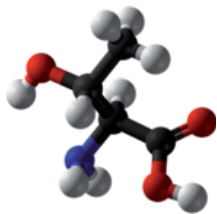


EQUISTRO®



Description: L-threonine is an essential amino acid. This means that it must be obtained through the diet in adequate quantities to meet the body's needs, because it is not synthesized by the horse's organism. L-threonine is obtained by the hydrolysis of protein by pancreatic enzymes during digestion. Horses can only use amino acids if all essential amino acids are present at sufficient levels. If one essential amino acid, such as L-threonine, is deficient, the horse's body will use it up and convert the excess of the remaining amino acids into carbon dioxide, which is exhaled, and to urea, which is excreted in the urine. L-threonine is considering like the 2nd (after lysine) or 3rd (after lysine and methionine) limiting amino acid, depending on publications.

Function: L-Threonine promotes normal growth by helping to maintain the proper protein balance in the body. L-Threonine also supports cardiovascular, liver, central nervous, and immune system function. Threonine is needed to create glycine and serine, two amino acids that are necessary for the production of collagen, elastin, and muscle tissue. Threonine helps keep connective tissues and

muscles throughout the body strong and elastic, including the heart, where it is found in significant amounts. It also helps build strong bones and tooth enamel, and may speed wound healing or recovery from injury. Threonine combines with the amino acids aspartic acid and methionine to help the liver with lipotropic function, or the digestion of fats and fatty acids. Without enough threonine in the body, fats could build up in the liver and ultimately cause liver failure. Threonine supports the immune system by aiding in the production of antibodies. **Sources:** For horses, L-threonine is found in plant proteins.

Requirements: Not established for horses. Horses usually acquire sufficient L-threonine from their diet.

Deficiency: The effects of essential amino acid deficiency are generally nonspecific, and many of the signs do not differ from the effects of partial or total caloric restriction. In general, the horse will have growth impairment, poor quality hair and hoof growth, weight loss, and inappetence. Milk production is decreased in lactating mares. L-threonine deficiency may also lead to digestion difficulties and liver function impairment.

Excess: Excess can't occur with a well-balanced diet. In case of excessive protein intake the owner will not be face only with an L-threonine excess but with a whole protein excess, leading to decreased performance, ammonia excretion and water consumption increase.

When problems may occur? During growth or heavy exercise periods, lack of threonine and more generally, proteins, can lead to underdevelopment and low performance.

L-THREONINE



Vétoquinol
Signe de Passion