

Should I be concerned about the high fat content (12%) in Cool Stance?



The answer to this question is not only a resounding “No”, but also, “Quite the opposite!”

This is because not all fats are created equal. When it comes to feeding horses, fats are almost always provided in the form of oils. Among the oils that can (economically) be used in horse feed, coconut oil is unique. All of the other oils (including soy, corn, linseed, sunflower, etc.) are made up of Long-chain Triglycerides (LTCs). Only coconut oil and palm oil (rarely used in horse feeds) are made up of Medium Chain Triglycerides (MCTs).

MCTs are a unique form of dietary fat that impart a wide range of positive health benefits. Dietary fats are molecules composed of individual carbon atoms linked into chains ranging from 2 to 22 carbon atoms in length. Long Chain Fatty acids (LCTs) ranging from 12 to 18 carbons long are the predominant form of fat in the American (and horse) diets. MCTs, by contrast, are composed of only 6 to 10 carbon links. Because of their shorter chain length, MCTs have a number of unique properties, which give them advantages over the more common LCTs.

MCTs provide about ten percent fewer calories than LCTs (8.3 calories per gram for MCTs versus 9 calories per gram for LCTs). But this is just one of the unique advantages of MCTs. More importantly, reduced chain length also means that MCTs are more rapidly absorbed by the body and more quickly metabolized (burned) as fuel. The result of this accelerated metabolic conversion is that instead of being stored as fat, the calories contained in MCTs are very efficiently converted into fuel for immediate use by organs and muscles. MCTs are thus a good choice for horses with increased energy needs, such as those that are growing, recovering from injury, needing to gain weight, or in regular work.

In addition to their lower caloric content than LCTs, MCTs are not stored in fat deposits in the body as much as LCTs. They have also been shown to enhance thermogenesis (i.e., fat burning). So MCTs seem to offer a triple approach to weight loss – they (1) have a lower calorie content than other fats, (2) are minimally stored as fat, and (3) contribute to enhanced metabolism to burn even more calories.

Even more important than the fat content in a feed is the amount of sugars and starches. **Non Structural Carbohydrate (NSC)** is the term used to describe the sugar and starch content of horse feeds (i.e. the digestible carbohydrates). NSC is the sum of the WSC and starch. When horses digest sugar and starch in the stomach and intestines, and absorb glucose, they also release insulin from the pancreas to help the uptake of glucose into cells (i.e. the cells are sensitive to insulin). When high levels of NSC are fed, the cells become resistant to insulin (i.e. the horse is insulin resistant), and blood glucose levels rise. Insulin resistance is associated with metabolic disorders including laminitis, EMS, Cushing’s and colic. High NSC feeds (>12% NSC) are also related to tying up. NSC levels below 12% are considered necessary to maintain insulin sensitivity, to maintain long term horse health, and to avoid the starch related metabolic disorders. **The NSC level in Cool stance is 11%.**