



Ranvet

HORSING AROUND

KNOW WHAT YOU'RE FEEDING

The information contained on feed and supplement labels supply a wealth of information to help ensure the appropriate choice is being made. However, knowing the requirements of your horse and being able to correctly interpret the information provided may not only save money but also ensure the health, vitality and performance of your horse.

The most common categories disclosed on feed and supplement labels include the following;

- ✓ **DE MJ/kg (Digestible energy in megajoules per kilogram of food provided)**
- ✓ **Crude Protein (CP)**
- ✓ **Lysine**
- ✓ **Calcium & Phosphorus**
- ✓ **Oil content**
- ✓ **Feeding directions**

Oils contain 2.25 times more energy than grains (i.e; 33MJ/kg vs 14MJ/kg.)

What does it all mean?

DE MJ/kg

The majority of feeds list digestible energy (DE) as the form of energy provided by the feed. DE is determined by subtracting the gross energy in the faeces (energy not digested) from the intake of energy consumed (energy provided via grains, pasture and roughage) by the animal.

Megajoules/kilograms (MJ/kg)

Refers to the energy density of the feed. Energy density measures the energy released when consumed feed is metabolised by a healthy horse following ingestion.

Crude Protein

All protein sources contain a varying percentage of nitrogen and thereby the crude protein is determined by measuring the nitrogen content of a feed. However, crude protein is not an accurate determination of the quality of a protein source, as this is reliant on the amino acid profile of each given feed source. Protein is comprised of 20 amino acids and the horse must obtain 10 of these, known as 'essential amino acids' from external sources. In cases whereby one of the essential amino acids is not adequately provided, this is termed a 'limiting amino acid' and as such will hinder protein synthesis.

Lysine

The primary limiting amino acid in the horse is lysine. A horse is only able to utilise the daily dietary protein intake up to the lowest level of the first limiting amino acid, thereby resulting in a shortage of any one essential amino acid reducing overall protein utilisation. Lysine in particular must be present in sufficient quantities to ensure optimal utilisation of other amino acids comprising any given protein unit. Diets lacking in lysine will prevent optimal skeletal growth, development and maintenance of muscle mass, hormone and enzyme function, and tissue repair mechanisms of particular importance in the developing and exercising horse.



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Power Formula® & Ranvet 500 PLUS® contain high levels of essential amino acids, in a unique amino acid profile supplying the building blocks for muscle development and growth.



**NEXT MONTH;
How Muscles Work!**

Calcium & Phosphorus

Calcium and phosphorus should be considered together due to their interdependent role in bone formation and the strength and rigidity of the skeleton. Ideally, the calcium to phosphorus ratio of the overall ration should be 1.8:1. Additionally, it should also be considered that grains contain higher amounts of phosphorus and therefore adequate calcium fortification should be provided to cereal grain based rations and commercial or pre-mix feeds containing a large proportion of grain.

Lucerne hay contains higher levels of calcium in comparison to grass hays

Oil

The higher the percentage of oil, the greater the energy content (MJ/kg) of the feed. Supplemented grain mixes, sweet feeds or pellets not fortified with fats generally contain approximately 2.0-3.0% oil, which is the naturally occurring oil content of grains. In order to derive the full benefits of fat supplementation, the dietary level of fat should equate to 5-10% of the total ration (i.e; including fibre/roughage), which may take the horse's gastro-intestinal system up to 6 weeks to adapt to the higher oil content of the ration. Furthermore, the oil supplied in commercial feeds may not contain an optimal Omega-3: Omega-6 fatty acid ratio.



Racing Oil® provides an Omega-3 to Omega-6 balance which complements the horse's needs, particularly in times of high reproductive stress, physical exertion and tissue damage and repair.

Feeding directions

The feeding guidelines provided on product packaging are notated to ensure the daily nutritional requirements are being addressed according to the recommended level of feed provision. Consideration must be given to any deviation from the feed manufacturer's feeding rates as this will alter the intake of daily nutrients, which may lead to nutrient deficiencies, toxicity and/or metabolic syndromes such as laminitis and 'tying up'.

To ensure that the optimal level of nutrients are being provided, the manufacturer's feeding rates must be followed where possible. However, if this does not occur, contact your veterinarian or nutritionist for clarification of any further supplementation or dietary modifications which may be required.

Ranvet's Nutritional Consultation Service for your horse's every need;

- Customised diets
- Energetic demands
- Vitamin & electrolyte requirement
- Growth & development needs
- Correcting metabolic disturbance

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