



## Alan L. Miller, ND

### The Plant Polyphenols Resveratrol, Curcumin, Quercetin, and Similar Molecules- Their Modes of Activity and Clinical Promise

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#### **About the lecture:**

Plant polyphenols are a biochemically diverse group of molecules that are present in significant concentrations in an optimal diet, but are woefully deficient in the typical American diet. All polyphenols have potent antioxidant activity; however, slight differences in their structures can offer significantly different benefits in the human body. Resveratrol, found in grapes, peanuts, and various botanicals, demonstrates unique biochemical effects. Numerous animal and in vitro studies have shown that resveratrol, via its effects on the SIRT1 enzyme and other genetic transcription factors and messenger molecules, offers significant metabolic benefits, including improved fat metabolism, insulin sensitivity, anti-inflammatory, and anticancer effects. Additionally, resveratrol is cardioprotective and may enhance cognitive function. Pterostilbene, a naturally occurring, dimethoxylated resveratrol analog, has similar effects and appears to be longer lasting in the body. Other polyphenols have been extensively studied as well, and some exhibit synergistic activity along with resveratrol.

#### **About Dr. Miller:**

Alan Miller, ND, a 1989 Bastyr University graduate, is currently Director of Medical Education and Research at Thorne Research, where he has been involved in product research, development, and formulation; educational services; and technical support for 16 years. Dr. Miller is Senior Editor of *Alternative Medicine Review*, a peer-reviewed, MEDLINE-indexed journal. Alan is Chief Medical Editor of the book *Alternative Medicine Review- Monographs, Volume One*, has authored over 20 scientific papers, is a contributing editor to Pizzorno and Murray's *Textbook of Natural Medicine*, and has lectured at medical conferences around the world.

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