

Health and welfare information about your horse from Vetlexicon Equis.



Nutrition - keeping your horse on top form

The combination of the right diet and correct workload should keep your horse in good condition. A horse's condition will vary depending on its breed, age and workload. Before you can begin to decide what to feed your horse, you need to check if he is already in good condition or if he needs to lose or gain weight.

What does good condition mean?

A horse in good condition will have the following qualities:

- A firm neck with no crest but be careful not to confuse a crest with a well-muscled topline.
- The ribs should be covered but still felt - the horse's coat thickness should be taken into account.
- There should be no crease along the back and spinous processes should be just felt.
- The rump of the horse should be rounded with a cover of fat, but the pelvis felt where

the skin is supple.

Make sure you take a good look at your horse before making a final decision on his condition. Condition scoring tables are available and these are very useful when assessing condition.

What should a daily feed include?

You are what you eat... and so is your horse. A balanced diet is essential to keep your horse happy and healthy. The correct diet will ensure your horse retains a healthy coat, skin, bones, muscles and feet. A healthy diet will also ensure your horse remains sound and has plenty of energy. There are five main parts to a horse's diet, these include:

- **Water:** horses should have a constant supply of fresh, clean water. Requirements range from 22.7-90.9 litres/day, depending on workload, amount of food eaten, environmental temperatures, etc.
- **Energy:** energy is a fuel supplied in the form of carbohydrates, eg cereal starch from oats, barley, etc and from digestible fibre from forage. Fats are also now used as a concentrated supplier of energy. Fat and digestible fibre are slow-release energy sources, whereas cereal starches are fast-release.
- **Protein:** this is essential for maintaining and developing healthy body tissue, such as muscle. It is supplied in the form of pasture grass, hay or haylage.
- **Minerals:** the most important minerals include calcium, phosphorus, magnesium, sodium, chloride and potassium. Also, vital trace minerals, eg copper, zinc and selenium are required in much smaller quantities. All of these should be supplied in compound feeds when fed at the recommended levels.
- **Vitamins:** fresh forage is a major source of vitamins and most needs are met when horses have access to good quality haylage or grazing. Vitamin A is the most commonly supplemented vitamin in food to aid good production and growth. Vitamin E is also widely supplemented to avoid muscle degeneration. Vitamin B is also used to supplement working horses because of its energetic qualities. Hay loses its vitamin content within six months of harvesting.

Forage (hay or grass) should be the base of your horse's diet. There are two types, these include:

- **Legumes:** alfalfa, clover, etc. These are higher in protein, calcium and potassium

than grass.

- **Grass:** of many varieties, are lower in nutrients than legumes, but are still vital for a balanced diet.

In order to maintain a balanced diet, concentrates may need to be fed to provide the nutrients that are missing from bad quality forages. This is very common in winter when extra energy is needed for body warmth: when additional hay or haylage is not sufficient, more concentrates should be fed to maintain bodyweight. Commercial feeds/concentrates are very common, these are already prepared with a variety of ingredients for a balanced diet. They include:

- Straight cereals, eg oats, barley.
- Grass meal.
- Soya.
- Vitamin/mineral concentrate pellets.
- Fibre sources.
- Wheat feed.
- Oat feed.

How do I calculate feeding rations?

First of all, you need to find out how much your horse weighs. There are three main ways of doing this:

Weigh scale: this is the most accurate method. Weighscales are usually found at veterinary surgeries, racing yards and studs.

Weigh tape: a simple and effective method. The tape is wrapped around the heart girth of the horse, directly behind the withers and close to the front legs. The ends of the tape are overlapped and the weight reading can be taken, this should be done when the horse breathes out. Weightapes can be purchased at most tack and feed shops. Different tapes can be found especially for horses and ponies.

Calculator: calculators are also available which are simple and easy to use, although expensive.

Once you have established the weight of your horse you need to evaluate his workload.

There are four main categories:

- **Maintenance:** horses and ponies at rest.
- **Light work, this includes:**
 - Hacking for 1-2 hours/day.
 - Novice dressage.
 - Novice show jumping.
 - Novice show level.
- **Medium work, this includes:**
 - Affiliated working hunter classes.
 - Endurance horses (up to 50 miles).
 - Intermediate dressage.
 - Intermediate show jumping: foxhunters, Grade A and B, etc.
 - Novice and intermediate one-day eventers.
 - Racehorses (fast canter work).
- **Hard work, this includes:**
 - Advanced dressage.
 - Endurance horses (up to 100 miles).
 - Hunters (1-2 days/week).
 - Racehorses in training/point-to-point/National Hunt/Flat racing.

Now you can calculate the feeding rations - see the table below for estimated concentrate feed / forage ratios in kg depending on your horse's bodyweight.

Bodyweight (kg)	Maintenance or Light work		Medium work		Hard work
	Feed (kg)	Forage (kg)	Feed (kg)	Forage (kg)	Feed and forage (kg)
200	1	3.9	1.8	2.2	2.5
250	1.25	3.75	1.25	2.75	3.15
300	1.5	4.5	2.7	3.3	3.75
350	1.75	5.25	3.15	3.85	4.4
400	2	6	3.6	4.4	5
450	2.25	6.75	3.95	4.95	5.6
500	2.5	7.5	4.5	5.5	6.25
550	2.75	8.25	4.95	6.05	6.9
600	3	9	5.4	6.6	7.5

Feeding tips...

- Feed little and often. The digestive system is not designed to cope with more than 2.3 kg of concentrates in a single feed, so larger horses in heavy work may need to be fed a minimum of three times a day.
- Create a feeding routine that your horse can get used to - horses are creatures of habit.
- If you need to change the feed, you should do it over a period of 7-10 days, so that your horse's digestive system adjusts to the change with no adverse effects or reactions. Any new feed should be mixed with the old feed, gradually increasing the new and decreasing the old by equal amounts over the 7-10 days.
- Feed plenty of hay or haylage, particularly in the winter when pasture grass, even if it looks plentiful, does not have the nutritional value it does during the summer months. This will also keep your horse warm. Avoid mouldy or very dusty hay. If you wish, you may soak hay in water for a maximum of 20 minutes before feeding, if you soak it for any longer it will start to lose its nutritional value. The better quality forage you feed your horse the less likely it is that your horse will suffer from digestive problems.
- The provision of a salt or mineral block is also important.
- Do not feed your horse immediately before or after exercise, allow an hour or so for your horse to rest and cool down. This is also true for the provision of water after exercise.
- If your horse does not drink enough water, he may become dehydrated or get impaction colic, particularly in the winter when the water is very cold. This can be avoided in various ways:
 - Warming up the water for stabled horses if possible.
 - Feed succulent food, eg soaked sugar beet pulp, to encourage water intake.
 - Make sure any ice is broken in the trough for grass kept horses during the winter and place more than one source of water around the field to avoid the areas around the troughs becoming muddy and unpleasant for your horse to walk on.
 - Add some salt to your horse's diet or provide a salt block.