

Product Overview

The original **PLUSVITAL RACING SYRUP** was first introduced in 1975. Our revised formulation now contains 30 key vitamins, minerals, trace elements and amino acids that play a vital role in equine nutrition. The intensive modern training programmes of racehorses require a diet that provides all the key nutrients to combat the stress and to maximise the horse's athletic potential.

While some of these nutrients come from the normal feed, additional supplementation may be required to meet recommended guidelines. Plusvital Racing Syrup is now one of the most complete multinutrient equine supplements available on the market.

Ingredient Summary

Ingredient	Purpose
Vitamins A and D	Bone growth and maintenance
B Vitamins	Food metabolism, energy and red blood cell production
Vitamin E	Anti-oxidant properties
Vitamin C	Anti-oxidant properties and collagen synthesis
Lysine, Methionine and Threonine	Repair and maintenance of muscle structure
Zinc	Carbohydrate and protein metabolism
Selenium	Antioxidant properties
Choline Chloride	Maintenance and integrity of cell membranes
Branched Chain Amino Acids	Muscle metabolism and repair

Key Ingredient Detail

Vitamins

VITAMIN A AND VITAMIN D are included for their role in supporting bone growth and maintenance. Vitamin D in particular manages the levels of **CALCIUM** in the horse by regulating its absorption and excretion.

VITAMIN E is the most well-known antioxidant for horses and is important for normal function of the muscular, immune and neurologic systems. Horses may be at risk from free radical build-up due to the increased workload in training, racing and competition. Vitamin E is normally derived from the horse's diet, particularly from fresh forages. However, supplementation may be required where the feed is not providing sufficient quantities.

VITAMIN C is an anti-oxidant that works with Vitamin E to reduce free radicals. Normally, it is produced in sufficient quantities given the presence of the enzyme, L-gulonolactone oxidase, in the liver. That said, horses under stress from training and competition may have depleted plasma levels of Vitamin C and supplementation may be required to support their immune function. Other functions where Vitamin C is needed include bone strength, antihistamine control, collagen synthesis as well as hormone synthesis.

B VITAMINS are a range of compounds including Thiamine (B1), Riboflavin (B2), Niacin (B3), Pantothenic Acid (B5), Pyridoxine (B6), Folic Acid (B9) and Cyanocobalamin (B12) that play a range of important roles in a horse's body including food metabolism and energy production, support of the nervous system as well as cell reproduction and growth. In particular, they are important for healthy red blood cell production. Typically, B vitamins are produced by flora in the horse's intestine or from fresh forage. However, horses that are under stress from exercise or the demands of performance may benefit from B vitamin supplementation.











ranched chain amino acids

immune support

Key Ingredient Detail

CHOLINE CHLORIDE is used by the body for a host of vital functions. Classified as a vitamin of the B complex. The principal function of this vitamin is to contribute methyl chemical groups to various cellular processes. Essential for building and maintaining the structure of cells. Also has a role in fat metabolism within the liver promoting utilisation and transport of fats and preventing their accumulation in the liver.

Minerals

ZINC (ZN) is a micro mineral that is involved in the metabolism of carbohydrates and proteins as well as in the development of healthy hooves and skin in the horse. Zinc has also been added to Plusvital Racing Syrup for its anti-oxidant effect in protecting cell membrane.

SELENIUM (SE) is a mineral that plays an important role in reducing free radicals. It is a component of the enzyme glutathione peroxidase, which prevents free radical peroxides from attacking cellular membranes.

TRACE ELEMENTS such as IRON, IODINE, COPPER and MANGANESE are included at NRC recommended levels whilst taking into account the typical diets of racing horses.

- IRON is contained in hemoglobin, myoglobin and many enzyme systems. It has an integral role in oxygen transport and cellular respiration.
- IODINE is necessary for the synthesis of thyroid hormones that regulate basal metabolism.
- COPPER is essential for several enzymes involved in the synthesis of elastic connective tissue, preservation of mitochondria and melanin synthesis.
- MANGANESE is essential for carbohydrate and lipid metabolism and for synthesis of chondroitin sulphate in cartilage.

Other Ingredients

ESSENTIAL AMINO ACIDS are important for growth and bone development. Protein is essential for the proper growth of tissue, muscles and ligaments which all play a part in correct skeletal development. Amino acids are the building blocks used to create proteins and are ultimately used to build muscle and other cells within the horse's body. In order to build muscle, it is important that the horse has sufficient crude protein and amino acids. Three essential amino acids - Lysine, Methionine and Threonine - have been included in Racing Syrup at appropriate levels to match the demands of the racing horse.

BRANCHED CHAIN AMINO ACIDS including Leucine, Isoleucine and Valine. They account for 35% of all the essential amino acids in muscle proteins. These promote protein synthesis and turnover and thus aid in muscle recovery. Additionally they promote the metabolism of glucose and aid in the reduction of lactic acid build up post recovery.

Key Ingredient Dosage

Nutrients		Per 60ml Dose
Vitamins	Vitamin A	40,000 IU
	Vitamin D3	5,200 IU
	Vitamin E	1,000mg
	Vitamin B1	62.5mg
	Vitamin B2	60mg
	Vitamin B6	26mg
	VitaminB12	240µg
	Biotin	1mg
	Pantothenic Acid	50mg
	Folic Acid	15mg
	Niacin (Nicotinic Acid)	120mg
	Choline Chloride	120mg
	Vitamin C	300mg
Trace Elements	E1 Iron	90mg
	E2 lodine	3.0mg
	E4 Copper	80mg
	E5 Manganese	100mg
	E6 Zinc	150mg
	Selenium	0.25mg



PLUSVITAL RACING SYRUP IS NOW AVAILABLE AT:



Amino Acids	Lysine	500mg
	Methionine	500mg
	Threonine	144mg
	Leucine	96mg
	Isoleucine	48mg
	Valine	48mg
Minerals	Calcium	180mg
	Phosphorous	18mg
	Sodium	924mg
	Potassium	504mg
	Magnesium	294mg







