



**BALLARAT
VETERINARY
PRACTICE**
ABN 40 119 407 715
www.bvp.com.au

1410 STURT ST,
LAKE WENDOUREE, 3350
PH. (03) 5331 1533
FAX (03) 5331 3337
bvp@bvp.com.au

1329 HOWITT ST.
WENDOUREE, 3355
PH. 5339 2266
FAX 5338 1588
wvc@bvp.com.au

EQUINE CLINIC
MIDAS ROAD
MINERS REST, 3352
PH. 5334 6756
FAX 5334 6800
bvpec@bvp.com.au

PO BOX 220
WENDOUREE VIC 3355

Partners

Dr. I. C. FULTON, B.V.Sc. (Hons.), M.S. (Michigan),
F.A.C.V.Sc.
Registered Specialist in Equine Surgery
Dr. R. H. LAWRENCE, B.Vet.Med.(Lond.)

Dr. B. H. ANDERSON, B.V.Sc. (Massey) M.V.Sc., M.S., MACVSc.,
Diplomate A.C.V.S.
Registered Specialist in Equine Surgery
Dr. S. A. GREEDY, B.V.Sc., M.A.C.V.Sc.
Dr. A. R. CUST, B.Sc., B.V.Sc. (Hons.), M.V.Sc.

Feeding the "good doer"

Dr Rachel O'Higgins

Overview

The term "good doers" refers to horses and ponies that are able to maintain or gain weight on a minimum amount of food. In their natural environment horses would have to make the most of poor quality grazing and would constantly be on the move in search of fresh grazing areas. The majority are no longer kept as nature intended. This change in lifestyle and diet has brought about its own set of problems, namely the challenge of keeping these good doers in slim, healthy condition as they can be prone to obesity, laminitis and metabolic issues. Owners of good doers should regularly perform body condition scoring and modify feeding and exercise to ensure these horses maintain a healthy body weight.

Body Condition Scoring

Good doers have a tendency to be overweight. Frequently owners will fail to recognize what constitutes a healthy body condition score (BCS). Scoring does not have to be complicated or time-consuming. As a rule of thumb you should be able to run your hand lightly across his ribcage and be able to feel ribs easily but not see them. A horse can be considered overweight if:

- Ribs are difficult to feel even with firm pressure
- The horse has a "cresty" neck
- Withers are rounded, covered in fat and shoulder blades are not easily seen
- The area surrounding his tailhead is bulging and soft
- There is a crease down the centre of his back
- He has fat bulging behind his shoulders and along his inner buttocks

Regular condition scoring and weigh taping will enable you to spot any changes in your horse's weight and condition much quicker than by eye alone.

Equine Metabolic Syndrome

Overweight good doers are at risk for developing equine metabolic syndrome (EMS). EMS is associated with chronic insulin resistance (IR), obesity and abnormal fat deposits, or "regional adiposity". This refers to the cresty neck and other fat pads EMS horses have, such as behind the shoulder, at the wither, above the tail head, over the eyes, and in the sheath of male horses. Insulin is a hormone secreted by the pancreas that stimulates the uptake of glucose (sugar) by tissues when glucose is abundant, such as after a meal. IR is a condition in which an increased production of insulin is required in order to maintain (or attempt to maintain) circulating blood sugar levels within normal limits, i.e. the failure of tissues to respond appropriately to insulin. Horses with EMS/IR have a higher chance of developing laminitis or 'founder' (inflammation of the sensitive laminae in the horse's hoof) than other horses. Therefore it is also important these horses receive regular and appropriate foot trimming. Although there is a strong genetic influence to EMS (certain breeds do seem to be predisposed to this condition), obesity is the primary problem that sets off the cascade of metabolic abnormalities. A horse is diagnosed with EMS through physical appearance, routine blood tests, and specific

insulin and glucose tests. There is no specific treatment or cure for horses with EMS/IR. Instead of relying solely on pharmaceutical drugs treatment is aimed at altering the horse's diet and instituting a strict exercise regime.

Diet

The basis of any horse or pony's diet should be fibre. In their natural environment horses and ponies will spend up to 18 hours a day grazing and the equine digestive system is well designed for this. For most horses not involved in moderate to heavy work forage alone (grass and/or hay) can meet their dietary needs. A healthy adult horse requires 1.5-2.5% of his body weight in hay per day. Good doers generally require only 1.5% of their body weight in hay each day. So a 500kg good doer only needs 7.5kg of hay daily. It is essential for a horse's mental & physical health that it gets enough fibre especially when limiting calorie intake. Horses are designed spend the majority of their time eating. Hours without food can result in a bored horse and behaviours like wood chewing, cribbing, and at worst, without the bulk material required by the horse's digestive system, a horse can colic. This is why it is important that you have a good and balanced nutritional program that keeps your horse from getting fat in the first place. There are many ways to lower your good doers' calorie intake or slow his consumption:

- Using a grazing muzzle when turning a horse out to graze can slow his intake, but first make sure that the horse can drink whilst he is wearing it.
- Strip graze large grass paddocks or fence off a smaller "starvation" paddock for your horse.
- Soak hay in clean water for at least an hour to leach out sugars, this lowers its energy content but still provides plenty of fibre for a healthy digestive system.
- Slow down the rate your horse eats hay by using 2 small haynets, one placed inside the other or using one with very small holes.
- Feed low energy chaff.
- Divide the daily forage allowance into several smaller meals so that your horse does not have to go long without food. (He shouldn't be left overnight, i.e. longer than 8 hours, without food as this can predispose him to colic.)
- Eliminate grain and other concentrated feeds and high-sugar feeds.
- Limit pasture access in some way during the spring and autumn when the grasses tend to be highest in their sugar/starch content.
- Restrict your horses pasture access in early to mid morning and again in mid to late afternoon as this is when peak production of fructan sugars in grass occurs.
- Weigh your horse's hay rather than simply 'guesstimating'. This is an integral step to avoid overfeeding.

All horses should be offered free choice water.

Remember that horses can experience gastrointestinal upset secondary to abrupt dietary changes. Make any changes to a horse's diet slowly over the course of several days, even if you're eliminating components.

Horses and ponies that are working harder may need additional feed to provide extra energy. However, it is important to remember that calories and energy are basically the same thing. If you are feeding a high energy feed your horse will be receiving a higher amount of calories and unless these extra calories are being used for work they will be used for weight gain instead. Often horses or ponies that are lacking in energy are overweight and unfit and if this is the case feeding a higher energy feed will only exacerbate the problem. Sticking to a high fibre, low starch, low sugar feed is much kinder on the horse's digestive system and helps to avoid digestive problems such as colic and laminitis which can be linked to high starch, low fibre diets. Instead a gradual fitness programme should be implemented combined with a high fibre, low calorie diet which should result in a slimmer, fitter horse who finds work easier. Horses usually do not require nutritional supplements if they are fed good quality hay. Nutritional supplements are widely considered safe; however, be aware that you can over supplement horses.

Weight loss

Weight loss should occur gradually over the course of several months. A horse may safely lose about 20kg or one BCS each month. Rapid weight loss, especially in obese ponies, may put the animal at a high risk of developing hyperlipidemia.

Hyperlipidemia is a condition where the body perceives itself to be starving, leading to the release of large quantities of stored fat into the bloodstream. This condition may quickly lead to impaired liver function and death. Signs of hyperlipidemia include

drowsiness, depression, muscle twitching, poor coordination, colic, and diarrhoea. Another drawback to intensive weight loss strategies is the increased likelihood of developing stereotypical behaviours. Allowing horses to interact with field companions, the provision of stimulatory toys, and the use of a regular exercise program may reduce the likelihood of stereotypies like weaving, pacing, wood-chewing, bedding ingestion, coprophagy and cribbing.

Proper weight loss may take several months, body weight and BCS changes should be monitored every 2- 4 weeks. Monitoring too often (i.e., weekly) can cause the horse owner to become discouraged because visible changes may not be readily obvious. Taking photographs of your horse every few weeks is a good way to see the positive effects of a weight loss programme. Patience and consistency are key, once the horse has reached its ideal body weight or BCS, maintaining that level of fitness is critical. Constant attention to the quality and quantity of feed offered as well as the body weight and BCS of the horse will allow horse owners to make informed decisions as to the amount of feed offered to the horse. Adjustments to the ration can be made based on the changing requirements of the horse during the different seasons or training schedules. Some fluctuation of body weight is normal in the adult horse. Feeding an EMS horse correctly may take a bit more effort. Your vet might recommend your horse is taken completely off pasture and only fed hay for forage.

Exercise

Exercise is important to keep any good doer in trim and healthy condition and it is essential for overweight horses or those with EMS/IR. Horses must be introduced into exercise gradually and should never be pushed beyond their physical capacity. This is especially true for overweight horses because they are more prone to fatigue and injury due to carrying excessive amounts of weight. Workload should start slowly and over several weeks you can gradually build up the length of time and intensity. It is important to remember that turnout does not equal exercise. To enable your horse to lose weight this will involve daily or near daily exercise, either ridden, in-hand or lunging. If it is not possible to immediately implement an exercise regime (if the horse is suffering from a laminitic episode, for example), institute the dietary changes first, wait for the episode to resolve and then begin an exercise regimen.

Additional Information

Your veterinarian should be happy to discuss a feeding and exercise plan and any concerns you might have regarding your horses weight. Most feed companies also have feeding help-lines which offer practical, easy to understand advice.