



# Nrf2 Detox

Introduced 2016

# What Is It?

Nrf2 Detox contains a combination of glutathione, sulforaphane from broccoli sprout concentrate, and resveratrol to promote detoxification and antioxidant defenses. This formula is designed to target Nrf2 (nuclear factor erythroid 2-related factor 2), a transcription factor that acts as a genomic "switch" and master inducer of more than 1,000 genes throughout the body, helping to protect against toxins, reactive metabolites, reactive oxygen species and environmental xenobiotics.\*

# Special Features

- Offers Setria glutathione, the only brand of glutathione with research showing absorption\*
- · Contains 1,000 mcg sulforaphane from broccoli, one of the most powerful activators of phase II enzyme function; also supports antoxidant activity (i.e. SOD)\*
- Includes resveratrol to support cellular function and healthy genomic expression\*
- Vegetarian

## Uses For Nrf2 Detox

Detoxification: Cruciferous vegetables of the brassica family have long been recognized for their ability to support detoxification thereby maintaining healthy cells and tissues. Cruciferous vegetables, like broccoli, cauliflower, Brussels sprouts and kale, are the richest sources of glucosinolates, which are considered to be the most bioactive constituents. Glucosinolates are converted in the body to isothiocyanates after they are ingested and hydrolyzed. The isothiocyanate sulforaphane is one of the most powerful activators of phase II enzyme function in the liver, supporting toxin elimination. Sulforaphane and resveratrol promote the activity of nuclear factor erythroid 2-related factor 2 (Nrf2), a transcription factor that supports robust, long-lasting expression of numerous genes responsible for detoxification and protection against oxidative stress. Among these genes are glutathione peroxidase, superoxide dismutase and various phase II enzymes, such as glutathione sulfotransferases. Nrf2 also supports expression of glutathione glutamylcysteinyl ligase, which is responsible for a critical step in the biosynthesis of glutathione,

a vital component of phase II detoxification. The highest concentration of glutathione is found in the liver, where it offers antioxidant support, protects tissue and maintains detoxification.\*

Cellular Health: Glutathione is also a vital component of cellular antioxidant systems. Found in virtually every cell of the body, glutathione plays essential roles in protein synthesis, synthesis and repair of DNA, enzyme function, transport, and cell maturation. Optimal levels of glutathione have been associated with physical and mental health. In a randomized clinical trial, supplementation with 250 and 1,000 mg of Setria® glutathione per day increased glutathione levels in the blood after one, three and six months. At six months, mean glutathione levels in the high-dose group increased 30-35% in erythrocytes, plasma and lymphocytes, and 260% in buccal cells (P<0.05). In the low-dose group, mean glutathione levels increased 17% and 29% in blood and erythrocytes, respectively (P<0.05). Both glutathione dose groups showed support for antioxidant defenses, indicated by decreases in the oxidized-toreduced-glutathione ratio in whole blood after six months.\*

#### What Is The Source?

Broccoli sprout concentrate is a 20:1 extract derived from Brassica oleracea italica and standardized to contain a minimum of 1,000 mcg sulforaphane. Glutathione is sourced from corn glucose fermentation. Resveratrol is synthetic.

### Recommendations

Pure Encapsulations® recommends 1 capsule, 1-3 times daily, with

# Are There Any Potential Side Effects Or Precautions?

If pregnant or lactating, consult your physician before taking this product. It is recommended to use resveratrol cautiously in patients with hormonal disorders and those using estrogen therapy, as resveratrol may act as either an estrogen agonist or estrogen antagonist. Consult your physician for more information.

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# Are There Any Potential Drug Interactions?

Some studies have reported that broccoli sprout extract can affect the way that the liver breaks down medications metabolized by the cytochrome P450 system, altering the effects of these medications and possibly the dose needed for treatment. Resveratrol and broccoli sprout extract may react with blood thinning medications. Consult your physician for more information.

#### Nrf2 Detox

each vegetarian capsule contains 🦞 v 0
Broccoli (Brassica oleracea italica) sprout concentrate250 mg (whole plant) (standardized to contain 1,000 mcg sulforaphane)
Setria® glutathione (reduced form)250 mg resVida® resveratrol (as trans-resveratrol)15 mg other ingredients: vegetarian capsule (cellulose, water)
1 capsule, 1-3 times daily, with meals.

