



## WINTER WORRIES

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With winter finally upon us, loss of weight is always a concern of many owners. However, there are small changes that you can make to ensure weight loss in winter is kept to a minimum.

All warm-blooded animals, including horses, have a critical temperature. This is the outside temperature below which a horse must produce extra heat to maintain its body temperature. Producing extra heat in order to maintain temperature means extra demands are placed on the horse's energy stores and thus more energy is needed to replace what is being lost.

The critical temperature varies, however, depending upon the horse's condition. A mature horse in good condition, where ribs cannot be seen, has a critical temperature of around 0°C during early winter. This means that an environmental temperature drop of below 0°C is needed before the horse may be required to produce extra heat. After developing a winter coat the critical temperature may be reduced even further to -5°C and even lower.

It is estimated that young horses, horses in thinner condition, and those that have been stabled and have not developed a winter coat (or those who have been clipped) might only have a critical temperature of between +10°C to +5°C. Thus, once temperatures drop to this range extra energy is needed.

This is important to note as horses require about 15-20% more feed for each 10-15°C that the ambient temperature falls below critical temperature in order to produce the extra heat required. Thin horses, or horses with short hair, however, may need even greater increases in dietary intake to maintain normal body temperature.

As horses grow a winter coat, they allow their critical temperature to decrease, making them more comfortable at lower temperatures. Wearing blankets obviously has the same effect.





### So how does this affect my feeding?

In general, temperatures in SA do not often reach low levels so most horses will not need the 15-20% extra feed. However, horses will generally still require more food (this includes hay, grazing and concentrate feed) in winter than summer. Horses exposed to constant chronic cold weather acclimatise to the cold, but horses not used to cooler temperatures typically require 10 – 21 days to adapt to the altered temperature. It is often useful, thus, to adjust feeding before the cold weather sets in.

#### Feed more forage:

Forage is fermented in the gut where bacteria are active. Bacteria produce considerable heat that the horse can use to warm himself from the inside out, rather than having to shiver or move to stay warm. Therefore, feeding more forage should always be the first port of call.

Many owners feeding ad lib already often don't think of increasing the amount provided per day, but this should always be factored in. Unfortunately, winter forage often has a reduced quality which means more hay should be provided than in summer to ensure the same calorie/nutritional value is maintained. For example, a horse eating ad lib hay in summer may finish a ¾-bale a day, however in winter he would perhaps need to eat 1.5 bales per day to provide the same calories and/or to increase his energy demands for maintaining body temperature.

When selecting Hay look for good quality hay that is clean and dust free. Consider feeding a higher calorie hay like Lucerne or Teff should there be a need to boost a horse's calorie intake. Choose Immature hay (characterised by soft stems and a larger portion of leaf matter)

rather than overly mature (very stalky with little leaf) as this provides better nutritional value. Moreover, immature hay has a water-holding capacity that more mature hay does not have. Impaction colic can be more common in winter when horses often drink less because of cold water that is not palatable or even water that is frozen, so this can help.

#### Feeding extra concentrates:

As concentrates generally provide more calories per kg than roughage, this is often the first port of call for many. Although horses will require a small amount of extra hard feed to provide increased calories, they will not need a vast change, unless workload has significantly increased, (usually unlikely in the colder months) or if they are pregnant, lactating or growing. If necessary, increase the kg of concentrates, however, rather than increasing the quantities, it may be better to change to a higher calorie/energy feed which allows meal sizes to remain small facilitating more efficient digestion thereby allowing the horse to get more from the feed.

#### But I don't want my horse to be hot!

This is one of the main concerns when more feed is needed for weight maintenance or gain. It is important to be realistic here, however, as over the winter months other factors can contribute to "hot" behaviour. A change in workload and increased stable time may well result in a horse being a little fresher than normal.

However, there are steps to assist in reducing the risk of over-excitable behaviour.



# TESTIMONIAL

Dear Equus

I just wanted to say a big thank you to Equus and Hannah Botha for all your feeding advice. Both of my horses have been fed Equus for years and, at 20+ years old I may add, they look wonderful. They also keep their condition summer and winter.

Thank you for always returning all my queries regarding feeding advice and more. I am sure my horses are just as happy as I am.

Kindest regards

**A very happy customer**  
**Ronell Bredenhann**



Firstly, introduce a higher energy/calorie feed slowly. Suddenly providing a horse with more energy/calories in their diet will increase the likelihood of "excitability".

Secondly, the type of energy source provided is an important aspect. Feeds based on 'slow-release' energy sources such as fibre and fat, release energy gradually and are less likely to promote hot behaviour compared to sources of 'quick-release' energy such as starch from cereal grains or sugars from molasses. It is thus important that the feed used is high in fat and fibre sources. The added bonus of this way of feeding is that it is far friendlier on the gut and can even help horses prone to colic and gastric ulcers.

Thirdly if your horse is on a diet based more on cereals and sugar and you don't want to increase, look at adding additional oil to the diet. Oil contains 2 ½- 3 times more energy compared with the equivalent amount of feed. It therefore allows you to give extra calories in a smaller amount. It also provides calories from a more cooling source.

### Consider small extras:

Keep in mind that poorer quality winter hay can also have a reduced vitamin and mineral content. Therefore if you don't need to increase your concentrates or if your horse doesn't normally receive any concentrates it may be wise to consider a Balancer product for younger and older horses to increase their levels of vitamins and minerals without changing the diet hugely.

### Conclusion

You should monitor your horse's body condition year-round, but especially before harsh weather arrives. You can determine whether your horse needs extra energy by checking for decreased body weight and body condition. Make sure to feel through the heavy winter coat. Are the ribs easily felt? If so, the horse needs more calories/energy.

Is the horse shivering a lot? If so, he needs more calories/energy! Shivering helps horses thermo-regulate, but they require energy to do so.

Don't wait until temperatures plummet – begin your winter nutrition program early enough and give your horse enough time to build up the reserves he needs to see him through the winter.

It is always worthwhile discussing your feeding program with a trusted feed advisor to avoid over feeding, which not only unbalances your pocket, but unbalances your horses ration.

Equus provides a free at home/yard service to ensure that your horse is kept in top condition no matter what the weather.

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For an absolutely free consultation with no further obligation contact our professional consultants to schedule a visit to your yard.

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