tongues to consume the pasture plant. Horses graze close to the ground and can also browse by picking the leafy material from bushes, trees, or other plants. These anatomical/behavioral combinations result in the ability of horses to be selective about what they consume. The horse will often select the most tasty part of the hay and leave the stems and undesirable portions. If adequate pasture is available, horses will be very selective. Horses are known as "spot grazers." They will eat portions of the pasture down to the bare ground, while an area right next to the bare spot may be lush and green. When forage availability decreases, so does selectivity.

Research has shown that horses have a preference for different types of forage and do not necessarily consume excellent forages. Many studies have shown that when horses are presented a choice between grass and alfalfa, they will often choose the grass first. However when forages of choice are diminished, horses will quickly choose the other forages available.

Sight, touch, taste, and smell are used by the horse in selecting the forage species it will consume. Taste is the sense that is most likely to influence selection. Studies have indicated that odor plays a relatively minor role. Sight is probably used primarily to recognize conspicuous forage species and to orient the approach to those species, but it apparently is not important in influencing selectivity. Horses will eat leaves over stems and green, succulent material in preference to dry, coarse material. Hunger will decrease selectivity.