

Dr. Fuhrman™

# PRODUCT FACTS

## ULTRA CELL BIOTECT

Epidemiologic studies have found that drinking brewed green tea regularly is associated with cardiovascular health and longevity

### ANTIOXIDANT SUPPORT FOR HEALTHY AGING AND A HEALTHY INFLAMMATORY RESPONSE

Ultra Cell Biotect contains unique phytochemicals from extracts of green tea, pepper (*Capsicum annuum*), turmeric, black turmeric (*Kaempferia parviflora*), and grape seed to complement a healthful diet and protect cellular health. Normal cellular metabolism produces byproducts that can age or damage our cells, such as free radicals. Dietary antioxidant phytochemicals complement our natural antioxidant defenses by neutralizing free radicals and affecting cell signaling pathways that promote cardiovascular health, the inflammatory response, proper cell growth, and cellular stability.

The green tea and turmeric extracts in Ultra Cell Biotect were selectively chosen because they have been formulated with complementary ingredients that enhance absorption. *Capsicum annuum* is included because of its potential synergy with green tea, grape seed for its rich concentration of proanthocyanidins, and *Kaempferia parviflora* for its potential to activate the SIRT1 pathway, which is thought to promote healthy aging.

### GREEN TEA

The leaves of the tea plant, *Camellia sinensis*, are rich in certain catechins, flavonoid antioxidants that are very rare in other plant foods. Green tea is especially rich in tea catechins, epigallocatechin 3-gallate (EGCG) in particular. Epidemiologic studies have found that drinking brewed green tea regularly is associated with cardiovascular health and longevity.<sup>1-9</sup> In vitro studies (studies in cultured cells) suggest that green



tea catechins work through a variety of mechanisms, including protecting healthy cells against oxidative damage and affecting signaling pathways that promote normal DNA repair and inflammatory status.<sup>10</sup>

Greenselect® Phytosome® is a caffeine-free green tea extract that uses sunflower lecithin to enhance absorption.<sup>11,12</sup> A human study comparing lecithin-complexed green tea to “free” green tea found that the peak EGCG concentration in plasma, which occurred 2 hours after ingestion, was 2-fold higher for lecithin-complexed green tea.<sup>11</sup> A 24-week human study found that Greenselect® Phytosome® has antioxidant effects, and that it could help maintain healthy fasting glucose, triglycerides, and blood pressure.<sup>12</sup>

## ULTRA CELL BIOTECT

### Product Features

- Greenselect® Phytosome®, a high absorption, caffeine-free green tea extract
- Capsicum annuum (pepper) powder
- Curcumin C3 Complex®: high absorption turmeric extract
- Sirtmax®: *Kaempferia parviflora* (black turmeric) extract
- Enovita®: European grape seed extract
- Vegan
- No gluten-containing ingredients
- No genetically modified ingredients



Grape Seed extract was shown to have antioxidant effects and promote cardiovascular health

## CAPSICUM ANNUUM

*Capsicum annuum* is a species that includes many different varieties of peppers. In vitro, phytochemicals called vanilloids, which are present in *Capsicum annuum* have shown synergistic effects with green tea, magnifying the protective effects of green tea on cells.<sup>13</sup>

## CURCUMIN & WHOLE TURMERIC

Curcumin refers collectively to the major bioactive components (curcuminoids) of the turmeric root (*Curcuma longa*), a yellow-colored culinary spice: curcumin, bisdemethoxycurcumin, and demethoxycurcumin. In vitro, curcumin has been shown to inhibit NF-κB, a transcription factor and regulator of the inflammatory response.<sup>14-16</sup>

Although it is helpful to season foods with turmeric regularly, the benefits of dietary turmeric may be limited by curcumin's poor bioavailability. Curcumin C3 Complex® is an extensively studied turmeric extract, which contains 95 percent curcuminoids and uses piperine (Bioperine®), a black pepper extract, to enhance absorption.<sup>17</sup> For additional turmeric-derived phytochemicals to complement the curcuminoid-concentrated extract, whole turmeric is also included.

Research on curcumin complexed with piperine in humans suggests it has antioxidant effects, protects the

cardiovascular system, supports joint health, and promotes a healthy inflammatory response.<sup>18-21</sup>

## KAEMPFERIA PARVIFLORA

Sirtmax® is an extract of *Kaempferia parviflora* (also known as black turmeric), a root related to turmeric and ginger. In vitro, *Kaempferia parviflora* phytochemicals activate the SIRT1 pathway and protect against oxidative damage.<sup>22,23</sup> Sirtmax® helps activate the SIRT1 enzyme to support healthy aging. Also, results of a seven-week placebo-controlled human study suggested that Sirtmax® helps to keep blood glucose in the healthy range and may also help to limit visceral fat accumulation.<sup>24</sup>

## GRAPE SEED EXTRACT

Grapes are a common food, but grapes with seeds are less common: grape polyphenols are concentrated in the seeds, skins, stems, and leaves, rather than in the flesh. When compared directly, the seeds have the greatest antioxidant capacity, followed by the leaf, skin, and then flesh. The major classes of antioxidant phytochemicals in grape seeds and skin are proanthocyanadins, and grape seeds are especially rich in these phytochemicals compared to other foods.<sup>25,26</sup> In a four month human trial, Enovita® grape seed extract was shown to have antioxidant effects and promote cardiovascular health.<sup>27</sup>

# ULTRA CELL BIOTECT

## Supplement Facts

Supplement Facts	
Serving Size: 2 capsules	
Servings Per Container: 60	
	Amount Per Serving
Curcumin C3 Complex® Turmeric Rhizome Extract (min. 95% Curcuminoids)	500 mg *
GreenSelect® Phytosome™ (Green Tea Leaf Extract/Sunflower Phosphatidylcholine Complex)	300 mg *
Turmeric Root	200 mg *
ENOVITA® European Grape Seed Extract	200 mg *
Sirtmax® Black Turmeric Rhizome Extract ( <i>Kaempferia parviflora</i> )	100 mg *
Cayenne Pepper Fruit ( <i>Capsicum annuum</i> )	12 mg *
BioPerine® Black Pepper Fruit Extract	5 mg *

\* Daily value not established.

**Other Ingredients:** hypromellose, vegetable stearic acid, silica. Non-GMO

**Suggested Use:** Take two capsules daily.

**This product does not contain any milk, dairy, egg, fish, shellfish, tree nuts, peanuts, wheat, gluten or soy.**

**\*\*These supplements have not been evaluated by the Food and Drug Administration.**

Products listed are not intended to diagnose, treat, cure or prevent disease.

For more detailed information about this supplement, visit <http://www.drfuhrman.com/shop/180>

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