

Coping with the Easy Keeper

BY MARK LLEWELLYN

He was christened "Tank" for a reason. The stock-type palomino gelding stands a not-so-impressive 15 hands yet weighs in at a hefty 1300 pounds. He maintains this weight on forage alone - pasture in the spring, summer and fall and low-grade grass hay in the winter. Fresh water and a salt block round out his menu. Tank is wormed every eight weeks and receives vaccinations annually. He defines "easy keeper." He needs to lose weight, but how?

A horse is considered an easy keeper when it is able to maintain optimal body condition on less than average amounts of feedstuffs. Such horses are undoubtedly less demanding on the budget than horses that require a substantial diet, but owning an easy keeper presents a different set of nutrition challenges for horsemen. This is doubly true if the horse is susceptible to becoming overweight. Obesity outdistances all other horse feeding management problems and is an equal opportunity affliction, plaguing the sedentary horse, the competitive equine athlete, the broodmare, the breeding stallion, or the pleasure mount. Achieving weight loss in horses can be just as problematic as realizing weight gain. Unfortunately, the horse would rather participate in a weight-gaining regime than a weight-losing one by most accounts.



IN SEARCH OF SVELTE

Like their human caretakers, horses gain and lose weight on individual metabolic timetables. Some people with ravenous appetites can eat whatever they like, in whatever quantities, and remain lean. Others must satiate their hunger prudently or temper overeating with an exercise program to maintain a desirable weight. The same phenomenon rings true for horses.

For many mature idle horses, an abundance of grass in addition to water and a salt block (particularly in the summer) constitutes the entire diet. This is the most natural menu for horses and the least likely to cause digestive upsets. However, for horses with increased nutrient demands, such as pregnant or lactating broodmares, intensely worked performance horses and young growing horses, pasture alone does not satisfy nutrient requirements. To boost nutrient intake, fortified grain concentrates are fed, yet these feeds may not seem necessary, particularly if a horse is an easy keeper. Does this mean a pregnant mare that maintains weight easily does not require additional nutrients during gestation? No, the key consideration in managing the nutritional needs of an easy keeper is not unlike that of managing any other horse: ensure its nutritional requirements are being met. This can be done by gathering nutritional analyses of the forages and balancing the nutrients that are absent in the forages with low-intake, low-calorie vitamin and mineral supplements.

Unfortunately, easy keepers on all forage diets often do not consume sufficient quantities of vitamins and minerals. This may be due in part to low quality hay that is often fed to overweight horses. Nutrient content of hay is largely a function of the maturity of the plants at harvest. The more mature the hay, the lower the nutritional value. Hay also begins to lose its nutritional value immediately following cutting and continues to do so during storage. Therefore, the longer the hay remains in storage, the greater the amount of nutrients blanched from it. In particular, vitamin depletion is prevalent among hays stored for long periods of time. Certain vitamins can be drained from herbage during haymaking seemingly overnight. Approximately 80% of vitamin A, an essential nutrient for tissue integrity, vision and immune function, can be lost during the first 24 hours after cutting. Long-term consumption of stored forages may render a horse deficient of certain important nutrients. In one study completed by Kentucky Equine Research nutritionist Kathleen Crandell, horses drained their body reserves of vitamin A within two months of being started on a diet devoid of vitamin A.

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Vitamin and mineral content of hay is best determined by chemical analysis. Although county extension personnel should be able to assist you in forage analysis, this may be impractical for many horse owners. The best non-laboratory method of determining vitamin and mineral content is by visual inspection. Simply put, the greener the hay, the higher the nutrient level. Off-colored hay that has been sun-bleached and stored for longer than six months is certainly low in vitamin content. If vitamin content in hay is questionable, chemical analysis is the only way to confirm your suspicions.

The Road to Obesity—A Short Trip for an Easy Keeper

One common problem among easy keepers is the tendency to become obese. Obesity is detrimental to horses for a variety of reasons. Perhaps the greatest threat is to athletic prowess. Increased sweating and the inability to cool quickly due to excessive fat acting as insulation decreases physical performance ability. Obese horses may also experience respiratory difficulties. The additional loading of fat causes oxygen needs to increase, but oxygen intake ability becomes restricted. Unnecessary weight may also induce joint and locomotion problems in horses, one consequence of obesity that could be career-ending to the athletic horse. Obese horses are also more prone to lipomas, fatty tumors which may develop in the abdominal cavity and strangulate intestine, precipitating an episode of colic.

Overfeeding is common among horsemen for a variety of reasons, some intentional and others not. Individuals involved in the halter horse industry may overcondition horses to mask conformational flaws. The same holds true for horse traders whose livelihoods sometimes depend on selling the next horse. Fat horses are more pleasing to the eye than skinny ones. Obesity can usually be remedied with one astute management ideal: energy expenditure must surpass energy intake. In black and white, that's diet and exercise.

Some considerations when feeding the obese horse:

1. *Limit grazing time.* This is particularly true in periods of rapid grass growth (such as the spring and early summer). If this is not feasible, outfit the horse with a muzzle, a piece of equipment that will significantly reduce the amount of forage grasped per bite. Muzzles come in a variety of models - some with one hole, others with two or three holes. Follow the manufacturer's instructions carefully when fitting the horse, and remove the muzzle when the horse is stall bound or in an area where feed restriction is not a concern. This will decrease the likelihood of hair loss or sores due to an ill-

fitting muzzle. Some Thoroughbreds, Arabians, and other thin-skinned horses are prone to rubbing.

2. *Eliminate high calorie concentrates from diet.* If the quality of forage is suspect, supplement diet with a low-intake, low calorie vitamin and mineral pellet which will ensure all critical nutrient requirements are met. (See sidebar on Micro-Phase and other supplement pellets.)
3. *Replace all legume hay with a grass or cereal grain hay.* Legume hays, such as alfalfa or clover, contain more calories per pound compared to grass hays. Instead of alfalfa, feed a high-fiber, low-calorie long stem grass hay free of dust, mold, and weeds.
4. *Exclude all high fat feed additives or supplements designed to help coat condition.* Corn oil, flax or linseed oil, and rice bran are chock full of calories. Instead of supplementing a ration with one of these fat-packed additives for a sleek coat, a biotin supplement such as Ker-A-Form (Kentucky Performance Products, 1-800-772-1988) will boost coat condition. In addition, faithfulness to a regular deworming and daily grooming regimen will work wonders on a dull coat. (See Equineews, Volume 4, Issue 1 for tips on achieving and maintaining impeccable coat condition.)
5. *Implement an exercise program.* The primary purpose for exercise is to increase energy expenditure. To maximize energy output while minimizing skeletal stress, exercise should be of low intensity and long duration. There are other benefits of daily exercise, including an increase in metabolic rate, a possible reduction in appetite, and prevention of bone and mineral losses that may occur during calorie restriction.
6. *Avoid the guilt.* Some horse owners feed their horse a "guilt cup." By definition, a guilt cup is a paltry amount of feed doled to overweight horses, usually due to caretaker's self-reproach or horse's incessant nickering for feed. Come on, you've done it. How can you deny your favorite mount that handful of grain when all of the other horses in the stable are contentedly gulping grain? Do you think to yourself, "A wee bit won't hurt him." If he's overweight, it won't help him either.

Consequences of Dieting

Putting a horse on a restricted diet may pose a few dilemmas. In a natural setting, horses spend the majority of their time foraging for palatable plants. Continuous grazing is necessary because the capacity of the stomach is limited, but this behavior also ensures that stomach acid is buffered by saliva and ingested plant material. If a horse receives infrequent meals, it may develop gastric ulceration due to the constant exposure of the stomach wall to acid. Signs of ulceration include a marked change in disposition, a noticeable decline in performance, and poor coat

condition. One commercial product designed to neutralize stomach acid and coat the stomach wall is Neigh-Lox, available through Kentucky Performance Products (1-800-772-1988).

Due to boredom, the dieting horse is also prone to develop vices, particularly if stalled much of the time. Vices that involve eating and chewing may be referred to as feeding vices. Oral vices such as cribbing, wind sucking, wood chewing, and crib wetting (repeatedly running the tongue along a manger or stall) usually evolve in horses that have little or no access to pasture.

Horses require fiber for proper hindgut function and therefore desire long stem plants in their diet. Some horses will even forsake lush spring grass (low in fiber) for high quality hay to satisfy fiber requirements. Horses committed to wood chewing and cribbing may be missing a fibrous dietary component. Offering hay will sometimes keep these vices in check, particularly if a horse is receiving hay cubes or pellets as its forage source. The root of a particular vice will likely not be nutritionally based and must be controlled through management trial and error.

He's Still Fat

Remember Tank? For five months he has received no grain and four flakes (approximately one percent of his body weight) of mid-quality hay daily. Tank is calling a barren drylot home, so he's not consuming any pasture. He also receives the recommended amount of a vitamin and mineral supplement. Ridden five days a week for approximately an hour, Tank is getting more exercise than ever. He's hit the infamous "diet plateau." What else can be done to slim Tank down?

Some horses are genetically engineered to thrive on minimal feed intake. While such horse are few and far between, they do exist. Like some humans, there are some horses that can maintain a trim figure regardless of what they eat. More often than not, however, an idle horse is an overweight horse. Implementation of one or more of the weight reduction methods described will likely melt the weight off of a hefty hoss in due time. Patience is necessary and horses should be placed on a weight loss program that promotes slow reduction of weight. Drastic changes in diet and accompanying rapid weight loss may predispose a horse to colic or metabolic problems.

While an easy keeper may be easy on the pocketbook, nutritionally managing such a horse can be challenging and time consuming. The greatest concern revolves around limiting feed intake to keep the horse at an optimal weight for its height and structure. Careful rationing of feed coupled with an appropriate exercise program will likely produce a slimmer, more athletic, and ultimately a happier, horse. ∞



MICRO-PHASE: Properly balancing vitamin and mineral intake of horses on all-forage diets is critical. Micro-Phase is a scientifically formulated vitamin and mineral supplement ideal for easy keepers. Horses fed a fortified concentrate do not require a vitamin and mineral supplement because all micro- and macronutrient requirements are fulfilled in this mixture. However, easy keepers are often given only forage. While limited grazing time and/or access to low to medium quality forage may help the weight reduction cause, the horse will likely not receive sufficient quantities of vitamins and minerals. These deficiencies may be negatively reflected in the hair coat, disposition, or tolerance to work.

Micro-Phase contains a rich blend of minerals, including calcium and phosphorus in an appropriate 2:1 ratio. Copper, selenium, and zinc are also included in Micro-Phase at levels most appropriate for maximal digestion. Optimal vitamin quantities are also incorporated into Micro-Phase. Vitamins A, D, E and B vitamins (thiamine, riboflavin and cobalamin) as well as niacin, pantothenic acid, and choline are found in Micro-Phase.

KER Team Member Supplement Pellets:

Most horse feed manufacturers who work with the nutrition staff at Kentucky Equine Research (KER) have a low-intake, low-calorie pellet capable of delivering essential protein, vitamins, and minerals. The names of these pellets vary among manufactures; however, some of the trade names include All-Phase, Forti-Phase, Super Supplement, and Equibalancer. Ask the KER Team Member nearest you for its low-intake, low-calorie supplement pellet. Addition of a small amount of supplement pellet to an all-forage diet may rejuvenate coat condition and brighten a surly disposition, particularly at feeding time when the easy keeper may not normally be allotted grain.

They May Not Need Grain, But They Still Need Nutrition

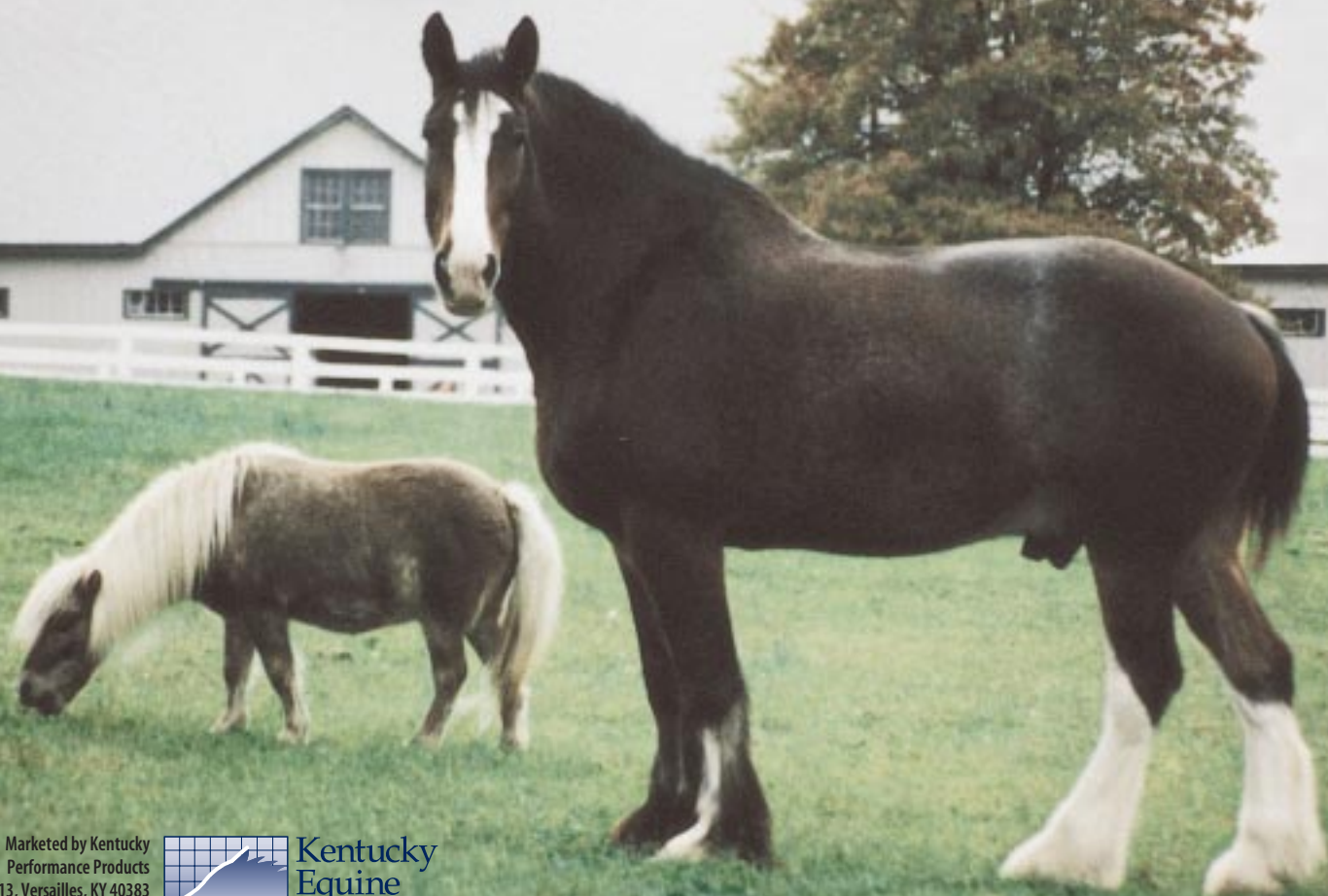
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