



In order to improve top line and muscle tone, he requires a fully balanced diet to fuel his work and condition



# muscling up



There's more to a horse in good condition than just body fat and a shiny coat and, whilst you won't achieve a well-muscled horse without the correct work and training, the right nutritional building blocks are essential too.

## Calorie Intake

Whether you consider your horse over or under weight, in order to improve top line and muscle tone, he requires a fully balanced diet to fuel his work and support the body condition you require. If you want him to gain weight, he will need to lay down some body fat and this is simply achieved by ensuring the diet supplies more calories than he requires for his work.

Likewise, for him to lose excess body fat, he should consume fewer calories than he requires for work so that his body is forced to start using its own reserves. There are other nutrients however which are essential for the working horse and these can make the difference between a horse who looks and performs to his best and one who, frankly, doesn't!

## Essential Protein

The main component of muscle and body tissue is protein which is supplied in limited amounts by forage (grass, hay, haylage) but working horses, and those whose physique we are looking to improve, will require supplementation in the form of a fully balanced compound feed or balancer. Many riders are afraid of feeding protein in the mistaken belief that it is the cause of excitable behaviour – it is not!

Fizziness and excitability may be the result of the horse having excess energy through being fed too many calories and not too much protein. Protein is rarely used by the horse's body as a source of energy (calories) so is not the culprit but is wrongly associated with fizzy behaviour because higher energy feeds, formulated for heavier workloads, also contain higher protein levels.

## Quality Protein

The harder a horse is working, the greater his demand for protein to both build more muscle tissue and to repair that which is constantly being damaged during work and performance. Consequently, compound feeds formulated for horses in moderate to hard work will have protein levels of 12 – 13% compared with those designed for light work which may contain 9 – 11% protein.

It is not the just the level of protein in a horse's diet that counts though, it is the quality and this is determined by the individual amino acid "building blocks" of which it is made up. With the right dietary components, the horse's body can manufacture most amino acids but there are a small number of "essential" ones, like methionine and lysine, which have to be included in the horse's diet. Good quality protein supplies these essential amino acids and is found in ingredients like alfalfa, micronised soya and distillers' grains (a by-product of the brewing industry).

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levels need controlling, Working Horse & Pony Cubes are an ideal starting point to which a balancer or Outshine high oil supplement can be added when nutrient or energy requirements increase.

### Nutrients Without Calories

Most conditioning and competition feeds will not only supply highly digestible calories but also the necessary levels of good quality protein to help build and improve top line when fed at recommended levels. They would however supply too many calories for the good-doer or overweight horse but feeding them at reduced levels will not just cut back the calories, it will mean the horse goes short of quality protein and other essential nutrients too.

In this scenario, a good quality feed balancer is ideal as it supplies the necessary building blocks to help the horse “muscle up” yet without any calories which could cause weight gain. The nutritional contribution of the horse’s forage must also be considered for these types and, whilst fibre is essential for good health and forage intake should never be less than the equivalent of 1% of the horse’s bodyweight, access to grazing may need restricting, for example, to control calorie consumption.

### Vitamins and Minerals

Just as the horse’s requirements for dietary protein and calories increase with workload, so does his need for vitamins and minerals. These are involved in many of the metabolic processes throughout the body, including the release of energy from food, whilst minerals are also vital components of body tissues, including bone and muscle.

Like protein, it is not just the levels of these nutrients in a diet which matter but also the form in which they are supplied which determines how easily the body can absorb them from the food and utilise them. Reputable feed manufacturers will use “chelated” minerals which are attached to protein molecules to make them more easily absorbed and available to the horse and will ensure that levels of “antioxidant” vitamins and minerals are higher in feeds for increased workloads.

### Electrolyte Support

The harder a horse’s muscles are working, the more free radicals are produced in the body and the higher his requirement for antioxidants to counteract them. It is also likely that he sweats more and loses electrolyte salts, including magnesium

### Working Lunch

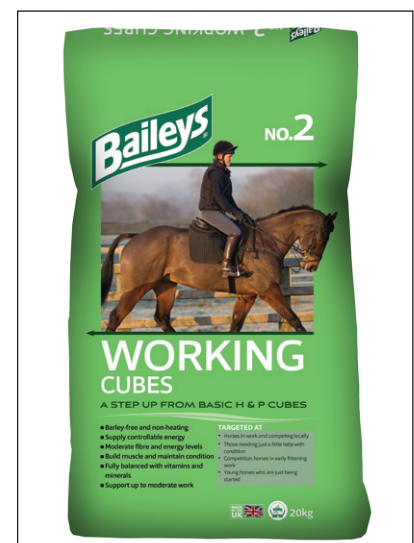
No.2 Working Cubes are great for those horses who need to look and perform that bit better but don’t perhaps need the full blown nutritional hit of a conditioning feed. Their protein quality, however, is as good as many a conditioning feed yet they are higher fibre and pitched to provide non-heating energy for a more moderate workload.

Their vitamin and mineral levels are also designed to support just that bit more than light work and, in that respect, they’re a definite step up from your average horse & pony cube. For working horses whose dietary starch

and calcium which are involved in muscle function. The use of a good quality electrolyte is therefore to be recommended, particularly when a horse sweats, to ensure these salts are replaced, aiding rehydration and recovery after exercise and helping to support correct muscle function. This way, not only is the diet supplying all that is necessary to build and repair muscle tissue but we are also ensuring these muscles can function to the best of their ability with the hope that they recover from fatigue and injury more easily.

### Strong and Healthy

Whatever your horse’s discipline, you should be aiming for one who is fit not fat; even the fittest horse can be rounded with a correctly developed musculature. By selecting the right feed for the horse’s type and workload and feeding it at recommended levels, we can help the horse achieve this and maintain a strong, healthy physique which is both appealing to the eye and ensures the horse can happily perform to his best.



For further information or a practical and individual diet for your horse, contact one of Baileys Nutrition team on 01371 850 247 (option 2) e: [nutriiton@baileyshorsefeeds.co.uk](mailto:nutriiton@baileyshorsefeeds.co.uk) [www.baileyshorsefeeds.co.uk](http://www.baileyshorsefeeds.co.uk)