



# PREPARING THE PERFORMANCE HORSE - PART ONE...

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**The preparation and conditioning of a horse for competition is a combination of careful planning, motivation, dedication and skill. It can be rewarding once the horse competes and is successful in its targeted equestrian discipline.**

Many experienced and successful competitors have their own programme developed over years of practice. Conditioning for equestrian competition involves a combination of balanced and careful nutrition. Preparation of the coat and hooves and ensuring that the horse has the proportions and top-line to stand out in the competition ring and mostly be able to give the best performance. Thus, the horse has to have good overall fitness with a willing, unfazed approach to training, travelling and competition conditions.

## FORMULATING THE IDEAL RATION

Providing your horse and pony with a well balanced diet is essential for good body and coat condition, digestive health and to maintain bone and skeletal strength, as well as ensuring optimum health and vitality. Many have a tendency to be overfed, resulting in 'fizzy' behaviour and an overweight condition, which can have detrimental effects on joints and the general health.

On the other hand, poor feeding can result in underweight condition, with show horses and ponies having no top-line and sluggish' movement due to inadequate energy. For these reasons, it is important to provide a diet which has been formulated to match your horse's needs relative to age, temperament, body condition and metabolic state, as well as exercise level. A simple way to formulate a balanced diet is to apply the following principles when making up a ration for competition and showing:

1. Include 1-2 energy sources, such as limited amounts of cereal grains (eg steam-rolled barley) by-products (eg pollard, bran and rice bran) or commercial feeds. Low GI and 'cool' feeds are becoming popular and many ready-mixed low GI feeds and pellets are available to help maintain a quiet temperament. Other 'cool' feeds include cracked lupins, sunflower seeds, copra meal and sugar beet fibre. These 'cool' feeds are usually preferred by show and pleasure owners to avoid 'fizzy' and difficult behaviour whilst maintaining weight and energy for exercise.
2. Include 1 good quality protein source, such as full fat soyabean meal (200g), cracked lupins (300g), sunflower seeds or copra meal (400g) daily to meet protein needs. Lucerne hay and chaff as roughage provides good quality protein. Avoid amounts in excess of 3-4 kg

## HINT: AVOID EXCESS SWEATING FROM LUCERNE HAY

Lucerne hay and chaff are well digested sources of calcium (12g/kg), magnesium (3.2g/kg) and potassium (14.2g/kg) and protein (average 17%). If a horse already has adequate protein in its diet, feeding more than 1½ - 2 biscuits (3-4kg) to a horse can result in high amounts of heat waste from the digestion of excess protein and fibre in the hind gut. Horses often develop sweaty flanks and underbelly and 'puff and blow' excessively during exercise. Furthermore, feeding more than 3-4 biscuits of hay a day to a horse already fed a large bulk of 'hard' feed to help weight gain, can result in failure to put on significant condition because of the large volume of fibre hindering the uptake of other energy sources and protein from the small bowel. In this case, limit the hay to a maximum of 4 kg per day and add additional 'cool' energy sources (eg steam-rolled or boiled barley) to improve overall condition.

for a 500kg horse as it can lead to increased heat production during digestion in the hind gut. Heavily conditioned (well insulated) performance horses offload extra heat when working with sweating in the flank area and 'blowing'.

3. Provide a good quality fibre source, from pasture, hay and chaff. On average, a resting horse needs to consume 1.5-2% of its body weight in dry feed per day. For example a resting 500kg horse would need to consume on average 7.5-10kg of roughage per day, depending on the energy content. If there is little access to pasture, this roughage should be made up of one third lucerne hay and chaff and two thirds grassy or cereal hay and chaff, to provide an ideal protein and fibre balance. A horse or pony in light work needs to consume 1.5-2.5% of its body weight in dry feed per day. For those in light work where a hard feed is provided, a diet of around 70% roughage and 30% concentrate by weight should meet requirements.
4. Supplement with bone minerals, trace-minerals and vitamins to meet daily needs. Spelling horses that are not regularly exercised can usually maintain themselves on good quality pasture. However, once horses and ponies begin preparation for the season with regular

## HINT: RAPID REHYDRATION AFTER EXERCISE, TRAVELLING OR COMPETITION

It is important to provide water and salts to replenish fluids and electrolytes after exercise or long distance travel. Simply mix 2 teaspoonsful (10g) of fine table salt into each litre of lukewarm water (OR 2 and 1/2 tablespoonfuls in 5 litres of water) and offer it as drink after each day's training. You can add an equal amount of glucose to sweeten the warm drink and aid sodium uptake. By conditioning your horse to drink the warm 'saline' after exercise, it will look for it as a rehydration drink following travelling or competition. It helps to rapidly rehydrate the blood and body fluids within 5-10 minutes if a horse is hot and thirsty. A daily supplement of Cell-Salts should be added to the feed each day to provide a range of salts to correct low or inadequate levels in feeds.



exercise, they will require a high quality vitamin and mineral supplements to make up for the shortfalls in their diet.

5. Salt (sodium chloride) is the most important electrolyte required for nerve function and fluid balance in the body. Many commercial feeds contain adequate salts for light work if the full recommended daily amount of the feed is fed. Other important salts include potassium, magnesium and calcium that are often low or inadequate in common feeds.
6. Fresh, clean, cool and palatable water must be readily available to horses and ponies as it is essential for health. Horses and ponies require on average 5 litres per 100kg body weight of water per day, with higher amounts required when exercising under moderate to hot conditions or for extended periods.

## YOUR HORSE'S TEMPERAMENT – KEEPING YOUR HORSE 'COOL' AND EASY TO HANDLE

When competing, it is important for your horse or pony to be relaxed and attentive. An excited, 'hot' or nervous horse or pony can result in misbehaviour and an unenjoyable experience. There are a number of possible causes for this unwanted behaviour, including changes to routine, overfeeding, feeding 'hot' feedstuffs, magnesium deficiencies and gastric ulcers. Eliminating these problems are likely to produce a happier horse and rider, as well as reducing the chance of injury and increasing the chance of success.

It is important to match your horse or pony's feed intake to the amount of exercise. By overfeeding relative to the workload, you could be providing excess energy in the ration which can increase the risk of the horse becoming 'fizzy' or over-energetic and badly behaved as well as ending up in an overweight condition. Horses and ponies which have an inadequate intake of magnesium in their diets can develop nervous, temperamental and anxious behaviour. They often have

difficulties in adjusting or coping with unfamiliar surroundings. Some of the symptoms include anxious and unsettled behaviour during handling, travelling or competition, especially when they are removed from their home environment.

Magnesium is often relatively poorly absorbed from feeds as it competes for uptake with calcium. As well, when excess phosphorus (for iron) is provided in the ration, there will also be a reduction in magnesium uptake from the small intestine.

For horses and ponies with low intake of magnesium, consider supplementing the ration with magnesium and Vitamin E.

## GASTRIC BURNS AND ULCERS CAN CAUSE ANXIOUS BEHAVIOUR

Many stressful and anxious horses and ponies often have a poor appetite and are picky eaters particularly after exercise and travelling. Other horses can develop an anxious temperament when travelling or waiting to compete. These horses are likely to be suffering from Equine Gastric Ulcer Syndrome (EGUS). Symptoms also include unwillingness, bad behaviour when travelling and pawing the ground when waiting to compete due to gastric discomfort. For a 500 kg horse, try feeding 4 litres of dampened lucerne chaff, or ¼ biscuit of dampened lucerne hay. Lucerne contains natural mucilages, saponins and buffering compounds which are often found to be low in processed and heat treated feeds.

Try Kohnke's Own Gastro-Coat to encourage chewing and saliva buffering which helps to maintain optimum gastric conditions and digestive function, assisting the appetite and often making the horse more comfortable and contented. In problem horses, add 2 tablespoonfuls of limestone (fine Ag-Lime) to the lucerne chaff and Gastro-Coat snack 30 minutes prior to daily exercise to enhance stomach buffering.



## HINT: LIMIT TIGHT CIRCLE LUNGEING TO TAKE OUT THE 'FIZZ'

Many competitors lunge a fizzy over-energetic horse to help settle it down by making it burn up excess energy. However, only lunge on a 15-17 metre diameter circle on soft even ground for as short a time as possible. Studies have shown that the inside front limb on the circle can suffer overload injury within 3 minutes especially in a horse in show condition. Changing the direction of the circle every 3 minutes is recommended.

## HINT: GETTING THE BEST FROM MAG-E

Kohnke's Own Mag-E has become a very popular supplement to provide a readily absorbed source of organic magnesium to help maintain proper nerve and muscle function during training, travelling and competition. It helps to keep horses unfazed and does not swab. For best results, when first introducing Mag-E, provide a loading dose consisting of one dose in each of the morning and evening feeds for the first seven days and then switch to a maintenance dose of one dose a day for the next two weeks. If needed, the maintenance dose can continue during the show preparation. Prior to a show or competition, supplement with 2-3 times the recommended maintenance dose for up to 7 – 10 days and then reduce to a maintenance dose between competitions.

## HINT: CHOOSE 'COOL' ENERGY SOURCES

There are a large variety of commercial feeds suitable for show and competition horses. However, the full daily feeding amount suggested on the bag label needs to be fed each day to provide adequate energy and other important nutrients. These amounts of feed, however, can 'over heat' some horses. If you feed a small amount of commercial feed for 'taste' and energy, other cool energy sources can be added to make up shortfalls to keep a horse easy to handle with impulsion, but not 'fizzy' behaviour. Suitable feeds include steam rolled barley, sugar beet pulp, limited amounts of copra meal (you must soak copra meal before feeding) and rice bran.

## ABOUT JOHN KOHNKE:

Dr. John Kohnke is arguably Australia's leading nutritional and practical feeding advisor and his services are sought throughout Australia and worldwide for advice on the feeding and management of horses. He has over 35 years experience as a veterinarian specialising in equine nutrition and management. Dr. Kohnke gained his early professional experience with horses as a veterinarian on a leading Thoroughbred horse breeding and racing stud. In March 2002 he started his own company John Kohnke Products and formulated an innovative range of feed supplements and horse care products, distinguished by the Kohnke's Own brand name. The large range of Kohnke's Own supplements are formulated to meet the specific needs of all types of horses, based on the latest research in nutritional standards (NRC 2007) and manufactured to the highest quality standards. Check out the Kohnke's Own website [www.kohnkesown.com](http://www.kohnkesown.com)