PRIOR TO COVERING

THE MARE

Maintaining correct nutrition for the mare is important to support fertility and immunity, giving her a better chance of conceiving first time and, potentially, reducing the need for repeat coverings. Research has shown that a rising plane of nutrition can benefit conception rates, which simply means that the mare should be improving in condition up to the point of covering. Mares who are significantly over or under weight are less likely to conceive and the aim should be for a body condition score of 5 - 5.5 (using the American system of 1 - 9).

As changes to a mare's condition can take some time, dietary adjustments may need to be made several months in advance, whilst those coming out of work or competition will need to be well "let down" to stand a better chance of conceiving. Whether aiming for weight gain or loss prior to covering, the diet should be fully balanced to provide all the mare needs for good health and to build up nutrient reserves to support the planned pregnancy.

FEEDING ADVICE

- The underweight mare will require a conditioning feed, fed at recommended levels to help her achieve and maintain the desired body condition score.
- The overweight mare may require restricted forage intake, though never lower than the equivalent of 1% of her bodyweight, with essential nutrients provided by Fibregenix Lami Low-Cal Balancer.
- Mares who maintain condition on forage alone should also receive Fibregenx Prime Original Balancer.
- Fibregenix Prime Original feed balancer will provide your mare with the enhanced nutritional uptake required throughout the gestation period.
- The unique formulation incudes ideal levels of folic Acid, which is important for the development of a healthy foetus. It also includes high levels of a leading live yeast probiotic, which may help to increase mare's milk production and milk nutrient density. The comprehensive vitamin, mineral and nutrient package will also ensure your mare is provided with everything she needs on a daily basis from a nutrient perspective.
- The live Actisaf Yeast probiotic In Prime Original has been scientifically proven to double the ability to digest fibre. This will help the broodmare to maximise the nutrients from the fibre in her diet. This is particularly useful during the last few weeks of pregnancy when the increasing size of the foetus means the mare is unable to eat as much fibre.

- Broodmares that are maintained in a healthy body condition will generally breed more successfully and will produce foals that are healthier too.

Fibregenix Prime Original conditioning balancer will help to:

- Aid foetal development
- Aid digestion and nutrient uptake
- Support milk production by preventing the normal ‘dip’ of antibody levels in lactating mares.
- Aid placental development and maintain condition throughout pregnancy, lactation and weaning.

An additional 100g of Fibregenix Prime Original or Lami Low-Cal can be fed on top of the normal daily rate once the mare has been confirmed in foal.

DURING PREGNANCY

Growth of the foetus begins from the point of conception and gradually accelerates so that the most rapid development occurs during the final trimester (third) of pregnancy.

Nutrients are not only required to support the growing foetus but also the development of the placenta, uterus and mammary glands as well as ensuring internal reserves are built up for both mare and foal after birth. The health of the mare’s placenta is crucial to the transfer of nutrients from the mare to the foetus.

Whilst “inadequate” nutrition may not lead to immediate apparent problems, long term shortfalls of nutrients or depletion of internal reserves could affect the development of subsequent foals. Inadequate nutrition during pregnancy has however been attributed to prolonged gestation, developmental abnormalities and low birth weights.

Good nutrition is also important at conception to ensure correct hormonal responses to support the pregnancy and, whilst excessive weight gain in the mare is to be avoided, recent research is suggesting that some weight gain during mid-gestation is necessary to provide an energy source for use in late gestation and early lactation. Over-feeding the mare will not produce a foal with a higher birth weight but is more likely to increase the risk of problems during foaling.

Indeed, a separate study has also shown that maternal weight loss during mid-gestation had a direct effect on the mare's blood insulin and glucose levels and those of the foal at birth, giving a strong indication of the link between mare nutrition and the subsequent health and viability of the foal. A link has also been shown between the feeding of a seleno-yeast, such as Alkosel™ which is included in Fibregenix Feed balancers, and increased levels of immunoglobulin (antibodies) in the mare's colostrum and subsequently in the foal's blood serum.

The mare's diet should include a balance of nutrients, including essential amino acids, provided by quality protein sources, vitamins and both major (macro) and trace (micro) minerals. Research in New Zealand showed a higher incidence of growth problems in foals when the pre and post-natal diets of the mares contained adequate levels of major minerals but below recommended allowances of trace minerals. Even mares looking well on pasture should receive supplementary nutrition as no modern forage is going to meet the major and trace mineral requirements of a pregnant mare on its own.

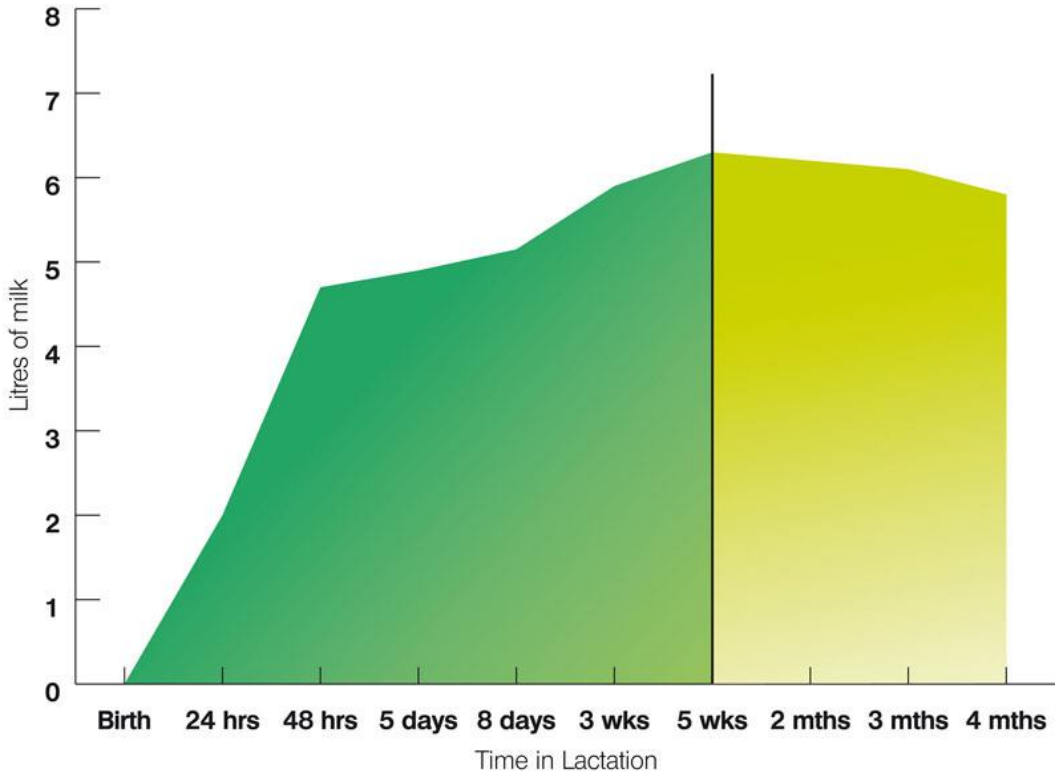
FEEDING ADVICE

- Mares at grass with low calorie requirements should have access to Lami Low-Cal Balancer to ensure all essential nutrient requirements are met.
- As pregnancy progresses, adding a breeding mix plus Fibregenix Prime Original Conditioning balancer may be more appropriate to provide the additional energy to maintain condition and support the growing foetus.
- An additional 100g of Fibregenix Prime Original or Lami Low-Cal can be fed on top of the normal daily rate once the mare has been confirmed in foal.
- During the last trimester, when the foetus is growing rapidly, the mare's appetite may dwindle as there is less space available for her digestive system. Her ration should be divided into as many small meals per day as possible, whilst feeding products like Prime Original conditioning balancer and a high oil supplement allow nutrients and calories to be delivered in a small volume.

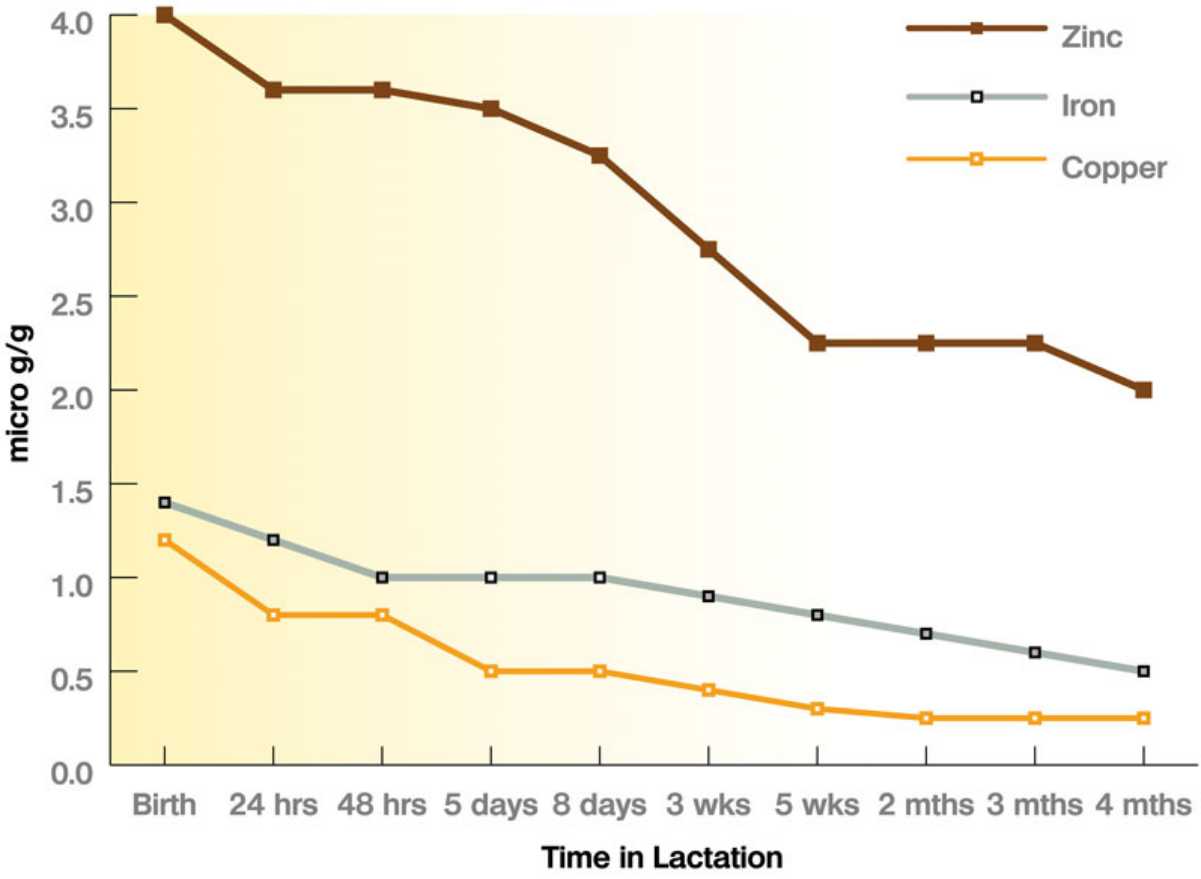
THE LACTATING MARE

Once the mare has foaled and is lactating, her energy requirements will increase by as much as 44% and nutrients, such as protein, calcium, phosphorous and vitamin A, will be in particularly high demand. With the foal growing most rapidly during the first three months, the mare will give up to 3% of her bodyweight daily in milk production so, for example, a mare of 454kg will produce in the region of 13.6kgs of milk per day.

If the mare's diet is deficient in calories at this stage, she will lose weight and, if deficient in quality protein, she will lose muscle and top line and "milk off her back", whilst an inadequate supply of major and trace minerals means her liver and bone stores will be sacrificed.



The composition of mare's milk changes rapidly during the first days of lactation with further gradual changes thereafter. The Mare Lactation Curve shows that the mare reaches peak milk volumes around five weeks into lactation, although exact volumes will depend on the number of previous lactations the mare has undertaken as well as her diet and the amount consumed by the foal per day. The graph of Mare's Milk Mineral Density shows how the levels of key minerals decrease during lactation, with levels of these and other nutrients being influenced by the mare's genetics plus her nutrient intake and requirements.



FEEDING ADVICE

- Whilst good quality grass will make a significant contribution to the mare's requirements, no modern pasture will provide all the vitamins and minerals she needs so some form of supplementation is essential.
- Good pasture management will maximise grass quality and quantity whilst pasture analysis will assist in determining necessary supplementation.
- Ultimately, the quantity and quality of the mare's milk will determine the foal's growth rate, bodyweight and condition, particularly during the first three months of the foal's life when it is totally dependent on the mother's milk. If the mare has not received a balanced and energy dense ration, her milk is likely to be of a poor quality or she may not produce enough milk to support the foal's growth.

THE STALLION

Sperm takes about 60 days to develop so raising the nutritional status of the stallion two months prior to his first covering, or collection if AI is being used, will help ensure that the sperm is at its optimum at the time of covering. The aim should be for the stallion to enter the breeding season with a similar body condition score to that described above for the mare and to be receiving a fully balanced diet supplying performance levels of vitamins and minerals to meet the increased demands of semen production and covering.

FEEDING ADVICE

- The working stallion will require a feed formulated to support performance, to ensure their requirements for work and semen production are met. Fibregenix Platinum Pro Performance balancer added to the diet provides elevated levels of nutrients such as quality protein and Omega 3 fatty acid to keep them in top condition ready for the breeding season.

- Those who require few calories to maintain condition should have Prime Original conditioning balancer to supply essential nutrients and maintain a balanced diet.