**KER- Nutrition of the Breeding Stallion**

Proper nutritional management of the breeding stallion is paramount. Breeding stallions are often the most frustrating horses on a farm to maintain at optimal body condition; some become too lean at the height of breeding season, while others remain candidates for Weight Watchers no matter the season. By providing a carefully balanced diet and monitoring weight regularly, a stallion's waistline can be kept trim and tidy all year long.

For the stallion, the year can be divided into two basic phases, breeding season and the off-season. The breeding season lasts approximately five months for the majority of stallions. In the Northern Hemisphere, the breeding season commences in mid-February and ends on July 4, though these dates are not necessarily concrete. Tennessee Walking Horse breeders, for instance, often breed mares so they foal in the autumn. In the Southern Hemisphere, the schedule is flip-flopped, with the breeding season beginning the first of August and winding up in late January. Some stallions pull double duty, servicing a book of mares in the Northern Hemisphere early in the year and a separate group in the Southern Hemisphere later in the year. It's not unusual for these stallions to breed more than 300 mares annually.

In 2001, one popular Thoroughbred stallion bred 216 mares in the United States and 155 in
Australia. Regardless of the number of mares bred, stallions must be properly nourished to perform their jobs successfully.

From a nutritional standpoint, the act of breeding can loosely be classified as work. According to *Nutrient Requirements of Horses,*produced by the National Research Council, breeding stallions expend nearly the same amount of energy as performance horses in light work. This may be slightly elevated when stallions are bred multiple times a day. Several large studs in Kentucky, for example, breed their charges three times daily during the peak breeding season. Stallions also vary greatly in the amount of exercise they give themselves; some are naturally more sedentary than others. During breeding season, nervous stallions may burn valuable calories fence walking, stall circling, pacing, and weaving.

Breeding may not be the only work certain stallions perform. Some continue to be ridden and trained while performing stud duties. In these instances, energy requirements would be higher still. The breeding stallion requires, above all else, a balanced diet. First and foremost, stallions should be provided with high-quality forage, consuming approximately 1.5-2 pounds of hay per 100 pounds of body weight. A 1,200-pound stallion should therefore be offered 18-24 pounds of hay daily. The *minimum*amount of hay offered should be 1% of body weight. Depending upon the time of year, good quality pasture may supply some or all of the stallion's forage needs.

During the breeding season, the addition of energy-dense feeds, usually grains may be necessary to satisfy calorie requirements for the increased workload of breeding. No more than 0.75 pounds of grain per 100 pounds of body weight should be fed to a stallion per day, and no single meal should weigh more than five pounds. If grain is fed, the amount of hay given may be decreased slightly. Fortified concentrates will contain the vitamins and minerals stallions necessary for optimal nutrition. As with all horses, stallions should have access to a white salt block or a trace-mineralized salt block.

If the stallion is consuming a well-balanced diet, the addition of other vitamins and minerals will not enhance fertility. Although much information has been bandied about through the years, there is no scientific evidence to suggest that vitamin C and E supplements or zinc additives boost reproductive performance. As breeding season approaches, stallions should be in moderate to fleshy body condition, which means the stallion's ribs should be palpable but not visible and minimal fat may be deposited along the withers, behind the shoulder, and around the tailhead. Once an ideal weight has been achieved, every attempt should be made to keep the stallion's weight static. This is best achieved by weighing the horse periodically, usually weekly or biweekly. A weight tape or portable scales can also help track weight.

An extremely thin stallion may not have the energy stores necessary to carry on through an arduous breeding season without his performance suffering. Stallions become too thin when they expend more calories than they consume. To encourage weight gain, provide free-choice access to high-quality forage (usually in the form of pasture and/or grass hay) and supplement with the recommended amount of a fortified concentrate. If a stallion fails to gain weight on this basic diet, a fat supplement such as rice bran or vegetable oil can be included in the ration. Because of the energy density of these supplements, stallions will be consuming far more calories than it is possible to obtain from feeding safe amounts of common feedstuffs. One benefit of a fat-enriched diet is a glossy coat, which will enhance the stallion's appearance.

Another fairly common reason for thinness among breeding stallions is reduced appetite. The anxiety surrounding the breeding shed may prevent some stallions from polishing off meals. If this is the case, every effort should be made to make meals especially palatable. The use of molasses and other appetizing feedstuffs will typically encourage an otherwise distracted stallion to eat. If necessary, remove any supplements (e.g., rice bran or vegetable oil) that may be playing a role in his inappetance.

More common than underfeeding, however, is overfeeding. Obesity predisposes stallions to laminitis, soundness problems (particularly of the hind legs, which is reflective of the strain placed on them during breeding), and possibly fatal aortic rupture.

Extremely overweight stallions are also thought to have lowered libido. If obesity is a problem, stallions should have restricted access to pastures, especially in the spring, and only enough grain to ensure the stallion's vitamin and mineral requirements are being met. An alternate way to satisfy these requirements is to feed a multipurpose vitamin and mineral supplement.

During the off-season, stallions may be maintained on high-quality forage alone, particularly if they are easy keepers. If a stallion requires concentrate, feed only enough to maintain optimal body weight, being sure not to overfeed.