

## Should I be concerned about the high protein content (20%) in Cool Stance?

The short answer is no. When it comes to understanding protein requirements for horses, it's more complicated than most people realize, and yet it's also simple.

More important than the overall % protein is the **type/quality of the protein** and the **protein to calorie and/or fat ratio**. Many people who feed high amounts of protein are doing so in a mis-guided effort to increase digestible energy. Attempting to feed protein for increased energy is pointless, and a waste of money.



Here's what IS important to keep in mind when considering the protein in a feed:

1. Protein should be combined with a good source of digestible energy (mainly fat). Protein itself is not an efficient source of energy so you don't want your horse's body to have to rely on it for that purpose. But protein IS critical for building muscle, transporting nutrients, maintaining hair and skin condition, and regulating hormones.
2. Protein exists only in the form of "chains" of amino acids. There are essential amino acids (those that the animal cannot synthesize itself and therefore they must be ingested) and non-essential amino acids (those that are synthesized naturally by the horse's body and are not required as intake). Cool Stance naturally has all 10 of the essential amino acids, which means it is chock full of the **important proteins** that horses need to ingest because their bodies can't make them internally. The proteins in Cool Stance are also *highly digestible* because they are not processed or chemically produced.
3. Commercial feed is only one component of the horse's overall diet. Cool Stance should only make up between 1lb and 6lbs of the overall diet per day. The rest should be made up of grass hay and/or pasture grass, both of which are lower in protein and fat than Cool Stance. **When calculating the overall percentage of protein in a diet, you must consider all feed sources combined.** Most horses require at least 8-12% protein overall in the diet, with higher requirements for those that are growing, lactating or in heavy work.
4. Moderate amounts of excess protein in a horse's diet are not considered dangerous. Unlike fats and carbohydrates, horses do not store protein for later use. However, excess protein metabolism results in the buildup of nitrogen end-products, such as ammonia and urea. A diet containing excess protein will increase the horse's water requirements and urine output as the ammonia and urea are flushed out of the body. Exposure to this strong urine can cause lung irritation and other airway problems, so excessive protein should be avoided. For this reason (among others), it is not recommended to feed alfalfa hay with Cool Stance for horses that are not in heavy work.

A common myth about protein is that if a horse breaks into the feed room, and gorges himself on grain, he may founder and colic because of the high protein intake. The founder danger in this scenario comes from excessive sugar intake and the colic danger comes from starch overload. Neither issue would have anything to do with protein intake.