

# Oil in the Equine Diet

There is one aspect of feeding horses that the past two decades of nutrition research and practical experience have demonstrated beyond reasonable doubt. The use of fat as an energy source to replace grain in a simple hay/grain diet is beneficial. Fat, mainly in the form of vegetable oil, can be used to good effect to limit the likelihood of starch overload and its consequences such as laminitis, colic and fizzy behaviour.

Glucose intolerance, insulin resistance and metabolic syndrome are aspects of carbohydrate metabolism and its control, which have received a lot of attention recently. A few proven “insulin resistant” horses are certainly at risk and, as diets high in starch and sugars tend to lower insulin sensitivity, substituting fats for carbs in suspect horses also makes sense.

The problems that relate to high-fat diets in humans revolve around saturated animal fats and do not apply to horses where vegetable oils are normally used. Increasing fat intake over the traditional levels found in horse diets has been shown to provide useful health and possibly performance benefits as well as helping coat and hoof condition.

Fat is a potent energy source – that’s why mammals use it to store energy when food is plentiful. In the plant kingdom, energy is also stored in the form of starch. Horses can utilise both but, weight for weight, fat has 2½ to 3 times as much energy as starchy seeds such as corn and oats. As knowledge has advanced and the advantages of fat feeding become apparent, many manufacturers have included vegetable oils in their feeds to take advantage of the benefits, mainly as a “cool energy” source.

However, not all oils are created equal. The beneficial effects depend on their relative proportions of the main fatty acids, including the essential Omega 3, 6 and 9 fatty acids, which cannot be synthesised by the body and must come from dietary sources. Many cheaper oils, such as recycled vegetable oil, are high in saturated fat, which tends to increase body fat stores rather than providing the benefits of cool energy and the essential fatty acids (EFAs) that we want. These special fatty acids play a part in many diverse aspects of metabolism from mediating inflammation and the pain response, to oxygen transport and hormone synthesis. Little wonder that an adequate dietary supply is critical to optimal health and performance. When these EFAs are in short supply, the effects of supplementing them can be obvious and quickly apparent.

One oil, **Alpha E**, has been developed specifically to contain optimal levels of each of the Omega group fatty acids and to maximise the beneficial effects. **Alpha E** is a chemical-free, cold-pressed soy oil enhanced by the inclusion of Vitamin E as a natural, oil-soluble antioxidant.



Digestible Energy	8.47MCal
Omega 3	7.1g/kg
Omega 6	53.3g/kg
Vitamin E	1090mg/kg

Feedback from customers has been overwhelmingly positive. Trainers have reported improved body condition, appetite, coat and hoof quality, and performance effects. The dose can be adjusted according to the desired effect – from simply putting a shine on yearlings to energy supplementation for horses in fast work.

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