

Biotol Ltd
Collivaud House
Ocean Way
Cardiff CF24 5PD
Tel: (029) 2047 5550
Fax: (029) 20475598



Biotol Equine Gold - For Breeding and Youngstock

Pregnancy and lactation is a nutritionally demanding life stages for a mare. Her requirement for nutrients increases dramatically during the last trimester of pregnancy and again during lactation. Energy requirements increase by about 20-30% during months 9-11, and still further during lactation. In addition, her need for other nutrients such as protein, calcium and phosphorus also increase. The requirement for these nutrients during pregnancy and lactation increases disproportionately to the need for energy. This means that simply feeding more of an ordinary feed designed for maintenance is not adequate. Pregnant and lactating mares need feeds that have been specifically designed for this life stage and as such contain appropriate levels of nutrients in the correct proportions. However, variation in metabolism between breeds, for example Thoroughbreds and native breeds or ponies, means that traditional stud cubes or mixes are not always the most appropriate option. Many individual mares are prone to excessive weight gain and do not require the recommended level of a conventional stud mix or cube and in this instance a more nutrient dense product such as a balancer, fed in conjunction with increased forage, would be more appropriate.

Whilst conventional high cereal containing stud cubes and mixes are still widely used, there is growing evidence to suggest that feeds that elicit a lower glycaemic response (rise in glucose) may offer a healthier option for broodmares and youngstock. This is because the large increase in blood glucose seen following meals that are rich in starch may have a negative effect on normal growth and development in the long term. Low glycaemic feeds typically contain more digestible fibre and oil and have less high starch- containing cereal. Large high starch- containing meals can also overwhelm a horse's ability to digest the starch in the small intestine, which results in an increasing amount of starch reaching the hindgut. Once in the hindgut, this starch is fermented rapidly, resulting in an increase in hindgut acidity. This change in the environment in the hindgut has a deleterious effect on the balance of friendly bacteria, which are essential for normal fermentation and feed utilisation.

Millions of friendly bacteria die naturally and are lost from your horse's digestive tract daily, especially during times of increased stress. Replenishing the healthy balance of 'friendly bacteria' is vital to support normal digestion and immune function, helping your horse to maintain weight and condition and health and vitality. There is considerable research that indicates the benefits of feeding live yeast supplements, such as **Biotol Equine Gold**, to both broodmares and youngstock. Equine Gold is a unique live yeast supplement that helps to boost the levels of friendly hindgut bacteria and offers a number of important benefits during pregnancy, lactation and growth.

- **Promotes and maintains condition** –A live yeast will help to ensure that mares ‘use’ their feed effectively by enhancing fibre digestion. This is achieved by improving the environmental conditions in the hindgut, allowing the proliferation of friendly bacteria, including those involved in fibre fermentation. Specifically, Equine Gold stimulates the production of bacteria capable of utilising lactic acid and so keeps hindgut acidity levels in check. It also helps to control the oxygen microclimate in the hindgut, making it more favourable towards the growth of friendly fibre digesting bacteria (cellulolytic). Improved feed utilisation can reduce the need to feed large quantities of energy dense cereals, which is particularly important when appetite may be limited during the latter stages of pregnancy when the foal starts to occupy an increasing amount of space in the mare’s abdomen.
- **Supports normal growth** - Protein supply and digestibility is important in both broodmares and youngstock. Protein provides a source of vital amino acids, needed as building blocks to support active growth of the foal both in utero and following birth. Live yeast supplements, such as **Equine Gold**, improve the digestibility of protein in the diet. In other words, they allow broodmares and youngsters to ‘use’ the protein content of their diet to greater effect.
- **Supports skeletal development** - Live yeast supplements, such as **Equine Gold**, also support efficient absorption of calcium and phosphorus. Calcium and phosphorus are major minerals in the body that are important for normal bone structure and function and also for nerve conduction. Studies have shown that addition of a yeast supplement to the daily diet can help improve the absorption of both calcium and phosphorus.
- **Supports lactation**– By enhancing feed utilisation in the mare, live yeast supplements can improve lactation. Research has indicated an increase in milk production in lactating mares supplemented with live yeast, resulting in an increase in wither height and bodyweight in their respective foals.
- **Supports natural immunity** –The digestive tract functions as a ‘front line’ defence against infection entering the body, so not surprisingly more than 70% of the immune cells involved in fighting infection are found within the intestines. **Equine Gold** helps to support these defences by boosting levels of immune fighting antibodies and by trapping and then eliminating harmful bacteria and mycotoxins, the latter of which may arise from mould in feed. There is also research to suggest that **Equine Gold** may increase the antibody content of mare’s colostrum.

Inappropriate growth of undesirable bacteria in the foal’s gut can lead to scouring and a failure to thrive. A live yeast such as **Equine Gold** will compete with less favourable bacteria in the hindgut for the available food source, therefore keeping their levels controlled, helping to avoid such digestive upset.

- **Combats the symptoms of stress** –A failure to thrive, lacklustre appearance, loose droppings, frequent bouts of colic, or increased susceptibility to illness or infection often signifies a stress response to reduced levels of ‘friendly bacteria’ in the digestive tract. Weaning can be a particularly stressful time for both mare and foal. **Equine Gold** acts to re-establish a healthy balance of ‘friendly bacteria’ in the hindgut and can help lessen the effect of stress on the digestive system when fed prior to and during weaning.
- **Supports friendly bacteria during routine worming**– The levels of friendly bacteria in the hindgut can be severely reduced following the use of anthelmintics (wormers). However, strategic use of wormers for both mares and foals is vital to maintain health. The use of **Equine Gold** can help ensure that the levels of friendly bacteria are re-established quickly following these necessary treatments.

Biotal Equine Gold is therefore a feed supplement that potentially has significant benefits to all horses and ponies when fed daily to help maintain a healthy balance of microflora within the digestive tract by supporting ‘friendly bacteria’.