



## BreedPlus information 2018

Our BreedPlus formula has been specifically designed for breeding stock. Broodmares, breeding stallions, foals and yearlings. This formula is designed to support the growth and development of the foetus and young horse, the mare through her pregnancy and lactation stages as well as the servicing stallion.

### Calcium and Phosphorous

Calcium and phosphorous are both essential for optimal growth and development of the musculoskeletal system. We have specifically used a 2:1 ratio of Ca:P to meet the requirements of the growing foetus to ensure they are supported through their growing years. If there is an unbalanced mineral ratio and phosphorous is higher than calcium, this can limit the absorption of calcium. Resulting in impaired growth and skeletal malformations, hence why it is vital to provide this mineral balance, to optimise healthy growth in foals.

### Vitamin A

Vitamin A is required for the development and regeneration of new cells. It is vital in the development of the foetus and we have included this at appropriate levels for correct foetal and foal growth, as deficiencies have resulted in limited growth rates and patterns. In addition to general growth vitamin A is essential for a sound development of the eye; specifically, in the retina. Severe deficiencies have also been found to lead to decreased sperm count and motility.

### Folate

Folate is vital for DNA synthesis and plays a critical role in cell division, like Vitamin A. The increased level in this formula, assists in supporting healthy cellular development of the foetus. Studies have found a reduction in folate levels in the third trimester and even more so through lactation, where there is an increased need to support the growing foal.



### Dose rates:

300kg pony: 12.5g (2/3rds large level scoop)

500kg horse: 25.5g (1 and ½ large level scoops)

600+kg horse: 34g (2 large level scoops)

Feeding Instructions: Mix well into slightly damp feed.

## Vitamin D

Vitamin D is essential for mineralisation of bone tissue and ensuring the capacity of bone mass has been met, by allowing calcium to enter the cells. It is also an essential nutrient in development of the immune cells for a robust immune system and is therefore a crucial nutrient for the developmental years. The storage of Vitamin D is mainly in the liver cells; hence the increased importance of Milk Thistle as an addition to keep the liver cells healthy.

## Zinc

As well as being an essential nutrient in spermiogenesis it is also a key mineral in growth of new cells and tissue and a cofactor in many reactions of the body. Therefore, not only is it necessary to replenish stores in stallions and increase sperm count but it is also crucial for the growing horse. In addition, it plays a significant role in the cell mediated immune response, the prime time for immune system development occurs in the early years of the horse, hence the importance to support their immunity through these years.

## Milk Thistle

A new feature of the BreedPlus formula and the only herbal extract added to the mix. As well as being one of the few herbs that is safe to use throughout pregnancy and lactation, it has an array of actions. Mainly known for its liver protective effects, in reproducing horses it enables sufficient detoxification of waste products and toxins and increases the effectiveness of antioxidants and anti-inflammatory mediators. Especially targeted for stallions and broodmares to significantly reduce the toxin load and therefore may increase fertility. In addition, as the name suggests, Milk Thistle is a galactagogue meaning it promotes milk production, which is important for the lactating mare.

## BioEquus

Our symbiotic formula, containing both pre and probiotics, is essential for providing a strong and healthy microbial balance in the digestive tract of the mare for her to pass on to the foal. Promoting microbiome balance, the formula has a key role in developing a robust immune system, digestive tract and healthy brain development.

(More information can be found on the BioEquus information sheet).

## References:

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## Nutritionals BreedPlus

Tricalcium Phosphate	299000	mg/kg
Trimagnesium Phosphate	30000	mg/kg
Monopotassium Phosphate	6000	mg/kg
Potassium Chloride	6000	mg/kg
Sodium Sulphate	6000	mg/kg
Monosodium Phosphate	6000	mg/kg
Calcium Sulphate	2000	mg/kg
Iron Phosphate (16-20% active iron)	7000	mg/kg
Zinc Sulphate	40000	mg/kg
Silica	2000	mg/kg

### MAJOR MINERALS

Calcium	119.0973	g/kg
Phosphorus	72.99854	g/kg
Sodium	4.38405	g/kg
Chloride	2.93256	g/kg
Potassium	14.70535	g/kg
Magnesium	6.505725	g/kg

### TRACE MINERALS

Zinc	14408.943	mg/kg
Copper	3200	mg/kg
Selenium	100	mg/kg
Iodine	246.5	mg/kg
Manganese	0.5508	mg/kg
Iron	1668.5292	mg/kg
Chromium	0.2295	mg/kg
Silica	1996	mg/kg

### VITAMINS

Vitamin A	1070352	IU/kg
Vitamin B1 (Thiamine)	11.892058	mg/kg
Vitamin B2 (Riboflavin)	3.9849	mg/kg
Vitamin B3 (Niacin)	33.9265	mg/kg
Vitamin B5 (Pantothenic Acid)	1.733	mg/kg
Vitamin B6 (Pyridoxine)	2.295	mg/kg
Vitamin C	14970	mg/kg
Vitamin D	204562	IU/kg
Vitamin E	40229.116	IU/kg
Folic Acid	0.918	mg/kg
Choline	7.975	mg/kg

### AMINO ACIDS

Lysine	11.621414	g/kg
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Lysine	11.621414	g/kg
Methionine	2.83617	g/kg
Leucine	13.579528	g/kg
Isoleucine	8.576544	g/kg
Cystine	2.858848	g/kg
Phenylalanine	9.291256	g/kg
Tyrosine	6.968442	g/kg
Threonine	7.325798	g/kg
Tryptophan	2.144136	g/kg
Valine	3.752238	g/kg
Arginine	13.758206	g/kg
Histidine	0.89339	g/kg

### FATTY ACIDS

Linolenic Acid (Omega 3)	3.4864	%
Linoleic Acid (Omega 6)	24.44838	%
Oleic Acid (Omega 9)	8.84674	%

BioEquus & Milk Thistle