

HAY HAY HAY

HAY IS A LARGE PART OF A HORSE'S DIET BUT ALL HAY IS **NOT THE SAME...**



WORDS: JORDAN WILLIAMS

In the beginning, a bale of hay was a bale of hay. It was made by experienced men of the land - you couldn't go far wrong. The stuff was also reasonably priced! However, now days with the advent of lifestyle blocks, contractors and grass gluts at seasonal peaks, it is necessary to be very choosy about what hay you subject your horses to. Worst case scenario, they will simply refuse to eat it, which will leave you looking a little sick if you have just outlaid a small fortune for a barn full. Now also, commercial operations offer many different varieties of hay, so how do you select the right type for your particular horse?

Hay Making

Hay is made from a dried and cured plant that has been cut in the paddock at differing times in the growing phase, depending on the type of hay. In the main, hay is cut during the late bud or early bloom phase. This will ensure you get maximum nutritional value as well as more hay to the acre.

The fibre content of hay increases as it grows and becomes stalkier. The protein content, which is mainly located in the leaves, diminishes as the plant ages.

The hay we need to feed to our horses must be of excellent quality and free from dust, mould and weeds. As the hay needs to dry outdoors in the paddock before it can be baled, it is imperative that it is cut at the right age and when the weather is warm and dry.

There are a large variety of different types of hay plus mixes of the different types to consider. These include meadow (which will vary according to location and pasture management), clover and lucerne to name just a few.

Hay falls into two basic categories: legumes and grasses. Commonly fed legume hays include lucerne and clover with most other hays falling into the grass family.

Beware feeding grain hays such as barley, oat or wheat. These are more commonly marketed as straw but many horses have no trouble eating them! These are higher in nitrates, which isn't a major concern unless that is the main source of nutrients. Too much starch can lead to obesity and associated problems with laminitis and other health concerns.

Grass Hay versus Legume Hay

Legume and grass hays both provide different nutritional elements and they can be used to complement each other with a little understanding of how this works.

Stalkier hay will contain more fibre than leafy hays. The fibre content of most grass hays is higher than legume hay but the protein content is middle to low, along with low levels of lysine - an essential amino acid. Grass hays can also be low in trace minerals (think calcium, zinc, selenium, vitamin E). Often grass hay is combined with weeds also, which will rob nutrients from the grass plant.

A higher level of fibre, combined with fewer nutrients, makes grass hays a safer option for horses when used on an ad lib basis or where your horse is prone to pack on the pounds indiscriminately. The one exception to this is hay made from fescue grass. This has been known to contain an organism which may cause problems in pregnant mares, such as abortion and stillborn foals.

On the other hand, legume hays are generally richer in nutrients and provide more energy than grass hays. Lucerne is one of most commonly fed of this type of hay and is readily available in most parts of the country. An added bonus is that the majority of horses love it.

Lucerne provides an excellent supply of protein and energy, although care needs to be taken that you don't overdo the protein, as the levels found in some lucerne hay far exceed the requirements of most horses. This excess protein gets broken down into carbohydrates, which provide extra energy. Horses can obtain more energy than is often required from too much lucerne, so kindness with the lucerne bale may not always be the best policy.

Lucerne hay has been blamed for increased urination (for the boxed horse this translates into wetter bedding...). It follows that any horse with possible or known kidney problems should not be fed lucerne. Your normal healthy horse is not at any increased risk though.

Clover hay is also widely available and a commonly fed legume hay. Horses are also partial to clover and will often pick out the clover both in the paddock and in hay. White clover has less fibre content than mature red clover, which will give stalkier 'hard' hay. When this is made well, with plenty of leaf, it is choice hay for horses. White clover, in the lush stage, also contains high amounts of protein which convert directly to carbohydrates and energy...

Choosing Your Hay

Both types of hay contain the basics to provide most horses with enough sustenance, particularly in New Zealand where we generally have access to paddock grazing as well on a

year round basis. But horses are known to be fussy and if the hay you select for them is lacking in quality, either they will refuse to eat it or, if they do, it won't really benefit them too much. So it is important to inspect hay before you buy it to feed to your horse.

Good hay smells sweet, is crisp, bright and dust free. Dust is the precursor to mould, which is definitely not desirable in hay. Steer well clear of hay that is dark, brown in places or hot to the touch. Separate the hay to look for any tell tale signs of mould - smell, white dust, grey fuzz or blackened areas. This is generally an indication of hay which has not been cured well, or the result of poor storage.

Leafier legume hays are much more likely to develop mould than the stalkier grass hays. Stalks and leaves should be able to be separated, rather than packed together in a tight mass. This will occur if the hay was baled when it was still damp and leave the hay likely to develop mould.

Also examine your potential hay for weeds and thistles. While the odd one will always find its way into a bale from my experience, these plants don't carry much nutritional value at all. You will end up with wastage when your horse sorts out the good bits and leaves the rest, so a weedy bale is not really cost effective even if it is cheap. Also, if you don't pick up the dock seeds, it will eventually grow in your paddock!

A twelve to fourteen percent protein content in the diet is sufficient for most horses. This applies if (and only if) the protein is of a high quality. A poorer quality protein will not supply enough amino acids to build body tissue such as muscle, bone, skin, hair and hooves. As a result, the kidneys will have to work overtime to remove extra waste from the blood. A strong ammonia smell to the urine is an indication that the amino acids being fed may not be being fully and properly utilised due to the low quality of the protein.

Getting enough vitamin A into your horse's diet is not usually a problem, as they obtain it from the beta-carotene that exists in plants. In fact, you are more likely to over supplement where a lot of lucerne is fed, as it contains about two thirds more beta carotene than grass hay. Lucerne is also higher in Vitamin D than grass hay but horses in New Zealand would normally get enough of this through sunlight and living outside.

Notoriously low in most horse diets, is Vitamin E. Even lucerne won't help us here and direct supplementation is the best plan.

If you like to keep things as "natural" as possible in your horse's diet, you can also these days obtain organic hay. Fans of this will tell you their horses have less health issues as no artificial fertilisers are used in the growing of organic hay and it will tend to be a tempting multi-species hay.

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So now where?

Too much information often only serves to confuse us even more in our quest to provide nothing but the best for our equine companions. And, of course we are not quite in a perfect world, so our choices can often be limited by location and availability. Where you are able to source all types of hay, as a general rule you would want to combine both legume and grass hays to keep your horse at his peak health wise.

Grass hay is an ideal source of roughage, which is very important for the digestive tract of your horse. This type of hay is lower in calories than other hays, so will not contribute to weight gain while it is keeping your horse happily amused and busy. It will never provide all of the nutrients your horse needs to be healthy. These will need to come from other feedstuffs such as legumes, grass (let's not underestimate the power of good grass!) or other supplements and concentrates.

Conversely, lucerne, clover and mixes of these are perfect for horses that need extra amino acids and calcium for growth or performance. Into this category put pregnant or lactating mares, growing horses and hard working performance horses.

If you are only able to feed your horse hay that does not have a high nutritional value, you may need to consider a vitamin/mineral supplement to cover for the nutritional deficiencies in the hay. When you realise that Vitamins C, E and beta carotene are easily ruined by excessive exposure to sunlight, heat and moisture; it is simple to understand why most hays are relatively low in these nutrients. Legume hays are also likely to be low in zinc and selenium so bear that

in mind when you are supplementing too. Lucerne, however, is high in calcium but low in phosphorus and magnesium, so you need to balance this by utilising other sources that can provide additional phosphorus and magnesium.

The simplest and easiest way to ensure that you are not unwittingly doing harm to your horse, by not fully comprehending the science around what is good and what is not so good, is to use a complete ration type feed in conjunction with hay and/or grass. Adding this type of feed to your staple diet items, in amounts that are appropriate for your horse (after taking age, weight and work level into consideration), should remove the need for additional vitamin or mineral supplements.

A normal, healthy horse will find this adequate. Resist the urge to indiscriminately supplement your horse with everything available. It is more than likely that one supplement may counteract another and, in the event that you find a successful solution for whatever problem you have, you will possibly have no idea which of the many supplementations you have been mixing merrily into his diet actually did the trick!

Quality is one of the main issues when deciding which hay to feed your horse. You should always find the highest quality hay you can afford to buy. Hay and grass make up at least half of your horse's diet, so spend time to ensure you buy good, clean well made hay which your horse will eat. The results will be worth the extra effort.

