

## Pica: The Peculiar Palate

**Pica is the desire to eat unusual substances that possess little or no nutritional value, such as dirt, wood, hair, and feces.** This phenomenon has been observed in horses of all ages, breeds, and sexes.

**Mineral or vitamin imbalances are often cited as the cause of pica. This is not always the case.** Nutritionists have found that horses have a true appetite for only three nutrients: energy, salt, and water. Horses do not typically express nutritional imbalances as pica; therefore, they do not seek ways to rectify imbalances. A horse licking its concrete automatic waterer or a pony scooping up a mouthful of soil is likely **more curious or bored than nutritionally deprived.** This premise is substantiated by research performed in the 1970s. Ponies fed a calcium-deficient diet consumed no more of a free-choice calcium supplement than ponies fed a calcium-adequate diet. In a separate trial, ponies fed a phosphorus-deficient diet were offered a range of mineral salts, including phosphorus and calcium, from which to satiate their mineral inadequacies. The ponies ate more calcium than phosphorus. If the calcium consumption were allowed to continue unhindered, it would have actually been detrimental to their condition, as increased calcium slows phosphorus absorption.

Breeders and other handlers of foals regularly encounter pica in the form **of coprophagy or the ingestion of feces.** Foals will begin practicing coprophagy as young as four or five days old. Some horsemen believe it is a normal developmental milestone, and the practice may **jumpstart the establishment of the microbial population in the intestinal tract.** Because these bacteria are necessary for the proper digestion of fiber, coprophagy may allow for a smooth transition from a milk-only diet to meals of forages and concentrates. The primary concern surrounding coprophagy is parasite infestation. Foals typically only consume fresh feces from their dams. Parasite eggs must often incubate in manure before becoming infective, **so foals usually sidestep parasite transmission from coprophagy.** Regardless of this, mares should be maintained on a rigorous deworming schedule. Coprophagy is normal behavior in foals and other young horses. Older horses, on the other hand, are seldom observed eating manure, and most will make a concerted effort to avoid feedstuffs tainted with fecal material. If an adult horse engages in coprophagy, allow it ad libitum access to forage (pasture and/or hay), keeping in mind any other health peculiarities of the horse (such as a predisposition to founder).

As foals mature, some become involved in **mane and tail chewing.** This is not unusual and may be caused by mere **boredom or playfulness.** Young horses are so apt to participate in this behavior that commercial breeders routinely slather tails with an over-the-counter or homemade concoction designed to ward off mischievous pasturemates. Such mixtures often contain cayenne pepper and other foul-tasting ingredients. The chewed-off, bobtail look is not appealing and often frowned upon, particularly in some venues such as the show arena or the sales ring.

**Wood chewing** is a common occurrence in stabled horses. Extended periods of confinement coupled with little or no long-stemmed forage often induces boredom and sets the stage for wood chewing. Forage is rich in fiber, and **some horsemen believe that horses are attempting to replace the fiber normally found in long-stemmed forage** (such as hay) with that found in stall boards and some beddings. Incidence of wood chewing may be especially high in stalled horses fed forage pellets or cubes. These feedstuffs do not adequately fulfill the desire of horses to chew that is afforded when hay is offered.

Wood chewing should not be confused with **cribbing, a stable vice characterized by the grasping of the incisors on an immovable object, arching of the neck, and gulping of air**. If the horse chooses a wooden surface to crib on, it may appear as though the horse is wood chewing. (For more information on cribbing, see Equine Review Horse World sheet HW 05.) **Horses committed to wood chewing are far more destructive to their surroundings than cribbers**. Equine behaviorists have documented that some wood-chewing ponies are capable of eating two pounds of wood daily. Surprisingly, wood chewing rarely harms a horse. In a small number of horses, gastrointestinal irritation or obstruction may occur.

The solution to wood chewing may rest in simple management changes. **Providing horses with plenty of roughage and socialization with other pasture-bound horses** may alleviate this behavior. Horses that eye fence posts and boards may be deterred by petroleum-based paint, which will not only protect fences from weathering but also from some of the most ardent wood chewers.

Pastured horses often exhibit a penchant for **stripping bark off trees**. Bark eating may be a residual feral behavior, as wild horses often browse on brushes, branches, leaves, and bark even when there is no shortage of grass. The belief that horses strip trees in an effort to access the protein-rich layer directly beneath the bark has been bounced among some horsemen for years. There seems to be little truth to this as horses seldom gnaw at the underlying wood, finding satisfaction in only debarking the tree. Bark eating is often a group activity, with several horses simultaneously munching on the same tree from its aboveground roots to as high as they can reach on its trunk and low branches. The best way to keep horses from devouring bark and potentially inhibiting tree growth is to **wrap trunks in heavy-gauge wire or chain-link fence**. Whatever material is used to deter horses from the bark must be watched and loosened when necessary to allow the tree to grow normally. **A cluster of trees may be fenced off to prevent bark eating**, but this may limit the amount of shade available to horses.

Some horses are naturally more investigative than others. As such, areas to which horses have access should be monitored closely for **foreign objects**. Ingestion and excretion of unusual matter may occur without untoward side effects. Other times, however, foreign objects may cause impaction or may precipitate the formation of an enterolith, a stone-like mass capable of completely occluding the colon of a horse. (See Equine Review Health Line sheet HL 06 for more information on enteroliths.)

**Pica often frustrates horse owners. If the diet has been carefully designed to provide adequate nutrients and the horse is allowed maximal time in large fields with peers, the likelihood of your horse being simply inquisitive or bored far outweighs the notion that something is amiss in its diet.**