

Monthly Newsletter

May 2013



Intermed XP

Summertime--a time for animals to graze and enjoy the meadows -- is almost upon us!

Now may be the moment for a few timely words about **antioxidants**. Here's a term to make us think of oxygen--so very essential to life! Let's recall that the oxidation of carbohydrates, proteins and fats is necessary for the production of energy to insure and maintain a certain level of work and exercise. In this process of oxidation, free radicals are formed daily.

Free radicals play an important role in the elimination of bacteria and viruses. Thus, they help protect the immune system of animals like horses and camels etc.

Also noteworthy is that the level of free radical formation can sometimes increase to such an extent that the destruction of normal and sane cells follows. Remember, a free radical is an unbalanced molecule missing an electron. To remedy this situation, the free radical will pilfer or steal an electron from a *sane* cell. This sets in motion a reaction from cell to cell, attacking healthy tissue in animals. With the addition of some antioxidants in their diet, animals receive protection from this weakening process.

Antioxidants are meant to counter the reaction of cell destruction, by offering their own electron to the free radical. This association, however, makes antioxidants themselves very unstable. To block this perverse effect, the animal body has to have additional antioxidants available which halt the destruction of cells.

Glance at the table below for some examples of antioxidants found in supplements and also a list of problems which antioxidants may help solve. See Horse Journal article- May 2013:

Antioxydants in Supplements	Problems solved by Antioxidants	
Beta-Carotene	Arthritis	Ulcers
Coenzyme Q10 (CoQ10)	Stress	Diarrhea
Grape Seed Extract	Pain	Aging
L-Carnitine	Insulin Resistance	Behavioral changes
Vitamin E	Equine Cushing's Disease	Hair loss
Vitamin C	Infections	Allergies
Selenium, Manganese, Cooper, Lutein Zinc, Quercitin, Lipoic Acid, Resveratrol, Green Tea Extr, Curcumi, Lycopene	Inflammations/Tendons/ligaments	Cancer

The Editor