**Sassy Mare Plus**

In this article we will look at the various ingredients included in Premier Performance’s Sassy Mare Plus supplement. Understanding what the ingredients are and what they may do can be of huge benefit when deciding on which supplement to feed. As you will see our Sassy Mare supplement has a variety of ingredients to support your mare’s hormone balance.

**Reproduction and behaviour in the mare**

Difficult, moody, temperamental are all words that some use to describe their mare when her behaviour is inappropriate or unpredictable. You mare’s behaviour can be affected by her reproductive cycle. The mare is known as a seasonal breeder that has a series of ovarian activity, known as oestrous cycles, during the breeding season. The mare is a ‘long day’ breeder in that the breeding season typically begins in early spring and ends in the autumn, which coincides with longer day lengths.

During oestrus (heat), oestrogen drives the final stages of follicle growth and development and helps the mare to be receptive to the stallion. A mare in heat will typically raise her tail, urinate repeatedly (and ‘winking’ her vulva), squealing at other horses and may become more distracted when handling and riding. She may also interact unpredictably with people and other horses. This behaviour is normal and usually last between 4 to 7 days, becoming more intense as she nears ovulation as more and more oestrogen is being produced.

Some mares only exhibit undesirable behavioural changes during their cycle. It is important to rule out any other reasons for your mare’s behaviour and speak with your vet. It can help to keep a diary of her cycle and behaviours. In mares with no health issues, nutrition can help to manage some of the undesirable behaviours and our Sassy Mare Plus supplement is packed full of key ingredients to support your mare.

**Raspberry Leaf**

Raspberry leaf is a supplement that contains phyto-progesterone and has also been reported to increase progesterone levels in women.

**Chaste Tree Berry (Agnus Castus)**

There are also a number of herbs that have been reported to increase progesterone levels in women; these include chasteberry, which has also been reported to decrease oestrogen levels as well as increasing progesterone levels in women1 and has long been used as a herbal remedy in many countries. This is an extract of the fruit and seeds of the chaste tree, which is also called *Vitex agnus-castus*. It’s important to note that chasteberry should not be fed to pregnant or lactating mares.

**Chia Seeds**

Chia seeds are high in fat with a rich source of omega fatty acids, amino acids and fibre. Omega-3 fatty acids have been shown to have beneficial effects on cardiovascular, inflammatory, neurological, reproductive and other functions have been reported in many species, including horses. Omega-3 fatty acids have been associated with increased progesterone in women2. Chia seeds are also a rich source of protein, including lysine and are a great source of many minerals, including calcium, phosphorus, magnesium, potassium, iron, zinc and copper. They are also a rich source of vitamin B.

**Flax seed**

Flax seed, also known as linseed, are small seeds containing high amount of oil and is known for producing a high shine to horse coats. They contain high levels of omega 3 fatty acids that have beneficial effects on cardiovascular, inflammatory, neurological, reproductive functions2. The also contain fibre, which helps support digestion, and are low in starch and sugar.

**Chamomile:** a gentle herb well-known for its calming properties and believed to reduce anxiety and promote a sense of calm

**Fenugreek**

Fenugreek is a herb that is commonly included in horse feeds and supplements as research has shown horses prefer this flavour over many others tested, including apple, carrot and mint. Fenugreek has also been reported to help with lowering blood sugar levels and has antioxidant properties3.

**Manganese Sulphate**

Manganese sulphate contains manganese, sulfur and oxygen. Manganese is used in the body to support connective tissues, bones, clotting factors and reproductive hormones.

**Thyme**

Thyme contains a number of ingredients that can support reproductive health, including vitamins A and C, copper, iron and manganese.

**Ginkgo**

Ginkgo is a herb from what is thought to be one of the oldest living trees on the planet. Ginkgo is reported to help circulation. Ginkgo has been reported to have reproductive benefits in humans and it’s effectiveness is further improved when fed alongside l-arginine4.

**L-Arginine**

L-arginine is an amino acid that is involved in several metabolic pathways in the body, as well as being used to build protein in the body and is also converted to nitric oxide (NO) in the body.

It is known as a semi-essential amino acid, in that the body normally produces it in adequate amounts, but supplementation may be required at times of poor nutrition, ill-health or exercise. L-arginine has also been reported to increase progesterone levels5.

**L-Tyrosine**

L-tyrosine is another amino acid that is included in some calming supplements and is a precursor for the neurotransmitter’s dopamine, adrenaline and noradrenaline. These factors play an important role in learning, memory, behaviour, attention and mood ref6. In humans, supplementing with tyrosine has been seen to improve stress-induced cognitive and behaviour deficits, particularly in relation to working memory and attention focussed tasks. Studies have shown a close correlation between some amino acids, like l-tyrosine, to be closely linked with the various stages of the reproductive cycle in animals and increase progesterone levels7.

**Black cohosh and dandelion root**

Black cohosh is reported to improve female hormone health and help with hormonal swings.

Dandelion root is packed with vitamins and minerals. It is a rich source of antioxidants and phytoestrogens.

**Milk thistle**

Milk thistle is a herb that contains silymarin and can help support the liver in healthy detoxification and oestrogen metabolism, which is the body’s ability to breakdown oestrogens and remove them from the body. Similar to Chasteberry, milk thistle should not be fed to pregnant or lactating mares.

**Vitamin D3**

Vitamin D3 plays a role in reproduction and is reported to increase follicle stimulating horses sensitivity and increase progesterone production8.

**Vitamins B6 and B12**

Vitamin B12 is considered essential for female reproductive health. Vitamin B6 is reported to balance oestrogen and progesterone levels9.

**References**

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