

# Cyto B2

## Medical Food

**A tasteless, microencapsulated, powdered form of Riboflavin for individuals over the age of 1 year with Mitochondrial Cytopathies or Glutaric Acidemia Type II.**

A Medical Food for the dietary management of Mitochondrial Cytopathies or Glutaric Acidemia. Not for the general population of consumers.

A tasteless, microencapsulated, powdered form of Riboflavin (Vitamin B2)

Allergen-free for egg, milk, fish, crustacean, soy, gluten, corn, tree nuts, and peanut.

**Net weight: 100 g (3.3 oz)**

### Product Form

- Powder

### Indications

- Diagnosed Mitochondrial Disorders
- Glutaric Acidemia Type II

### Advantages

- Tasteless – promotes better compliance
- Does not stain

# Cyto B7

**Cyto B7** is a Medical Food for the dietary management of Mitochondrial Cytopathies. Not for the general population of consumers.

An unflavored, concentrated liquid form of Biotin for individuals over the age of 1 year.

### Product Form

- Liquid

## **Indications**

- Diagnosed Mitochondrial Disorders
- Biotinidase Deficiency

## **Advantages**

- Highly concentrated form allowing small volume serving sizes

## **Serving Suggestions**

- Add Cyto B7 to water, juice, milk or any other beverage

**Biotin** is a B vitamin that is sometimes referred to as vitamin H or vitamin B7. It is one of the eight vitamins in the vitamin B-complex. The B vitamins, in general, help in promoting healthy nerves, skin, eyes, hair, liver and a healthy mouth.

Most diets contain foods that supply more than enough biotin to keep a person healthy. Biotin can be obtained 2 ways:

- From food – Biotin is naturally present in many foods, such as meats, saltwater fish, cooked egg yolks, milk, poultry, legumes, whole grains and brewer's yeast.
- From our intestine – Biotin is one of the few vitamins that can be made the intestine by intestinal bacteria.

However, there are medical conditions (Biotinidase Deficiency and Mitochondrial Disease) where supplemental Biotin is clinically necessary as food or intestinal sources are inadequate.

## **Biotin is Important in Metabolism and Energy Production**

Biotin assists in the metabolism of carbohydrates, fats and proteins by helping to activate certain critical enzymes called carboxylases. As a coenzyme, it is involved in how the cell creates new glucose from other sources. It also helps in regulating fat metabolism and how much fat is broken down to form energy. Finally it also assists in how the cell breaks down certain building blocks of protein to create molecules for energy production.

## **Metabolic disorders – Biotinidase Deficiency**

Biotinidase deficiency (BTD) is not due to inadequate biotin. BTD is a metabolic disorder that is the result of a low concentration, or complete lack, of the enzyme, biotinidase. Biotinidase deficiency is an inherited disorder in which the body is not able to properly process the vitamin, biotin. Biotin is an essential vitamin to the metabolic process and biotinidase, among its other functions, allows biotin to become available for use by the body. Mutations in the BTD gene cause biotinidase deficiency.

Biochemical and clinical manifestation includes: ketolactic acidosis, organic aciduria, hyperammonemia, skin rash, feeding problems, hypotonia, seizures, developmental delay, alopecia and coma.

## Sol Fiber

A Medical Food for use in the dietary management of constipation, hard stools and irregularity. Not for the general population of consumers.

A digestion-resistant, soluble, well-tolerated 90% fiber powder to help eliminate the use of laxatives, stool softeners and enemas.

Allergen tested at No Detectable Level (NDL) for gluten, egg, soy, wheat, fish, shellfish, walnut, almond and peanut. GMO-free.

Derived from corn.