

Feeding Horses During Drought

It's been a lovely change to finally get a little rain recently, but it's been an incredibly dry 12 months, in fact, 2023 had one of the driest winter rainfall periods in living memory, and then a hot dry summer and autumn hasn't helped. These drought conditions have had a big impact on agriculture here in WA, and the effects are being felt by horse owners around the state.

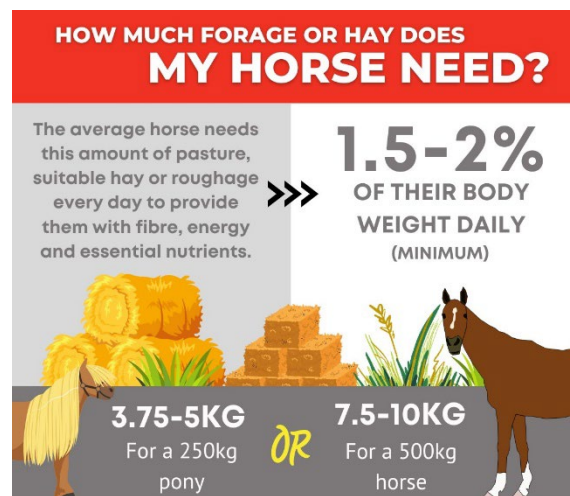
For horse owners, drought doesn't just impact the amount of grass in our paddocks, it impacts the availability, quality and price of the hay and feeds that we can offer our four-legged friends.

Unfortunately, a bit of rain doesn't mean that drought will turn off like a switch either, so we've put together some tips on keeping your horses healthy during tough times.

Roughage is the priority:

A horse's digestive system is built to consume roughage, and they should be consuming 1.5-2% of their body weight daily in roughage – that's 10kg for a 500kg horse! Roughage comes from several sources including:

- Pasture
- Hay (including meadow, oaten, wheaten, lucerne etc)
- Chaff (meadow mix, oaten, wheaten or lucerne)
- Super Fibres like Lupin Hulls
- Straw – can be used in small amounts only to replace portions of hay



HOW MUCH FORAGE OR HAY DOES MY HORSE NEED?

The average horse needs this amount of pasture, suitable hay or roughage every day to provide them with fibre, energy and essential nutrients.

1.5-2% OF THEIR BODY WEIGHT DAILY (MINIMUM)

3.75-5KG For a 250kg pony **OR** **7.5-10KG** For a 500kg horse

Ideally when pasture is limited, we can provide ad lib access to good meadow hay, but at the moment, this isn't always possible. You may need to look at other hay types, mixing hay types and adding more fibre to their hard feeds.

Always try to keep them consuming roughage as naturally and continuously as possible to keep their guts functioning and avoid gastric issues like ulcers.



REMEMBER – Make all changes to feed, including changes in hay or re-introduction of pasture slowly, over 14-21 days to avoid digestive upsets.

Be hay cautious:

Be cautious about the hay you are buying. Even if you are desperate! Make sure that the hay you are getting is still safe for your horses to eat. Remember:

- Hay should come from a trusted seller and still needs to be “horse quality”.
- Some pasture types or hays are not suitable for horses.
- Last season hay is ok to feed but must be clean and mould free.



Hay Quality

Hay is usually classed as high quality or low quality and the quality refers to the nutritional value, but also the digestibility. ADF (Acid Detergent Fibre) and NDF (Neutral Detergent Fibre) are measures of the fibre components in the hay and indicate the digestibility and energy availability of hay.

High Quality ADF 25-35% NDF 35-55%	Low Quality ADF 35-45% NDF 55-70%	Unsuitable NDF >69%
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Using Low Quality Hay - Low quality hays can still be beneficial for horses that need lower amounts of energy as it still provides a necessary source of long-stem fibres for digestive health without excessive calories.

Using Straw - straw can be used to replace a portion of the hay in your horse's diet to help extend hay supply. You can use straw for up to 20% of their daily fibre/forage intake but it still needs to be under 69% NDF, and they must still be getting the correct protein, vitamins and minerals needed to meet their daily needs. Make sure straw has been ARGV tested.

📖 **Straw must not be fed to foals, weanlings or yearlings as their digestive system is not mature enough to digest it properly.**

📖 **Straw is not laminitis friendly. The average straw NSC is over 17%, as most straws come from cereal crops.**

Conserve the hay that you've got:

Every mouthful counts! There is nothing worse than looking at your precious hay trampled into a urine-soaked mess.

- Use a horse-safe feeder or hay net that reduces wastage. Make sure the holes are not too small, which can put horses off eating it altogether.
- Avoid putting hay out around gateways, troughs and on the ground in stables where they might trash it more.
- Meter hay out throughout the day in more, smaller feeds to make sure they eat what is there.

Be aware of hidden starches and sugar:

With the lack of meadow hay available, many horse owners are turning to cereal hays or chaffs. Their nutritional value depends on the plant type, but also the region it is grown in.

'Cereal' refers to hays and chaffs made from oaten, wheaten and barley crops. The grains are naturally high in sugars and starch, but so are the leaves and stems of the plant. Some sample results from WA hays/chaffs are:

DID YOU KNOW: our hays here in WA test very differently to the East Coast.



- **Oaten - NSC 31.5%** - WA's Oaten hay consistently tests between 30-38% but has been recorded as high as 42.63% in Southwest WA.
- **Wheaten - NSC 28.8%**

LET'S CALCULATE: For a 500kg horse fed oaten hay at an average of 35% NSC, they are consuming 3.5kg of NSC for every 10kg of hay. This means consuming 1,246kgs of starch and sugar in their hay alone in a year!

Performance horses with high workloads do need carbohydrates in their diet as a source of energy, but it's important not to feed more than the daily requirements, especially if you are already feeding a performance concentrate.



Be aware that if they are eating cereal hay or chaff and getting energy above their daily requirements, it can impact how they feel and behave.

Crude Protein

Be aware of the crude protein levels in hay. While lucerne is a great low NSC alternative hay and chaff (average 10% NSC), the protein levels can be very high. Crude protein results usually average around 20%, but this depends on the season. This year crude protein in Lucerne has jumped as high 36%.

Consult a nutritionist:

If you have a horse or pony with specific dietary requirements and you can't get your normal hay, then it's a good idea to reach out to a nutritionist. They may be able to suggest a safe alternative, or how you can still reach their daily fibre requirements.

Additional supplementation may be required:

The changing quality in hay and pasture can also mean your horse isn't getting the fat-soluble vitamins and omegas they normally would be. It's an important reason to make sure your diet is balanced, as you may need to add supplements. Certain types of hay like Teff (which is high in oxalates) can require additional supplementation too.

Don't over feed hard feed volume:

Watch out for the volume of your hard feeds. Your horse's stomach is quite small for their overall size, and if your hard feeds are too big, it pushes undigested feed into the small intestine and can lead to digestive upsets. While a huge bucket of feed and chaff may look good, it stops your horse from getting what they need out of every mouthful. Remember this:

The maximum volume you should offer in any one feed is 2/3's of their stomach volume.

500kg Horse:
Maximum 8L per feed

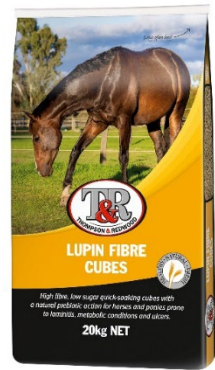
250kg Pony
Maximum 3-4L per feed

This volume includes NO MORE than 2kg of concentrate or grain (for a 500kg horse).



Consider substituting your chaff for Lupin Fibre Cubes:

Chaff is just chopped up hay, and while it is used to add fibre and nutrients to your horse's diet, Lupin Fibre Cubes provide a more economical, super fibre alternative. You can use them to replace chaff, or 'shandy' them with chaff. Why?



- They are more cost-effective than chaff, so you can feed a lower volume, but they expand when soaked to give your horse a good gut fill.
- They work like chaff to slow feed down in the digestive system and maximise absorption and hindgut fermentation.
- They are low in sugar and starch with only 5.3% NSC. That's lower in NSC than lucerne chaff, and substantially lower than cereal chaffs.
- They are a fibre supplement; we don't include vitamins and minerals to make them easy to incorporate into your horse's diet.
- They are full of natural pectins and super fibres, to keep your horse's gut healthy and keep feeding their good gut bacteria.
- They provide slow release, sustainable and low fizzle energy.
- They contain quality amino acids, with half the protein of whole lupins. Pastures at the moment are very low in protein, and horses still need essential amino acids for health and function.

They are not a complete supplement for hay and forage but can help you to maintain healthy fibre levels in your horse's diet, and they must be fed within the recommended rate still. It's important to balance this so chat to our team or submit a free diet request from our nutritionist.

Had rain? You still need to manage grazing:

During drought periods, it can be a good idea to move to a paddock conservation system, by fencing horses into smaller areas to preserve remaining grass, or by rotating and resting paddocks more frequently. This can prevent overgrazing fragile pastures, which could otherwise cause long term damage.

Once you get rain though, it's important not to rush horses back onto pasture straight away. Why?

- **Weeds:** weeds tend to be the first plants to grow post a drought. Keep a close eye on your paddocks and manage weed growth.
- **Pasture growth takes time:** establishing new pastures takes time. The plants need to get their roots down and a reasonable amount of leaf before they are strong enough to withstand horses grazing.
- **Short, new growth:** short, new growth in pastures is actually higher in Non-Structural Carbohydrates (NSC) and fructans which can be dangerous for horses prone to laminitis or metabolic conditions.
- **Reintroduce pasture slowly:** if horses have been off pasture for a while, like all feeds, it needs to be reintroduced slowly to avoid upsetting the gut microbiome and prevent digestive upsets.

Compiled by Thompson and Redwood with Feed Your Steed Equine Nutrition