

BASIC NUTRITION FOR HORSES

Horses, and their nutritional needs, vary greatly. A lot depends on the type of horse, its age and its weight. Even more depends on the work it does. And, of course, each horse has its own likes and dislikes, so this guide is very general and should be used as your starting point only. As you get to know your horse, you will need to fine tune its feeding.

Horses are NOT ruminants. Therefore, their nutritional needs are quite different from ruminants (ie cattle, sheep, goats, alpacas etc). The major difference is that horses cannot digest low-quality feed as well as ruminants and therefore the feed quality for horses has to be much higher. Also, horses do not ruminate (“chew the cud”), so they have to chew the feed a lot more than ruminants before swallowing. In practice, this means a horse takes longer over its feed than a ruminant. Horses have small stomachs relative to their body size, so a horse needs to eat often and in small amounts. Gut and behavioural problems may develop if a horse does not have access to some roughage throughout the day if all its nutrition is supplied in 1 or 2 meals.

In most cases, pasture is not enough. If you have plenty of high quality pasture and if your horse is not working, not pregnant, not lactating or not growing, the pasture may provide sufficient nutrition in a reasonable season. Otherwise, supplementary feeding will be necessary. It is very rare indeed for a smallholding to have sufficient pasture of sufficient quality for that to be the horse’s only source of feed. Horses are selective when they graze, so they avoid pasture species that are unpalatable and these become weeds and can quickly dominate your pasture, thereby reducing pasture quality. The bottom line is that, unless you spend a lot of time, effort and probably money on improving and managing your pasture, it will not be enough for your horse.

How much feed does a horse need ?

Mature horses will need between 1.5% and 2.5% of their bodyweight in dry matter per day. Growing horses may need up to 3%.

<i>Feed needed by a horse per 100 kgs liveweight* Amounts measured in kgs of dry matter**</i>			
	Total feed	Roughage	Concentrate
Mature horse, idle	1.5	1.5	
Light work (less than 2 hrs/day)	1.75-2.25	1.25-1.5	0.5-0.75
Medium work (2-4 hrs/day)	2.25 – 2.75	1.25 – 1.75	1.0
Heavy work (over 4 hrs/day)	2.0 – 2.5	1.0	1.0-1.5
Pregnant/lactating mare	1.5 – 3.0	0.75 – 1.5	0.75 – 1.5

Sourced from Practical Feeding of Horses (Prime Fact 425), NSW DPI

* *DPIPWE has a handout showing how to body condition score your horse and estimate its weight*

***Please note that a kilogram of pasture does NOT provide a kilogram of dry matter. Dry matter is the weight after the water has been removed. So, a kilogram of pasture may yield between 0.2 and 0.75*

kilograms of dry matter, depending on the time of year and paddock conditions. A kilogram of hay is usually around 0.85 kilograms of dry matter.

Horse concentrate. You can either mix your own or buy it already mixed. Unless you are well set up, the commercial mixes that you can buy through your rural merchandiser are generally cheaper and a lot more convenient than mixing your own.

If you mix your own concentrate.

- Oats are traditionally considered to be the best and safest grain for horses. Other grains can be used quite safely as long as you know their limitations.
- All grain types can kill your horse if they gorge on it. As with all herbivores, grain must be introduced gradually over a 10 day period so their digestive system gets used to it. Similarly, the grain component of the diet must be reduced when the horse's activity level does not need it.
- Oats can be fed whole but other grains should be crushed or rolled.
- Young horses need more protein than mature horses, because they need protein for growing more tissue. If you are feeding young growing horses, the protein from grain and hay will probably be insufficient so you should add a protein supplement to the concentrate.
- Working horses do not need more protein than idle horses, but they do need more energy. So, working horses need more grain in their diet than idle horses.
- Measure your concentrate ingredients by weight and not by volume, as this will be a more reliable way of getting the right mix. For example, a bucket of oats from one source may weigh differently from the same bucket of oats from another source.

How do I know if I am feeding my horse the right amount ? Learn how to do a body condition score. DPIPWWE has a handout showing you how to do this. It's an easy way to assess whether you're getting the diet right.

Water. A horse will drink a lot of water in a day. It must have free access to cool, clean, fresh water that is free of sediment and organic matter. The only exception is when a horse comes off heavy work, in which case the water should be restricted to 2 to 4 litres until it has cooled down.

Horse welfare. Most of the horse welfare cases that are investigated are, essentially, the failure of the owner to provide an adequate diet for the horse. Clearly, some people underestimate the cost of feeding it, or the time involved in maintaining it, before they buy a horse. Others overfeed their horse resulting in other health and welfare problems such as laminitis. There are some excellent equine welfare guidelines, developed by the Australian Equine Welfare Association, available for download from the DPIPWWE website and they will be most useful for anyone having difficulty in keeping their horse fit and healthy.

*If you see a horse that is clearly
undernourished or is otherwise
neglected, please report to DPIPWWE
on 1300 368 550 or the RSPCA on
1300 139 947*

