

UNDERSTANDING YOUR HAY TEST

- **Moisture / dry matter:** Amount of moisture remaining in the hay. We use this column as opposed to Dry Matter (DM) because you are feeding hays and feeds containing moisture.
- **Crude Protein:** An average horse requires 9 – 10% protein for a wide range of body functions.
- **ADF (Acid detergent fiber)** and **NDF (Neutral detergent fiber)** measure how digestible the hay is for your horse. ADF measures cellulose and lignin, NDF measures the bulk in the hay. Please note, 50% of NDF fiber is non digestible by your horse
- **Starch** (glucose sugars), **WSC** (water soluble carbohydrates – starches, sugars & fructans) **ESC** (either soluble carbohydrates – simple sugars) are a measurement of starch and sugars. If low, it is better for metabolic issue horses, Insulin resistant, Cushing's, Equine Polysaccharide myopathy, Cresty neck etc. The average horse uses starch, WSC and ESC just fine for energy.
- **Crude fat:** A concentrated source of calories the hay provides.
- **Calcium & Phosphorous:** These are crucial minerals for unlocking the total mineral balance. All other minerals must come through calcium and phosphorous to work. Reminder: every cell in the horse's body requires a proper mineral balance
- **Copper, Manganese and Zinc:** Trace minerals very important to many body functions. These are a few reasons why.
 - **Copper:** Copper aids in the creation of red blood cells, the development of connective tissues, and pigmentation of the hair coat
 - **Zinc:** Zinc supports a healthy immune system, cell and membrane integrity, DNA synthesis, and more. Zinc is required for over 200 body functions
 - **Manganese:** Manganese is required for enzymes that are necessary for the formation of cartilage and the bone matrix
- **Lysine: The only amino acid with a set requirement.**

Lysine is important for effectively building muscles, enzymes, and hormones, in conjunction with the other necessary amino acids
- **Horse DE:** A measurement of the calories per # that hay provides for the horse. A .85 for instance provides 850 calories per pound.