

The benefits of feeding a warming mash for winter

By Dr Tom Shurlock, Consultant Nutritionist at British Horse Feeds, June 2019

Winter brings a number of issues around stabling, feeding and keeping your horse warm over winter. Of these, water management doesn't seem important. Obviously, there is a full bucket at all times, but perhaps more attention should be paid to water intake.

Over winter there is a change in the pattern of forage intake. Hay and haylage intakes tend to be higher and, as moisture content is lower than grass, a decline in inherent water intake. At the same time cold water in a bucket is less appealing, especially on cold days, and so water intake generally is low.

We are also looking at reduced feeding times over the winter period and therefore need to increase moist feed intake over a shorter period, whilst increasing energy intakes to maintain the horse's body temperature.

Even though the horse may be stabled for some or all of the day over winter, and although there will be mild days, extra energy will be needed to keep the horse's body temperature in what is known as the zone of thermoneutrality. This is a band of temperature above and below which the body initiates activity to keep its own core temperature within normal limits. Shivering at the low end and sweating at the high end are both such activities.

It has been calculated that for every 1oC drop in temperature a horse needs an extra 2MJ of energy to generate extra heat and, even if stabled or rugged, this can add up to a sizeable load. For example, a 5oC drop in temperature means an extra kilogram of feed or hay needs to be eaten.

However horses tend to eat less in winter and, although we are probably not exercising them as much, we do need to improve the energy efficiency of the feed. Although it is not essential to maintain condition during the winter (the hormone controls of metabolism actually vary with seasons, a little weight loss is acceptable) we do not like to see it and so are tempted to overfeed through high energy feeds.

There are factors that impact this and, surprisingly, the temperature of the water bucket is one. Water intake for a 500kg horse is around 20 litres and the effect of warming that to body temperature could be significant. 20 litres heated from 4o - 38oC takes about 3MJ of direct heat. It would take significantly more for a horse to generate an equivalent amount.

I have written in the past that fibre fermentation, especially super fibres like Speedi-Beet and Fibre-Beet, goes a long way to supporting body temperature as the heat generated by the fermentation is a bonus to the energy contribution. However, the

energy cost of the body warming water may negate this. Supplying warm water can be a significant contribution to optimising energy intake.

This is a real, but hidden, benefit of a warm mash. Mashers are a brilliant idea for winter, as they encourage water intake at a time when it is sub-optimal. Mashers also, by having a moist presence, encourage chewing and salivary production and ensure the swallowed chyme is well suspended in an aqueous medium, benefiting digestion and hind gut fermentation.

Warm mashers achieve all this but also tend to improve palatability, and so overall intake, and counteract energy/heat loss by negating the need to warm the cold drinking water it replaces.

Warm mashers take the ideal feedstuff of a high moisture feed and improve its energy level by counteracting heat loss associated with cold water.

There are lots of factors to consider when designing a diet for your horse. Visit barastochorse.com.au to find the right diet for your horse