

Equestrian Q & A

I breed warmbloods for use as show hunters and foxhunters. How much can I expect them to grow during their first year of life, and how does this growth compare to that of Thoroughbreds? What are some general feeding guidelines for weanling warmbloods?

Mature body size is genetically predetermined, but growth rate can be influenced by a number of factors: environment, nutrition and management. Optimal growth rate results in a desirable body size at a specific age with the least amount of developmental problems. Managing growth in horses becomes a balance between producing a desirable individual for a particular purpose without creating skeletal problems that will reduce a horse's subsequent athletic ability.

Growing a foal too slowly could increase the risk of it being too small at a given age (if, for example, you're speaking of a horse pointed towards a particular show at a particular age) or never obtaining maximal mature body size. Growing one too quickly, on the other hand, could result in developmental orthopedic disease such as physitis, angular limb deformities and osteochondritis dissecans (OCD). There is no single growth rate that is desirable for all types of horses. Therefore, horses should be managed differently for varying growth rates.

For more than a decade, Kentucky Equine Research has performed extensive studies on the growth of Thoroughbred foals, recording weight and height information regularly. We compared the information gathered in these studies with the data collected from researchers that measured body weight and withers height in over 600 Hanoverian foals from birth to seven months of age.

The Hanoverian foals were slightly heavier at birth, weighing in at an average of 60 kg (132 lb) compared to 54.5 kg (120 lb). The Hanoverian foals grew slower than their Thoroughbred peers for the first three months and remained slightly smaller until five months of age. By seven months of age, however, the Hanoverian and Thoroughbred foals were nearly identical in weight and height. At this point in their growth, these Hanoverian foals weighed an average of 267 kg (587 lb) and had a withers height of 138 cm (54 in; 13.2 hands). The Thoroughbreds had an average weight of 269 kg (592 lb) and withers height of 138 cm.

In terms of percentage of mature weight and height, it is necessary to make the assumptions that an average adult Thoroughbred weighs approximately 570 kg (1140 lb) and stands 165 cm (16.1 hands), while an average adult Hanoverian might be closer to 650 kg (1430 lb) in weight and 167 cm (nearly 16.2) in height. At seven months of age, therefore, Hanoverians have attained about 41% of their adult body weight and 83% of their adult withers height. As mentioned previously, Thoroughbreds reflect similar percentages.

Much can be said about feeding growing warmbloods, so the following suggestions reflect only the most basic guidelines. At six months of age, an appropriate growth rate might be 0.8-0.9 kg/day (1.75-2.0 lb/day). Daily growth slows until the horse is gaining 0.1-0.3 kg/day (0.2-0.7 lb/day) as it enters its second year of life. Breeders should implement feeding programs that are predominantly forage-based with appropriate protein and mineral fortification to promote sound skeletal development. Fortification can come in many forms, though two popular ones might be a low-glycemic

feed designed particularly for young horses or a concentrated supplement pellet that supplies the protein, vitamins and minerals needed for optimal growth. Amount fed depends largely on the individual horse and feeding directions of the chosen product.

Guidelines for feeding growing horses should be discussed thoroughly with a qualified equine nutritionist.

If you would like to submit a nutrition question, please contact Eileen Phethean at ephethean@ker.com or mail to: EQUESTRIAN Nutrition Questions, c/o Kentucky Equine Research, 3910 Delaney Ferry Road, Versailles, KY 40383.