THE ANTIOXIDANT

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# **Clinical Applications**

- Supports Antioxidant Activity\*
- Supports Cardiovascular Health\*
- Contains Health-Supportive Polyphenols\*

The Antioxidant is a proprietary fruit extract blend containing fruits and berries rich in polyphenols and antioxidant-supportive elements. This high-quality extract goes through a multiple-stage quality assurance program to ensure potency, safety, integrity, and purity from field to finished product.\*

All Dr. Will Cole Formulas Meet or Exceed cGMP Quality Standards

## **Discussion**

Fruit and vegetable intake has a profound and well-recognized correlation with health, and increased intake has been found to increase plasma antioxidant capacity in humans.[1] Fruits contain a wide range of bioactive compounds; they not only contribute to antioxidant protection but also support cellular health in a variety of ways. Isolation of these beneficial compounds and investigations into their specific effects on human health is ongoing. The hope is that concentrated sources of these bioactive phytonutrients will become a convenient way to augment intake of fruits and vegetables.\*

The Antioxidant has a new and improved profile of concentrated extracts from the following nutrient-dense fruits: grape, pomegranate, blueberry, chokeberry, mangosteen, cranberry, goji berry, apple, and bilberry. These fruits are featured in the The Antioxidant formula because of their phytonutrient content, antioxidant-supportive properties, and polyphenol concentration. Polyphenols (phenolic acids, flavonoids, stilbenes, and lignans) are produced by plants and often play a defensive role, protecting the plant from UV radiation, oxidation, and pathogens. In many cases, it is the polyphenol component of medicinal plants that exerts activity, such as modulating enzymes and cell receptors, in the body. [2] Research strongly supports a role for polyphenols in promoting and maintaining health.\*[3,4]

Berries are an especially rich source of polyphenols and other health-promoting elements. [5,6] Blueberries, cranberries, and chokeberries have been found to contain relatively high concentrations of compounds with highly effective radical scavenging structures, contributing to total antioxidant capacity.[7] The consumption of bilberry and chokeberry has been shown to significantly increase the concentration of health-supportive polyphenols in plasma.[8] Goji berries have been consumed for their healthpromoting benefits for over 2000 years. Contemporary research suggests that goji juice supplementation significantly increased antioxidant markers in human subjects.\*[9]

Alongside The Antioxidant's berry concentrates are extracts from a variety of other "super" fruits. Mangosteen is a "berry-type" fruit; its pericarp (peel, rind, hull) has a long history of use as a traditional medicine and recently has been studied for its role in antioxidant and immune support.[10, 11] Pomegranate juice supplementation was found to have an inhibitory effect on lipid peroxidation in plasma, lipoproteins, and macrophages; researchers suggest this is important to the support of cardiovascular and cellular health.[12] The Antioxidant contains grape skin, seed, and pulp in a concentrated extract. Research on grape polyphenols suggests that they may have direct effects on vasorelaxation and may promote cardiovascular health and function. [13] The apple has long been understood to be a pillar in the foundation of a healthy diet, and this has been underscored by the old adage we learned as children: "an apple a day keeps the doctor away." Research supports this traditional wisdom and reveals that even the skin of the apple contains polyphenols that appear to play a protective role in oxidative stress.\*[14]

The role of polyphenols appears to extend beyond their antioxidant capacity. Research suggests that polyphenol-rich extracts may exert positive effects on cardiovascular health.[8] Mechanisms of action appear to include the promotion of endothelial function and healthy platelet aggregation. [3,15-17] In order to more accurately highlight the health effects of specific polyphenols, researchers have called for the compilation of a comprehensive polyphenol database.[2] Ongoing research promises to reveal even more detailed and intriguing facts about the role that these complex phytonutrients play in human health.\*[18]

The Antioxidant features concentrated whole fruit and berry extracts with a total polyphenol content of no less than 40% and an oxygen radical absorbance capacity (ORAC) of not less than 6000 TE/gram. The Antioxidant ingredients undergo stringent quality assurance testing through the Adulterant Screening Program. This program screens for economic adulterants, pesticide residues, solvent residues, ETO (ethylene oxide), irradiation, and GMOs (genetically modified organisms).[19]

> \*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.



# Serving Size: 1 Capsule Servings Per Container: 60 Amount Per Serving %Daily Value Product Name Grape (Vitis vinitera)(seed, skin, and pulp), pomegranate (Punica granatum)(whole fruit), blueberry (Vaccinium uliginosum)(whole berry), chokeberry (Aronia arbutifolia)(whole berry), mangosteen (Garcinia mangostana)(skin), cranberry (Vaccinium macrocarpon)(whole berry), goji berry (Lycium barbarum)(whole berry), apple (Malus pumila Mill)(skin), bilberry (Vaccinium myrtillus)(whole berry) (6,000 µmol TE/g) \*\* Daily Value not established.

Other Ingredients: Capsule (hypromellose and water), stearic acid, magnesium stearate, and silica.

## **Directions**

Take one capsule twice daily, or as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

# References

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## Formulated To Exclude

Wheat, gluten, yeast, soy, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.

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