

Antioxidant Support



CLINICAL APPLICATIONS

- Increases Antioxidant Protection
- Maintains Normal Inflammatory Balance
- Activates Nrf2, the Master Cellular Switch for Antioxidant Production
- Supports Cellular Longevity
- Enhances Mechanisms of Cellular Detoxification

This product is a unique combination of phytonutrients designed to enhance antioxidant potential by stimulating nuclear factor-erythroid-2-related factor 2 (Nrf2), a dynamic pathway known to increase the production of the body's most important cellular antioxidants. This unique combination of truebroc™, turmeric, andrographis, and resveratrol provides potent free radical scavenging potential, maintaining normal inflammatory balance, and induction of intracellular antioxidant production. These powerful phytochemicals are the basis of many "superfoods" and have extensive, peer-reviewed research supporting their dramatic effect on cell health and longevity.

Overview

Nrf2 is a transcription factor that regulates the antioxidant response of the body.¹ It is the primary cellular defense against the cytotoxic effects of oxidative stress.² This key protein is found inside a cell and is inactive until it is released by an Nrf2 activator. Once activated, Nrf2 migrates into the nucleus and binds to DNA at the location of the master antioxidant regulator, the antioxidant response element (ARE).³ Studies suggest Nrf2 plays an important role in supporting the activation of cellular antioxidant systems, as well as maintaining normal inflammatory balance.^{4,5} A number of fruit and vegetable compounds have been shown to activate Nrf2 and ARE, and increase antioxidant potential.⁶⁻⁹ It is believed that these compounds have a protective effect on the body, help maintain normal inflammatory balance, and induce cellular longevity.¹⁰

Broccoli Seed Extract†

Broccoli seed extract has the highest levels of glucoraphanin (a potent Nrf2 stimulator) of any broccoli product available.¹¹ In fact, 230 mg of broccoli seed extract is equivalent to consuming 1 ¼ cups of fresh broccoli. Glucoraphanin is a phytochemical compound that acts as the precursor to sulforaphane, one

of the leading compounds in broccoli that is responsible for many of its positive benefits.^{12,13} These compounds and their mechanisms have been studied extensively and supported by more than 500 scientific publications. Glucoraphanin and sulforaphane act as direct activators of Nrf2 and potent antioxidants shown to support detoxification and maintain normal inflammatory balance.¹⁴⁻¹⁸ Studies show they work by improving hormone balance and increasing functional enzymes that support excretion of toxins from the body.¹⁹ Broccoli seed extract has been shown to remain active within the body for up to three days following consumption.²⁰

Turmeric (Complete Turmeric Matrix)†

Whole-root turmeric and its active components have been used in traditional Ayurvedic medicine for centuries. In herbal medicine of old, practitioners used teas, tinctures and extracts of all types. In the 21st century, as research grew on the benefits of turmeric, the focus shifted to identifying and isolating one individual compound, curcumin, rather than delivering the comprehensive benefits of a matrix of turmeric bioactives. As a result, concentrating curcumin led to poor absorption and pharmaceutical methods were applied to bypass the gut and increase its bioavailability. The glaring disadvantage of applying this pharmaceutical model to botanicals is that it misses the benefits of other bioactives present within the turmeric matrix and their positive effects on the microbiome. New research on turmeric shows the additional bioactives in turmeric have additional benefits and enhance bioavailability. The Complete Turmeric Matrix includes compounds from the entire turmeric root, all working together as nature intended to deliver better results. The Complete Turmeric Matrix formulation contains standardized amounts of 45%–55% curcuminoids, 2%–6% turmerin protein and 3%–8% volatile oil, plus other components that make up the whole turmeric root. This matrix of bioactive compounds supports a healthy GI tract, enhances detoxification, creates a healthy microbiome, and helps



maintain normal inflammatory balance. Specifically, turmeric and its phytonutrients, like curcumin, have been shown to play a crucial role in maintaining normal inflammatory balance in a variety of bodily systems due to its ability to modulate Nrf2.²⁵ Studies have shown curcumin maintains normal inflammatory balance in endothelial cells and cardiac cells.²⁶⁻²⁸ Curcumin has also been found to provide antioxidant protection to the cardiovascular system by reducing oxidative stress and supporting a normal immune response.²⁹

Andrographis †

Andrographis (*Andrographis paniculata*) is an herbaceous plant native in India and Sri Lanka. It has widely been used in Southeastern Asian medicine for its broad range of health-promoting properties. In recent years, andrographis has emerged as a potent activator of Nrf2.¹ Recent studies have shown that when compared to other phenolic compounds, 60 mg of andrographis induced the highest activation of Nrf2.² This activation helps reduce oxidative stress, quench free radicals, maintain endothelial health and support mitochondrial function.²⁻⁴

Resveratrol†

Resveratrol, the most well-researched stilbene, is found in many plants and red wines. Studies of resveratrol have found it to enhance the potential of antioxidant and detoxification activity through Nrf2 activation.³⁰ Other studies have linked resveratrol to enhancing blood sugar balance, maintaining normal inflammatory balance and reducing oxidative stress.^{31,32}

Directions

2 capsules per day or as recommended by your health care professional.

Does Not Contain

Gluten, yeast, artificial colors and flavors.

Cautions

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

Supplement Facts^{v4}

Serving Size 2 Capsules
Servings Per Container 30

2 capsules contain	Amount Per Serving	% Daily Value
Turmeric Root Extract (Complete Turmeric Matrix) (Standardized to contain 45-55% Curcuminoids, 3-8% Volatile Oil, 2-6% Turmerin)	400 mg	*
Broccoli Seed Extract (TrueBroc [®]) (Standardized to contain 13% Glucoraphanin)	230 mg	*
<i>trans</i> -Resveratrol (from <i>Polygonum cuspidatum</i> (Roots))	100 mg	*
<i>Andrographis paniculata</i> Extract (Leaves) (ParActin [®] (Bioactive 14-Neo-Andro Compound)) (Standardized to contain 50% Andrographolides)	60 mg	*
* Daily Value not established		

References

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