

The Last 90 Days

Management of the late pregnant mare

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Bone diseases in growing horses are a major cause of wastage and loss. Guiding growth and development of foals begins with the late pregnant mare. As well as size and weight at birth, we must be concerned about soundness, because we are producing an athlete.

Developmental orthopaedic disease is the term used to describe the debilitating bone diseases which afflict an increasing number of young horses, including:

- Angular limb deformities - including bent and twisted legs in foals
- Contracted tendons and club feet
- Epiphysitis and joint enlargements
- Bone cysts and OCD
- Thin and poor quality bone
- Cartilage damage

The potential to develop these diseases develops in late gestation as a result of imbalanced diets. Borderline imbalances, excesses and deficiencies are often difficult to detect and the effects often present as vague syndromes of poor performance, failure to reach potential, breakdowns, injuries and reduced winnings for the racehorse. Because diet is as important as conformation in the development of unsoundness, poor nutrition has been called 'the hidden handicapper'.

The nutrition of the late pregnant mare affects:

- ***the foal's immunity against diseases***
- ***the risk of diarrhoea in the young foal***
- ***foal growth rate***
- ***bone growth and the risk of bone and joint diseases in the weanling and yearling***

MANAGEMENT OF THE LATE PREGNANT MARE

1. ***Vaccinations and foaling location:*** It is essential that the foal receives the first milk or 'colostrum' to protect it against infections. The mare should be vaccinated against tetanus and brought to the foaling location at least one month before foaling. This allows her to produce colostral antibodies and confer some immunity to organisms in the foaling environment that cause joint ill, scours and septicaemia. The incidence of diarrhoea in foals is up to 63% higher in foals born to mares bought to new locations for foaling, than it is in foals of resident mares.
2. ***Colostrum:*** The foal can only absorb colostrum for 12 to 18 hours after birth - after this, the gut cells change and even if colostrum is given it cannot be taken up by the foal. If there is any doubt about the quality or quantity of colostrum, the foal should be given at least one litre of frozen colostrum before it is 6 hours old. Frozen colostrum must be brought to room temperature slowly. Overheating with hot water and defrosting in a microwave damage the protective proteins. Some breeders routinely monitor the foals immunity at 12 hours of age and many insurance companies require documentation of adequate immunity before insuring a foal.
3. ***Running Milk:*** Anywhere between 3 and 25% of mares have reduced quantity or quality of colostrum. It is especially important to have a veterinarian assess the colostrum in mares that run milk prior to foaling. ***Running*** milk often occurs when mares are fed too heavily during pregnancy and after foaling. Mares must receive correctly balanced mineral, vitamin and essential amino acid intakes, but if the pasture is unusually lush and improved or excessive amounts of starch are fed, they may be at greater risk of running milk and over-producing milk. This can result in loss of colostrum and afterbirth, increase the risk of foal diarrhoeas. Strong healthy foals may get gastro-intestinal overload, which can lead to diarrhoea.

4. **Foal heat diarrhoea:** Milk over-load is often associated with foal heat. This can occur if the mare is fed too heavily during pregnancy and after foaling. This does not suggest complete removal of good feed, as this will result in loss of milk and/or reduced fertility. Mitavite has recently released a specialised, extruded feed, Mitavite Promita, which contains all required minerals, vitamins and essential amino acids to balance pasture and traditional hay/grain diets. Trace mineral, vitamin and essential amino acids requirements are met - allowing hay, pasture and grain intakes to be varied - without inducing deficiencies of essential nutrients. This offers a feeding strategy that prevents dietary imbalances but allows management of mare condition so running of milk and over-production are not encouraged. Mitavita Breeda is formulated to provide essential vitamins, minerals and amino acids as well as the extra protein and energy required when pasture quality and/or quantity is less than optimum. Foals growing well with mares don't need additional feed till 2-3 months of age, so it is important to place mares feed bins out of reach of foals.

5. **Mineral intake during pregnancy:** Mares milk is very low in copper, manganese, zinc, selenium, iodine and iron, so for the first 3 months after birth the foal relies on its own reserves which it builds up during the last 3 months of pregnancy. If the pregnant mare **does not** receive adequate trace minerals in the last 3 months of pregnancy, it is not possible to make up for this by supplementing either the mare or the foal after birth. The incidence of bone and joint lesions is the same - whether or not the mares and foals are supplemented after birth. The use of chelated mineral proteinates increases mineral availability.

Considerable time and money is invested in analysing bloodlines and selecting stallions for broodmares. To reach genetic potential, a similar investment of thought and care is necessary after pregnancy is confirmed. Nutrition influences fertility; ability to recover from foaling and conceive again; foal vigour at birth and the growth and soundness of the suckling foal. In addition, a readily digestible complete feed supplies all nutrients in a reduced volume, thus avoiding overfilling the gut - which increases the risk of post-foaling colics.

At Mitavite, agricultural scientists, equine nutritionists and veterinarians combine their fields of knowledge and expertise to formulate the Mitavite range of feeds. Using steam-extrusion, micronization, protected-heat-stable vitamins and chelated mineral proteinates. Mitavite feeds nurture, support and protect growth, development and performance.

For further information on feeding horses please fill in our **nutrition advice form**.

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