Beautiful Dragons Vitamin B Complex ~ Ingredients

Thiamin (B-1) - This nutrient plays a critical role in maintaining the central nervous system. Adequate thiamin levels can dramatically affect physiological well-being. Conversely, inadequate levels of B-1 can lead to eye weakness and loss of physical coordination. Vitamin B-1 is required for the production of hydrochloric acid, for forming blood cells, and for maintaining healthy circulation. It also plays a key role in converting carbohydrates into energy, and in maintaining good muscle tone of the digestive system. A chronic deficiency of thiamin will lead to damages of the central nervous system. Thiamin levels can be affected in combination with antibiotics and sulfa drugs like Albon. This nutrient is water-soluble, meaning that the excess is excreted in the feces and is not kept in the body.

Riboflavin (B-2) - Vitamin B2 is an easily absorbed, water-soluble nutrient with a key role in maintaining health. Like the other B vitamins, riboflavin supports energy production by aiding in the metabolization of fats, carbohydrates, and proteins. Vitamin B-2 is also required for red blood cell formation, respiration, antibody production, and for regulating growth and reproduction. Riboflavin is known to increase energy levels and aid in boosting immune system functions. It also plays a key role in maintaining healthy scales, skin, and nails. A deficiency of vitamin B-2 may be indicated by the appearance of skin and shedding problems. Gravid females need Vitamin B-2, as it is critical for the proper growth and development of the eggs.

Niacin (B-3) - Vitamin B3 is an essential nutrient required by all animals for the proper metabolism of carbohydrates, fats, and proteins, as well as for the production of hydrochloric acid for digestion. B-3 also supports proper blood circulation, healthy skin and scales. It also aids in the functioning of the central nervous system because of its role in supporting the higher functions of the brain and cognition. A deficiency in vitamin B-3 can result in a disorder characterized by malfunctioning of the nervous system, diarrhea, skin and shedding problems.

Pantothenic Acid (B-5) - This is a water-soluble B vitamin that cannot be stored in the body, and must be replaced daily, either from diet or from supplements. It's most important function is as an essential component in the production of coenzyme A, a vital catalyst that is required for the conversion of carbohydrates, fats, and protein into energy. Pantothenic acid is also referred to as an anti-stress vitamin due to its vital role in the formation of various adrenal hormones, steroids, and cortisone, as well as contributing to the production of important brain neurotransmitters. B-5 is required for the production of cholesterol, bile, vitamin D, red blood cells, and antibodies. Lack of B-5 can lead to a variety of symptoms including skin disorders, digestive problems, and muscle cramps.

Pyridoxine (B-6) - This is another water-soluble nutrient that cannot be stored in the body, but must be obtained daily from either dietary sources or supplements. Vitamin B-6 is an important nutrient that supports more vital functions than any other vitamin. This is due to its role as a coenzyme involved in the metabolism of carbohydrates, fats, and proteins. Vitamin B-6 is also responsible for the manufacture of hormones, red blood cells, neurotransmitters, and enzymes. Vitamin B-6 is required for the production of serotonin, a brain neurotransmitter that controls appetite, sleep patterns, and sensitivity to pain. A deficiency in B-6 can quickly lead to a profound malfunctioning of the central nervous system. Among its many benefits, B-6 is recognized for helping to maintain healthy immune system functions.

Vitamin B-12 - Is a water-soluble compound of the B vitamin family with a unique difference. Unlike the other B vitamins, which cannot be stored, but which must be replaced daily, vitamin B-12 can be stored for long periods in the liver and kidneys. Vitamin B-12 is a particularly important coenzyme that is required for the proper synthesis of DNA, which controls the healthy formation of new cells throughout the body. B-12 prevents nerve damage by contributing to the formation of nerve cells insulators. B-12 also maintains fertility, and helps promote normal growth and development. Since B-12 can be easily stored in the reptile's body, and is only required in tiny amounts, symptoms of severe deficiency usually take time to appear. When symptoms do surface, it is likely that deficiency was due to digestive disorders or malabsorption rather than to poor diet. The source of B-12 in herbivorous reptiles is not known, since B-12 only comes from animal sources. Due to its role in healthy cell formation, a deficiency of B-12 disrupts the formation of red blood cells, leading to reduced numbers of poorly formed red cells. Symptoms include loss of appetite and neurological disorders. B-12 deficiency can lead to improper formation of nerve cells, resulting in irreversible neurological damage.

Cobalt - Cobalt is stored in the red blood cells and the plasma, as well as in the liver, and kidneys. As part of vitamin B-12, cobalt is essential to red blood cell formation and is also helpful to other cells. High dosage may affect the thyroid or cause overproduction of red blood cells, thickened blood, and increased activity in the bone marrow. Deficiency of cobalt is not really a concern with enough vitamin B-12. As cobalt deficiency leads to decreased availability of B-12, there is an increase of many symptoms and problems related to B-12 deficiency, particularly nerve damage.

Copper - Copper is important as a catalyst in the formation of hemoglobin, the oxygen-carrying molecule. It helps oxidize vitamin C, forms collagen, helps the cross-linking of collagen fibers, supports the healing process of tissues, and aids in proper bone formation. An excess amount of copper may increase collagen and lead to stiffer and less flexible tissues. Copper enzymes play a role in oxygen-free radical metabolism, and in this way have a mild anti-inflammatory effect. Copper also functions in certain amino acid conversions. Copper also contributes to the integrity of the myelin sheaths covering nerves, and aids the conversion of tyrosine to the pigment melanin, which gives scales and skin their coloring. Low copper levels may reduce thyroid functions. Copper, like most metals, is a conductor of electricity; and helps the nervous system function. It also helps control levels of histamine. Weakened immunity, skeletal defects related to bone demineralization, and poor nerve conductivity, might all be a result of copper depletions. Copper deficiency results in several abnormalities of the immune system, such as reduced cellular immune response, reduced activity of white blood cells, and an increased infection rate.

Iron - The primary function of iron is the formation of hemoglobin. Iron is the central core of the hemoglobin molecule, which is the essential oxygen-carrying component of the red blood cell (RBC). In combination with protein, iron is carried in the blood to the bone marrow, where, with the help of copper, it forms hemoglobin. Hemoglobin carries the oxygen molecules throughout the body. Red blood cells pick up oxygen from the lungs and distribute it to the rest of the tissues, all of which need oxygen to survive. Iron deficiency occurs fairly commonly when a rapid growth period increases iron needs, which are often not met with additional dietary intake. Females need more iron than males. Symptoms of iron deficiency are weight loss from decreased appetite, loss of energy, lowered immunity.

(Info above was gathered from several sites, including Anapsid.org and Phelsumania.com.)