

## ~Ranvet Suggested Broodmare Ration~

### Suggested Broodmare Ration (Daily/Per Horse/500kg)

Feed Type	Early Gestation (<5 Months)	Late Gestation (11 Months)	Early Lactation (0-3 Months)	Late Lactation (3 Months- Weaning)
Lucerne Chaff	1kg	2kg	2kg	2kg
Oats	1.7kg	2.5kg	6kg	3kg
Meadow Hay	3kg	Ad Lib	Ad Lib	4kg (2 Biscuits)
Lucerne Hay	2kg (1 Biscuit)	-	-	-
<b>Supplements:</b>				
Ranvet 500 Plus	300g	600g	600g	600g
Racing Oil	100mL	100mL	100mL	100mL
Aminovite Plus	30g	60g	60g	60g

Note; Ad lib Meadow hay consumption of 4kg/day has been calculated according to the minimum daily roughage requirements of 1% bodyweight.

### Energetic Requirements of Broodmares

It must be considered that for the pregnant broodmare, energy will be used for not only maintenance of bodily functions, but will also be used for the developing foetus and associated mammary and placental tissues.

The energy requirement of the broodmare in early gestation is similar to that of a resting horse, as approximately 80% of foal growth occurs in the last four months of pregnancy. From the fifth month of gestation, the broodmare's energetic, protein, vitamin and mineral requirements will increase significantly and during early lactation the broodmare's energetic requirements will increase further due to the onset of milk production for the suckling foal.

### Protein Requirements for the Reproduction & Lactation

During the last three months of gestation, crude protein requirements of the broodmare increase and will significantly increase comparatively during the first three months of lactation due to both milk protein content and milk volume peaking during this period. As a result, the intake of daily protein required is elevated during this period.

Not only is the provision of crude protein important, it is also crucial to ensure that the lactating broodmare's diet contains optimal levels of the essential amino acids (building blocks of high quality protein) lysine and methionine, as these are required in high amount by the growing foal. Studies have shown that mares fed high quality protein containing lysine and methionine prior to and following foaling produced milk with higher protein content during the first month of foaling compared to mares that were not supplemented with essential amino acids. Furthermore, foals from supplemented mares showed significantly higher growth rates during the first seven weeks of life compared to foals from non-supplemented mares.

### Mineral Requirements for Sound Development & Growth (Copper & Zinc)

The supplementation of optimal amounts of the minerals copper and zinc during the last trimester of gestation has been advocated by many researchers. Studies investigating supplementation of copper and zinc during this period describe reductions in the incidence of osteochondritis dissecans (OCD), physitis, angular/flexural and cartilage defects of the limb. Furthermore, milk produced from lactating mares contains low levels of these nutrients and research has shown that supplementing the lactating mare's diet does not increase the trace mineral content of the milk. Therefore, trace mineral supplementation of the late pregnant mare is vitally important, as the foetus stores nutrients such as copper in the liver for use during the first few months after birth. Ideally a zinc: copper ratio of 2.5-4:1 should be formulated in the provided ration.

### **Mineral Requirements for Sound Development & Growth (Calcium & Phosphorus)**

Adequate amounts of calcium and phosphorus must be available for bone formation to occur. In the absence of adequate quantities of calcium or phosphorus, endochondral cartilage becomes thickened, bone density and growth decrease and skeletal disease may occur. The ration must not only contain adequate amounts of calcium and phosphorus, the broodmare must be able to absorb and utilise these nutrients as a sufficient excess of either mineral will decrease the absorption of the other.