



## **FEEDING THE BREEDING STALLION**

Horse breeders are well aware: whether you're breeding for commercial purposes, or for the simple joy of witnessing your foal's birth on your own farm, the process is very expensive. Caring for a mother-to-be and the mating process itself are often quite costly endeavours. For this reason, it is critical that the stallion be in peak health at the moment of mating or semen collection and that we do everything in our power to ensure an optimal level of fertility.

### **MONITORING BODY CONDITION**

During reproduction, a stallion's caloric needs are relatively low; however, factors in the horse's state of mind such as stress and agitation may increase his overall energy requirements. Stallions who mate either naturally or artificially several times a week will have higher energy requirements than those who mate only a dozen or so times throughout the course of the mating season. Recent studies confirm that body condition is crucial to a stallion's reproductive capacity. It is therefore of utmost importance to ensure that the stallion maintains an ideal body condition of between 5.5 and 6. Unfortunately, stallions often lose their appetite during the mating season, a phenomenon that frequently results in weight loss. To prevent this, farmers should use a feed with a higher energy and fat content to compensate for the horse's decreased intake. We also recommend that the stallion have daily and extended access to quality pastures. If such a pasture is not available, he should have the opportunity to exercise daily for several hours in a spacious paddock. These daily excursions are deemed to be essential for maintaining the horse's state of mind.

### **PRIORITIZING ANTIOXIDANTS**

When it comes to a stallion's fertility, it is important to consider all nutrients; in addition to promoting the immune response, each nutrient contributes to cellular function and integrity. Any nutritional deficit or imbalance may cause various problems in the immune system while decreasing a stallion's libido and fertility.

Besides acting as powerful antioxidants and free radical inhibitors, selenium, vitamin A, vitamin C, and vitamin E play an extremely important role, particularly for older breeding horses. These nutrients, especially vitamin E and selenium, stimulate optimal immune function. More than any other vitamin, beta carotene, the precursor to vitamin A, is well known for its role in the reproductive system. It is thought that an extended vitamin A deficiency may cause a stallion to experience a loss in libido.

Vitamin C and Vitamin E are also of great importance. According to certain studies on human and rabbit sperm quality, these vitamins increase sperm density while decreasing the number of abnormal sperm. It would appear that vitamin C supplements were able to improve certain cases of infertility in stallions.

### **ADDING SOURCES OF OMEGAS**

A stallion's sperm quality and membranes greatly depend upon high concentrations of lipids or fats. These fats control both membrane function and the sperm's response to various situations such as cooling or freezing. Lipids within the sperm are high in polyunsaturated fats. This is particularly true for the omega-3 fatty acid, docosahexaenoic acid (DHA) and the omega-6 docosapentaenoic acid

(ADP). A stallion's sperm contains much more omega-6 fatty acids than it does omega-3s, a distribution that is detrimental to sperm during the cooling and freezing processes, both central steps in artificial insemination. During recent years, some studies have confirmed that improving the sperm's DHA to DPA ratio by increasing its DHA content resulted in superior sperm quality and fertility.

Good ways to increase a ration's omega-3 fatty acid content include the daily addition of ground flax seed or flax oil, or the use of an omega-3 rich supplement such as Athlete. In order to be effective, these supplements need to be served in the correct proportions.

Guarantee your horse the best nutritious start. Choose a balanced, high-quality feed that contains enough calories to maintain an ideal body condition and the correct omega-6:3 ratio for optimal health.

**ADVICE:**

Beyond their role in reproduction, omega-3 fatty acids benefit all horse types by improving coat and skin condition. They are also known for strengthening the immune system and the anti-inflammatory response. Several kinds of complete feeds offer a balanced omega-6 to omega-3 ratio. We especially recommend the Evolution and Omolene lines. For feeds with added omega-3s, look for the following

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