



Growing/Breeding Horse Nutrition Feeding Foals for Optimum Growth

The birth of a healthy, normal foal is a welcome event for a horse owner and represents the end of a long waiting period. The proper nutrition for the broodmare is a key element in the production of the foal. The continued proper feeding of the broodmare and foal is essential for the optimum development of the foal to allow it to achieve its genetic potential. A foal achieves up to 45%-50% of its mature weight and 70+% of its mature height at 6 months of age. The nutrition program should consist of the following segments:

1. Make certain the foal receives adequate colostrum.
2. Feed the mare properly to support milk production and allow re-breeding.
3. Provide available feed to the foal to supplement the mare's milk production until weaning, and ensure a smooth transition at weaning.

Providing adequate colostrum within 2 hours of the foal's life is a crucial management responsibility. In fact, colostrum is the only nutrient the foal should receive during the first 24-48 hours of its life. Colostrum provides antibodies which protect the foal from disease until it is capable of immune response. Also, colostrum provides a vital laxative benefit to help the foal pass the meconium, the first material in the bowel. If a foal does not receive colostrum from the dam, the foal needs to receive either colostrum that has been properly stored, or one of the newer plasma or immunoglobulin products that must be administered by a veterinarian.

The mare's milk will provide the foal's nutrition for the first several weeks. A mare can produce 3%-4% of her bodyweight in milk per day. During this time, the mare must receive adequate water, energy, protein, minerals and vitamins to produce milk and maintain her body condition. This requires a high quality forage and appropriate supplemental feed. If a broodmare is losing weight during early lactation, she is using body stores to provide nutrition in the milk. A mare losing weight is less likely to re-breed successfully and may not be providing optimum nutrition for the foal. The nutrient content of the mare's milk declines after 2 weeks and the quantity produced declines at about 12 weeks. At this point, the mare's milk is generally not adequate to support optimum growth.

Foals will generally start to nibble on solid food at 2-4 weeks of age, either eating with mares or being creep fed. Creep feeding begins at about 8 weeks and generally produces more consistent weight gains. A foal should be offered 1 lb per day of properly designed feed for each month of age. A 3-month-old foal can be consuming about 3 lbs per day of a well designed feed, plus milk and pasture or hay. A foal at this age will be consuming about 3% of its body weight in dry matter and gaining 2.5+ lbs per day. If the mare's milk production is inadequate, the feed intake may increase, or the foal will not maintain growth. If a foal is consuming about 1 lb of feed per month of age plus hay or pasture, weaning may be accomplished at 4 to 6 months of age with no disruption of the foal's growth. At this point, the nutrition furnished by the mare's milk is limited.

The key to the smooth growth curve for a foal is a well balanced intake of energy, protein, minerals and vitamins, as well as good health care. Rate of gain may be adjusted, but energy or other nutrient deficiencies or excesses may result in less than optimum growth or potential metabolic problems, such as Developmental Orthopedic Disease (DOD).