

# FEEDING THE LARGE HORSE

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Few owners have difficulty in keeping the weight and condition on large Warmbloods or their cross breeds and most have problems of weight control in these horses classed as “good doers” or “easy keepers”. In other large horses that are being worked on a regular basis, especially young thoroughbreds recently retired from racing, it may be difficult to put on and maintain body weight and condition.

It is well known that warmbloods and draft crosses are generally slower moving, usually less excitable in nature and have a higher efficiency of feed conversion compared to thoroughbreds and their crosses. Many horses also inherit more obese characteristics that have a higher number of “storage” fat cells in their abdominal cavity. Therefore, when fed enough feed in the standard recommended ratio of 50:50 energy based feeds (grains, oils) and roughages (chaff and hay) to meet needs for moderate exercise (60-90 minutes per day), they usually put on body condition.

Moreover, many horses are “hooverers” – meaning that they spend most of their time grazing and searching for food, fossicking for wasted feed and hay and nibbling sparse pasture, as compared to “hot” blooded horses that spend less time eating. Arabians are also considered to be more efficient at converting feed due to their historical adaptation to harsher conditions. Ponies are also effective converters and certain bloodlines put on condition easily and have a higher risk of founder.

## Concept of Glycaemic Index

High glycaemic foods, such as raw and processed grains and ‘cooked’ feeds, cause a more rapid increase in blood glucose after a meal, resulting in an insulin response, which produces an “anabolic” type effect that stores more energy (glycogen) in the muscles and liver and converts the extra energy to fat deposits when excess starches are fed relative to exercise needs. Feeding low glycaemic feeds or feeds containing low starch or non-structural carbohydrates (NSC), generally assist in body weight control and lessen the risk of ‘hyper’ temperament in horses.

<b>Low GI</b>	<b>Medium GI</b>	<b>High GI</b>
Rice bran	Barley	Corn
Wheat bran	Triticale grain	Wheat
Lucerne hay	Spring grass hay	Oats
Lupins	Clover hay	Molasses
Soyabean meal	Vetch/grass hay	Apples
Sunflower seeds	Carrots	Extruded barley
Oaten chaff (low grain)	Apple cider vinegar	
Copra meal		
Vegetable oils		

Note: Vegetable oils added to boost energy in grain based feeds reduce the speed of glucose uptake and reduce the GI of grain based feeds.

## Controlling Role of Glucose Uptake (Low GI diets)

Low GI diets can help control and minimise the risk of high glycaemic index and weight gain in large horses that are ‘good doers’ in training. The following steps can be taken, both for large or ‘nervy’ horses, by feeding ration mixes that avoid weight gain and are cool” feeds.

## Roughages

- ★ Soaked grass hay – soaking spring harvested grass hay for 60 minutes in double its volume of lukewarm water, then draining before feeding removes soluble fructan and other sugars that can add weight gain and help reduce the risk of laminitis or “metabolic” Cushing’s Disease.

- ★ Lucerne hay – generally lower glycaemic index, but excess will provide too much protein.

#### Energy Sources

- ★ Steam rolled barley or triticale instead of oats or corn
- ★ Vegetable oil to reduce rate of grain digestion of lupins, sunflower seeds, soyabean, copra meal (all contain little or no starch)
- ★ Lucerne hay – generally lower glycaemic index, but excess will provide too much protein
- ★ Rice bran, KER Equi-Jewel®, Hygain Ice®, Coprice M®

#### Bulkers

- ★ Low grain cereal chaff – sieve out grain if necessary
- ★ Lupin hulls, (well digested), sunflower hulls (poorly digested), oat hulls (poorly digested – higher GI)

#### Appetizers

- ★ Carrots (GI 52) as a treat instead of apples (GI 80)
- ★ Apple cider vinegar (GI 15) as an appetizer instead of molasses (GI 90)

#### Minerals and Vitamins

Always ensure that a horse on a restricted diet is provided with a good quality vitamin supplement such as Cell-Vital or Cell-Provide, to ensure that the shortfalls in roughage based diets in particular, are corrected to maintain health, vitality and coat condition.

Restricting Grazing - Restriction of grazing to 2-3 hours per day, stabling at night for “hoverers” to reduce feed intake – don’t use straw bedding as the average horse will consume around 4.5kg straw overnight.

#### Putting weight on a large horse

If a horse is large framed and is not a “good doer”, then there no need to control the feeding of high GI feeds, provided that the horse has a good appetite and can consume an adequate quantity of feed to meet its needs for training and weight gain, especially under cold conditions.

#### Improving Body Condition

Feeds that help to gain condition without “fizz” are

1. Boiled barley – 1kg twice daily for 2-3 weeks
2. Equi-Jewel® - 500g twice daily until adequate condition is reached.
3. Weight-Lifter – suitable to put on condition, but if fed in excess can increase “hyper” behaviour.

#### Improving Coat Condition

A supplement of trace-minerals and vitamins, such as 20-30 grams Cell-Vital, or 50g Cell-Provide, will provide iron, copper, zinc and vitamins to correct low dietary levels, combined with 70-100mL of an Omega-3 oil, such as Energy Gold daily. It normally takes 2-3 weeks to improve coat condition. A 300gram feed of 100g linseed seed (boiled) with 200grams Bran mash can also help to improve coat condition in dry coated horses.

#### Improving Muscle and Topline

A daily supplement of Muscle XL (60g for a large horse) given within 15 minutes after exercise in a small feed made up of a double handful of lucerne or oaten chaff with 30mLs Energy Gold (garlic flavoured to improve acceptance) for 10-14 days will help to improve topline and hindquarters. Repeat courses at 2-3 week intervals should help to maintain optimum muscle mass. An additional course 4-5 days before competition will help to maintain optimum topline and muscle strength.