Vitamin E, a fat-soluble cellular antioxidant, is located within the membranes both inside and surrounding the cell, strengthening the cells’ protection against free radical attack. It may also protect the chemical bonds of beta-carotene from being oxidized.

Vitamin E deficiency syndromes in laboratory and domestic animals have been recognized since the 1920’s and can be manifested in many different ways, including reproductive failure, skeletal muscle necrosis, cardiomyopathy, vascular disorders and central nervous system disorders.

In addition, an anemia associated with vitamin E deficiency was initially described in monkeys.\(^{26}\)

Dolensek\(^{21}\) reports in several species of animals kept at the New York Zoological Park, pathological conditions consistent with vitamin E deficiency have been observed during the past years, including cardiomyopathy in gelada baboons. Subsequent supplementation of diets of different mammals with vitamin E has resulted in increased plasma and tissue levels of the vitamin.

Concurrently, the occurrence of certain pathological conditions previously observed, declined.

Determining the value of vitamin E in a primate diet is only the beginning to unleashing its nutritional power. Caregivers must also examine dietary sources to insure the vitamin E is natural.

What’s the Difference?

Early animal studies showed natural vitamin E to be about 36 percent more potent than the synthetic, milligram for milligram. The international unit (IU) standard was developed to account for these differences.

Recent studies on human subjects, by Burton and Acuff, show that 400 IU of natural and 400 IU of synthetic vitamin E are not equivalent. Extrapolating from these studies, a person would need approximately 664 IU of synthetic E to get the equivalent of 400 IU of natural.

Natural vitamin E also appears to be better for other reasons. According to research by Angelo Azzi\(^{22}\), natural vitamin E influences activation of certain genes and enzymes that protect against heart disease. Synthetic vitamin E does not.

When checking ingredients, read the fine print. Natural vitamin E is identified by its chemical name, d-alpha tocopherol and is present in all MAZURI\(^{\circledR}\) Primate Diets.