

~Ranvet Suggested Broodmare Ration~

Suggested Growing Ration (Daily/Per Horse)

Feed Type	Creep Feeding	Weanling 6 Months (220kg)	Weanling 9 Months (275kg)	Weanling 12 Months (310kg)
Lucerne Chaff	1kg	1.5kg	1.5kg	1kg
Oats	1.5kg	2.75kg	3.8kg	4kg
Lucerne Hay	2kg (1 Biscuit)	3kg (1.5 Biscuits)	3.5kg (1.5 Biscuits)	4kg (2 Biscuits)
Supplements:				
Ranvet 500 Plus	300g	500g	600g	600g
Racing Oil	-	150mL	150mL	150mL
Ration Balancer or Aminovite Plus	30g	30g	30g	30g

Energetic Requirements of Foals

Growing foals have varying energy requirements according to their developmental stage. However, excessive energy provision has been attributed to significantly increasing the risk of skeletal disease. Conversely, the provision of insufficient energy will result in reduced growth rate, which is also unfavourable.

The daily energy requirement of a growing foal is influenced by various factors such as;

- Rate of growth (which will be different between breeds)
- Genetics (which may be different within breeds)
- Environment

Grain Feeding

The provision of starch (common in energy sources such as cereal grains) should be carefully monitored in the growing horse. Although required to support growth rates and ensure adequate energy provision, there is a cascade of unfavourable events, which occur following a high starch based meal. This cascade involves the release of hormones; Insulin, insulin growth factor 1 (IGF1), Growth Hormone (GH) and Thyroxine, with current research demonstrating the chronic release of these hormones in young horses being provided with high starch-based rations. This chronic hormone release may adversely affect the maturation of cartilage and bone development in growing horses thereby resulting in an increased incidence of Developmental Orthopaedic Disease (DOD).

Mineral Requirements for Sound Development & Growth (Calcium, Phosphorus, Copper & Zinc)

There are many essential nutrients in the growing foal ration and studies have shown that there is a strong correlation between the occurrence of skeletal disease in foals and weanlings and reduced amounts of calcium, phosphorus, copper and zinc. Research has shown that the incidence of skeletal disease decreases significantly when these minerals (particularly copper) were increased to optimal levels in the diet. In further support of this research, studies have shown that following optimal copper and zinc supplementation to the mare in the last trimester, reductions in the incidence of osteochondritis dissecans (OCD), phytitis, angular/flexural and cartilage defects of the limb in the foal have been reported.

Adequate amounts of calcium and phosphorus must also 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 foal/weanling must be able to absorb and utilise these nutrients effectively, as a sufficient excess of either mineral will decrease the absorption of the other. An optimal ratio of calcium: phosphorus (Ca:P) in the growing horses diet is between 1.8-3:1 outside of which alteration in endochondral ossification, resulting in skeletal disease may occur.