

RU-21 INGREDIENTS

To assist the body in processing alcohol, ingredients in RU-21 enable certain biochemical reactions that enhance enzyme functions of the body, while oxygenating the cells, keeping the energy levels up and metabolic pathways running properly.

Supplement Facts

Serving size: 2 tablets Servings Per Container: 10		
Amount Per Serving	% DV	
Vitamin C	60 mg	100 %
Vitamin B2	8.50 mg	500 %
Vitamin B6	10 mg	500 %
L-Glutamic Acid HCL	250 mg	*
Succinic Acid	200 mg	*
Fumaric Acid	75 mg	*
L-Cysteine	30 mg	*
Alpha Lipoic Acid	20 mg	*
* Daily Value not established		

Other Ingredients May Contain: Glucose (as Dextrose Monohydrate) Croscarmellose Sodium, Magnesium Stearate, Silicon Dioxide, Modified Cellulose, Food Glaze, Titanium Dioxide, Water.

RU-21 is a dietary supplement.

All ingredients are considered GRAS (Generally Regarded As Safe) by the USFDA.

Vitamin C

Vitamin C activates anti-oxidant systems of the central nervous system, liver and hormone-active tissues and supports the adrenal gland cortex, which produces anti-stress hormones.

Succinic and Fumaric Acids

Succinic and Fumaric acids are substrates which are crucial to alcohol metabolism, and important in the Krebs cycle. Succinic and Fumaric acids boost the aerobic oxidation process in mitochondria by activating the second half-cycle of tricarboxylic acids. Succinic substrate, which is independent of NADH-dehydrogenase, prevents the toxic byproducts of ethanol metabolism from causing hypoxia, which often results from the accumulation of suboxidized metabolites, and from impeding NADH oxidation in the respiratory chain of cells.

L-Glutamic Acid HCL

L-Glutamic Acid HCL speeds up the mitochondria-cytosolic malate-aspartate shuttle, which plays a key role in the course of toxic byproduct development. It also speeds up the succinate oxidation process (by preventing oxalic and acetic inhibition of succinate dehydrogenase). In addition, it transforms itself into a-ketoglutarate during a rapid oxidation in the Krebs cycle. The proper concentration of L-Glutamic Acid HCL positively influences glutamate and GAMC synapses in the brain, improving coordination and inhibition processes.

Vitamin B2

Vitamin B2 is essential for the metabolism of carbohydrates (to produce energy) and amino acids. It also helps keep mucous membranes (such as those lining the mouth) healthy. Riboflavin is further needed to activate vitamin B6 (pyridoxine), helps to create niacin and assists the adrenal gland.

Vitamin B6

Vitamin B6 is needed for the synthesis of neurotransmitters such as serotonin and dopamine. These neurotransmitters are required for normal nerve cell communication. Vitamin B6 increases oxygenation of tissues by helping the body produce hemoglobin, which is responsible for carrying oxygen to tissues within red blood cells.

L-cysteine

L-cysteine is an important amino acid that supports numerous functions in your body. Persons with compromised immune function (the young, the elderly and people exposed to pollutants) can benefit from L-cysteine supplementation due to its immuno-protective and antioxidative effects. L-cysteine can enhance immune system function and maintain optimal health. L-cysteine supplementation may be most effective when used in conjunction with vitamin E, vitamin C, vitamin B6 and calcium and selenium.

Alpha Lipoic Acid

Alpha Lipoic Acid serves as a coenzyme in the Krebs cycle and in the production of cellular energy. It neutralizes free radicals in both the fatty and watery regions of cells. Alpha-Lipoic Acid also plays an important role in the synergism of antioxidants. It directly recycles and extends the metabolic lifespans of vitamin C, glutathione, and coenzyme Q10, and it indirectly renews vitamin E. Alpha Lipoic Acid is widely used as a therapeutic agent in a number of conditions in which oxidative damage has been implicated.

Dextrose / Glucose

Dextrose slows down the ethanol oxidation process into the toxic byproducts of ethanol. Dextrose rapidly oxidizes in cytosol of liver cells, and uses the same cytosol NAD pool used by ethanol to convert into the toxic byproducts, thus creating a deficit of cytosol NAD needed for the reaction and slowing the conversion process.