

# Topline Evaluation Scoring (TES)

Assessing Current Muscle Status in Horses of All Ages

Progressive Nutrition's Topline Evaluation Score (TES) will evaluate your horse's muscle development. The muscles over the back, loin and croup are the best indicators, and easiest to identify, of the horses' muscle status. Those muscles affect the horses' ability to elevate, lengthen, stop, turn, and drive forward. The TES is a 'visual' and a 'hands-on' appraisal of the horses' topline muscles. The three areas to evaluate include:

- The back area
- The loin area
- The croup area

The TES uses the 'A' through 'D' grading scale, with an 'A' showing 'ideal' over-all muscling and a 'D' showing muscle atrophy in all three of the areas that make up their topline.

Topline Evaluation is an indicator of the amino acids in a horses' diet and if they are in adequate supply or are they 'balanced' or not. Amino Acids are the building blocks that make up crude protein. Muscles contain 73% protein and the first limiting amino acid will determine how much 'all' of the other amino acids in their diet can be utilized.

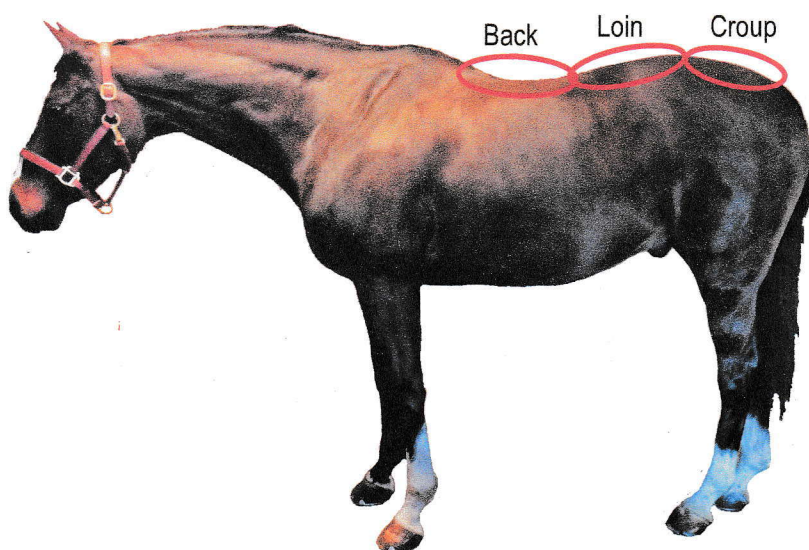
In performance horses: A TES Score of 'B-' or below may have a negative effect on the horses' ability to perform very long, because their stamina will be reduced, while it increases muscle soreness. A score of 'C' or 'D' may also decrease their bone density and tendon strength depending on how long this deficient diet was fed. There are amino acid to mineral ratios that must be maintained in their 'total diet' for 'optimal absorption and utilization of both.

In young growing horses: A TES Score of B- or below can predispose them to Developmental Orthopedic Disease (DOD). Dr. Ed Ott, from the Univ. of Florida, published his work showing how a 'protein deficient' diet fed to young, growing horses affected both, the 'quality' of bone formed and the 'strength' of their tendons and ligaments.

Realizing the first place they lose muscle, when a deficient diet is fed, is in their back area; the second is their loin; and third is their croup area. Realizing the easiest place to first visualize muscle loss on the horse is in their back area. If their muscles continue to atrophy, it would then be seen through the loin and then the croup area. Once the horses diet is 'balanced', it usually takes 30 days to improve 'one' grade of their TES. For more assistance, contact Progressive Nutrition at 888-239-3185, or on-line at [www.ProgNutrition.com](http://www.ProgNutrition.com), or call your closest Progressive Nutrition Dealer.

## Muscle Development;

Amino acid balance, genetics & work load



**Grade A-** The horse has 'ideal muscle development'. The back, loin and croup are full and well rounded. The topline muscles are well developed and blend smoothly into his ribs. The horse should be able to perform work requiring the use of all of these muscles.

**Grade B-** The 'back area is concave' (sunken), between the vertebrae and the top of the ribs:

1. You may have trouble fitting this horse with a saddle.
2. The muscle atrophy in this area may cause back soreness when worked.
3. Soreness can negatively impact their attitude and performance.
4. The loin muscles are well developed and are the same height as the spinal processes, i.e. you cannot see or palpate the spinal processes.

**Grade C-** The 'back and loin areas are concave' (sunken), between the vertebrae and the ribs:

1. The 'spinal processes' in the loin area are higher than the muscles beside them and can easily be seen and palpated.
2. The atrophied muscles in the back and loin areas weaken the horse.
3. The length of time they are able to work and perform will be compromised, causing them to tire easily.
4. Muscling over the croup and hindquarters are well developed and rounded.

**Grade D-** The entire topline is concave (sunken), including the back, loin and croup areas:

1. The croup appears pointed at the top since the vertebrae and hip bones are higher than the muscles in-between them.
2. In severely affected horses, the width of their stifle is narrower than the width of their point of hip.
3. This horse will lack the strength and stamina to perform and the muscle atrophy will cause discomfort when worked.