

Forage Facts & Nutrient Values

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Primero Equine INT

Grass:

The nutrient quality of grass can differ immensely depending on many factors such as: soil quality, environmental factors (rainfall/sun), pasture management etc. But in general grass contains approx. 80% water, 16-20% + protein, 12MJ/kg energy (dry weight), vitamins and some minerals (iron, manganese, zinc, copper & selenium, calcium & phosphorus). Sugar values fluctuate immensely. On average a horse will ingest approximately 10kg of grass in 1 hour which equates to 2kg of dry matter.

Meadow Hay:

Meadow hay is generally made from pasture and contains various species of grasses, herbs and plants. It also ranges in nutrient and energy values depending on quality but on average it contains 12-15% water, 8-12% protein, and 9-11MJ/kg energy. Meadow hay usually contains higher levels of minerals than seed hay due to the proportion of deeper rooting herbaceous species. Vitamin levels are lower than in grass, notably vitamins A & E.

Seed Hay:

Seed hay is more uniform and usually contains one or 2 species of grass, typically Timothy or Rye. Seed hays have lower energy (6-8MJ/kg), protein (4-8%) and nutrient levels as they tend to be more stalky than meadow hays.

Haylage:

Haylage is known as a semi-wilted forage which means that it is hay that is cut and baled before it has dried, typically with moisture levels around 40%. Once the haylage is cut it is sealed in an airtight plastic bag which means that there are very few dust and mould spores present, making haylage suitable forage for horses suffering from respiratory disease. If the sack is punctured or damaged it should be discarded as mould growth will occur rapidly. Due to the high water content, fibre levels are lower than dry forage so more has to be fed to meet the horse's fibre needs. Its moist state also means that it is consumed faster than dry hay leaving the horse for longer periods without the satisfaction of chewing. Typically, its energy and nutrient content is similar to hay.

Straw:

Straw is made from the stalks that are left from grain harvesting (oats, barley & wheat) and is more commonly used as bedding rather than a feedstuff these days. However, in many parts of the world straw still constitutes the major form of forage for horses. Straw is high in fibre, but low in nutrients (4-6% protein, 5MJ/kg energy) so is not suitable for most horses. However, it is adequate for use as a forage feed for animals that do not require high levels of energy and nutrients and is useful for satisfying chewing and fibre needs for laminitic horses and ponies. It should not be fed to young horses until the microbial flora is established in the large intestine as it may cause impaction. Due to its high fibre/dry matter content (90%), plenty of fresh water must be made available to avoid impaction colic.

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If you have any queries or questions regarding nutrition for your horse, please contact me at; info@holistichorsefeed.com and I will be delighted to help.