

## CoolStance

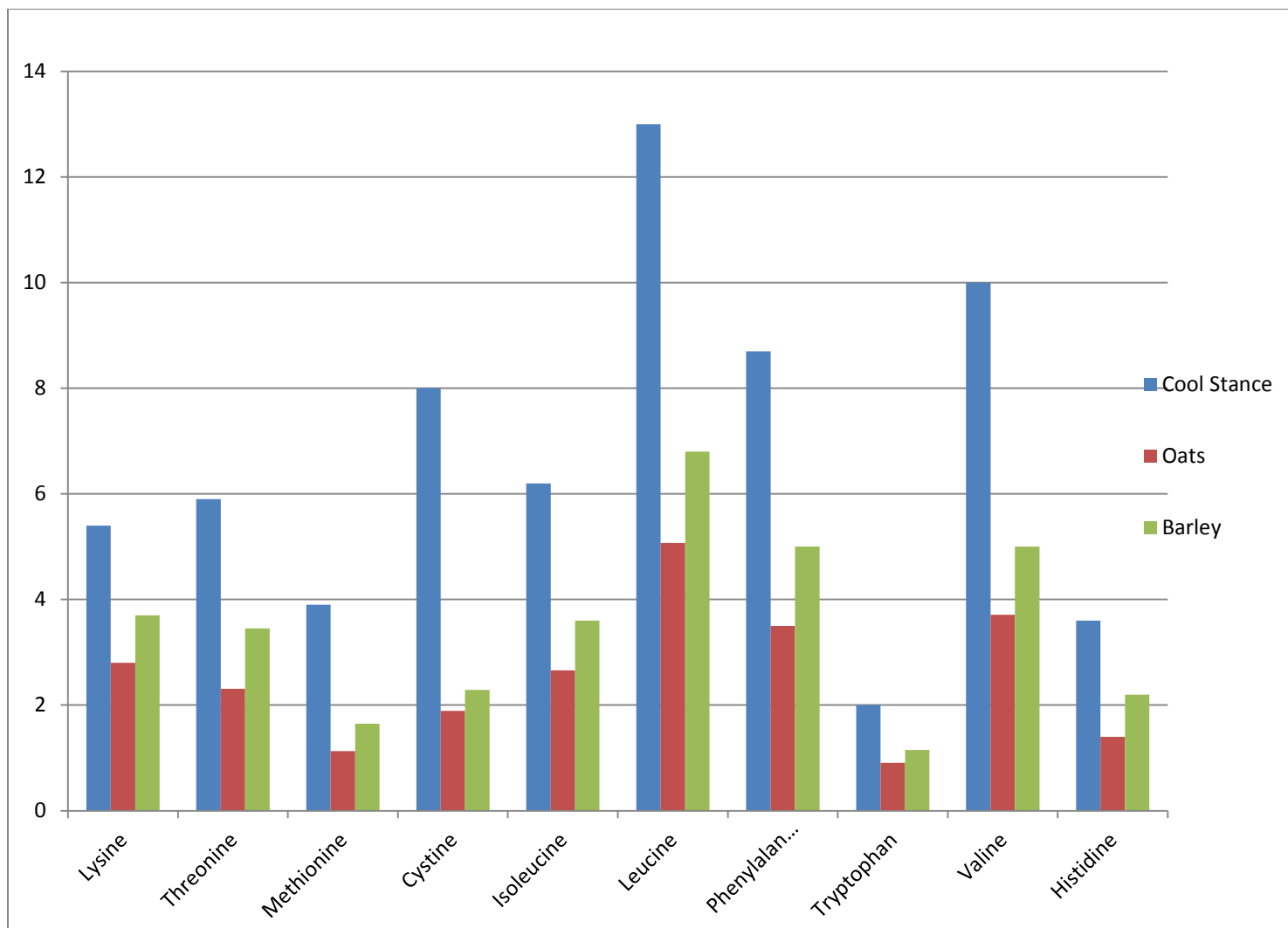
### A High Energy Feed with a Superior Amino Acid Profile

Amino acids are the building blocks of protein and play an important role in muscle development, hoof growth and coat condition as well as immune system, nervous system and hormonal function. In addition, amino acids supply the horse with a valuable source of energy. Most of the amino acids required by the horse can be manufactured in the horse's body. There are however 10 amino acids that cannot be manufactured by the horse and thus must be supplied in the diet: these are termed the *essential amino acids*. Failure to provide the essential amino acids in the diet will slow growth, limit muscle development and reduce the horses feed use efficiency (Graham *et al.* 1994). Lysine is the first limiting amino acid in a horses diet (i.e. it is the one most likely to be deficient in the diet). Threonine and methionine are thought to be the second and third limiting amino acids in a horse's diet.

In comparison to cereal grains such as barley and oats, which are commonly used as an energy source in horse feeds, CoolStance has a superior essential amino acid profile (Figure 1). Therefore CoolStance not only provides a readily digestible and 'safe' source of energy, but will make a valuable contribution toward satisfying your horse's essential amino acid requirements to promote muscle development, hoof growth and brilliant coat condition. Methionine and cystine are essential for keratin formation in hoof growth.

For more information or to order CoolStance, please  
call 803-647-1200 or e-mail [Claudia@stanceglobal.com](mailto:Claudia@stanceglobal.com)

## CoolStance and Amino Acids



**Figure 1:** The concentration (grams/kg) of essential amino acids in CoolStance, Barley and Oats.

Graham, P.M., Ott, E.A., Brendemuhl, J.H. and TenBroeck, S.H. (1994). The Effect of Supplemental Lysine and Threonine on Growth and Development of Yearling Horses. *Journal of Animal Science*, **74**, 380 – 386.

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