

Condition Scoring Helps Determine Optimum Weight

BY ROBIN STANBACK

Horses and humans have had a long and storied association since the first horse was captured and harnessed for use. Over the centuries man has bred horses for a variety of specific uses and the equids that have developed show the results of this breeding in their size, speed, temperament and ability. The very different types of horses from the Miniature to the Thoroughbred and Draft do have many distinctly unique needs but one they all share is the need for a sound and balanced diet to help them to maintain a healthy body structure.

Steve Caddel of Hallway Feeds has spent the last 10 years working on a unique project with Kentucky Equine Research President Dr. Joe Pagan that has involved monitoring the weight and growth of over 10,000 Thoroughbreds in central Kentucky from birth to eighteen months. Mr. Caddel has combined this experience with a life-long interest in and association with horses to become a highly regarded resource for people wanting information on their horse's nutritional health and body structure. He explained, "In 1983 researchers at Texas A&M University led by Dr. R. Henneke developed a process called condition scoring that would allow people to more accurately determine the overall health of their horses. Dr. Henneke took a system designed for the cattle industry and adapted it for horses. Many other researchers have modified Dr. Henneke's design as more information has become available. This system takes into account more than the weight of the horse as determined by scale, regression equation, or weight tape."

Measurements determined by feel and sight observation of the horse's muscle tone and fat deposits help to determine the overall score of a horse. Ranging from 1 to 9 or, in a modified version, from 0 to 5, horses are judged to be poor, very thin, moderately thin, moderate, moderately fleshy, fleshy, fat, and extremely fat. According to Mr. Caddel, however, the use of each individual animal as well as the breeding and body frame must be taken into account.

He said, "Horses have been bred for specific purposes for so many years that very distinct differences have evolved between breeds and types. For instance, many draft and pony breeds were

developed to be working animals. As such, they needed not only to be able to perform their given tasks, such as pulling coal carts in mines, but they needed to be economical animals as well. The goal was to produce an animal that could deliver the maximum amount of work for a minimum amount of cost in feed. The end result is that many draft and pony breeds are what we would consider "easy keepers" and do not require large amounts of forage or feed to be able to maintain their weight and muscle tone. Fed well and placed on lush pasture, these horses are candidates for obesity and the inherent problems that come with it such as colic and laminitis."

He continued, "Thoroughbreds have developed over years of selective breeding to travel distances at high speeds. These horses were typically bred by people who did not take the costs of maintaining the animals into consideration. The common thinking was to breed the best to the best in hopes of getting the best. It takes so many calories just to move the body forward before you can ask for speed. Breeders provided higher amounts of feed and better pastures to these horses and, over the course of centuries, these horses evolved into animals that seem to require more calories."

In the case of Thoroughbreds the body condition of choice is determined by the function of the animal. A racehorse could not run efficiently carrying an excess of weight. To perform at an optimum level, Mr. Caddel stated, "A Thoroughbred in training should have a body condition score in about the 4+ to 5 range, moderately thin to moderate." This condition score is described as a horse with a slight ridge along his back, and a faint outline of ribs discernible. Horses with a 4+ condition score also have a small amount of fat around the tailhead, and their necks, withers and shoulders do not appear noticeably thin.


Most pleasure horses, according to Mr. Caddel, are best kept in the 5+ to 6 range considered moderate to moderately fleshy. This is indicated by a flat back perhaps with a slight crease, a bit of fat over the rib cage, a fat rounded tailhead, and fat beginning to be deposited along the withers, behind the shoulders, and along the neck.

Body condition scores can also be helpful in

determining the health of broodmares and young growing horses. In fact, it was to disprove a long-held theory about broodmares that Dr. Henneke began to explore the need for a scoring system. Mr. Caddel explained, "It used to be that breeders would attempt to "flush" a mare prior to attempting to get her in foal. The theory was that if you could get a mare on the thin side and then build her up she would be easier to get in foal while she was gaining weight. Dr. Henneke set out to prove that it was less labor intensive and better for the horses to attempt to keep the mares in good condition all the way through the breeding process. Healthy broodmares tend to fall in the 6 to 7 range."

Monitoring the condition score of young, growing horses can help owners and farm managers to maintain awareness of the stresses that are put upon young bones, joints and muscle tissue. In the young Thoroughbreds Mr. Caddel has monitored he has seen a wide range of body

styles and condition scores. It has been his observation that "the precocious foals that experience rapid growth and large amounts of weight gain with body scores of 7+ tend to be the ones that seem to have more problems with angular limb deformities. Monitoring the condition score and adjusting the feed rations appropriately can help alleviate some of these problems."

Another area in which condition scoring can help determine a program for horses is when a horse has become very thin. Humane societies use this system to help determine when a horse is in need of society members' intervention. A score of 3 or below is considered to be deprived but, as Mr. Caddel cautioned, "it is important to bring the horse along carefully and not be in too big a hurry to push that horse from a three to a seven or higher. People often forget that obesity is as damaging to a horse as is being terribly thin." 

The Condition Scoring System

Absolute weight is not the only important criterion by which to evaluate the horse. Appearance and condition have always been used as indicators of fitness and health. This condition score system was developed in an attempt to standardize these descriptions and to allow for easier comparison and communication:

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| 1. POOR | Animal is extremely emaciated; spinal column is easily discernible, ribs; tailhead; bone structure of withers, shoulders, and neck easily noticeable; no fatty tissue can be felt. |
| 2. VERY THIN | Animal is emaciated; slight fat covering over base of spinous processes; transverse processes of lumbar vertebrae feel rounded; spinous processes, ribs and tailhead prominent; withers, shoulders, and neck structure faintly discernible. |
| 3. THIN | Fat buildup about halfway on spinous processes; transverse processes cannot be felt; slight fat cover over ribs; spinous processes and ribs easily discernible; tailhead prominent, but individual vertebrae cannot be identified visually; withers, shoulders, and neck accentuated. |
| 4. MODERATELY THIN | Slight ridge along back; faint outline of ribs discernible; tailhead prominence depends upon conformation, fat can be felt around it; withers, shoulders, and neck not obviously thin. |
| 5. MODERATE | Back is flat (no crease or ridge); ribs not visually distinguishable but easily felt; fat around tailhead beginning to feel spongy; withers appear rounded over spinous processes; shoulders and neck blend smoothly into body. |
| 6. MODERATELY FLESHY | May have a slight crease down back; fat over ribs spongy; fat around tailhead soft; fat beginning to be deposited along the side of the withers, behind the shoulders, and along the sides of the neck. |
| 7. FLESHY | May have crease down back; individual ribs can be felt, but noticeable filling between ribs with fat; fat around tailhead soft; fat deposited along withers, shoulders, and along the neck. |
| 8. FAT | Crease down back; difficult to feel ribs; fat around tailhead very soft; area behind shoulder filled with fat; noticeable thickening of neck; fat deposited along inner thighs. |
| 9. EXTREMELY FAT | Obvious crease down back; patchy fat appearing over ribs; bulging fat around tailhead, along withers, behind shoulders, and along neck; fat along inner thighs may rub together; flank filled with fat. |

Developed by Dr. R. Henneke and co-workers at Texas A&M University.