



## SAGE TEA NATUROPATHIC MEDICINE

# LEARNING CENTER

## Q: What are Polyphenol Nutrients?

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**Answer:** Possibly the most powerful antioxidants we eat.

**Polyphenols** are nutritional factors that are derived from fruits and vegetable, particularly the skins of colorful fruits like grapes and berries. These important nutrition factors are powerful antioxidants and provide the body with a myriad of health benefits.

Research on the effects of dietary polyphenols on human health has developed considerably in the past 10 y. It strongly supports a role for polyphenols in the prevention of degenerative diseases, particularly cardiovascular diseases and cancers. The antioxidant properties of polyphenols have been widely studied, but it has become clear that the mechanisms of action of polyphenols go beyond the modulation of oxidative stress. This supplemental issue of *The American Journal of Clinical Nutrition*, published on the occasion of the 1st International Conference on Polyphenols and Health, offers an overview of the experimental, clinical, and epidemiologic evidence of the effects of polyphenols on health.

Polyphenols are the most abundant antioxidants in the diet, much higher than that of all other classes of phytochemicals and known dietary antioxidants. Their main dietary sources are fruits and plant-derived beverages such as fruit juices, tea, coffee, and red wine. Vegetables, cereals, chocolate, and dry legumes also contribute to the total polyphenol intake.

Despite their wide distribution in plants, the health effects of dietary polyphenols have come to the attention of nutritionists only rather recently. Until the mid-1990s, the most widely studied antioxidants were antioxidant vitamins, carotenoids, and minerals. Research on flavonoids and other polyphenols, their antioxidant properties, and their effects in disease prevention truly began after 1995. The main factor that has delayed research on polyphenols is the considerable **diversity and complexity of their chemical structures**. For this same reason, it is best to consume the foods that contain polyphenols rather than taking an extract. But extracts are the best way to get a large amount in the diet of ordinary Americans since we do not eat an abundance of fresh, raw foods.

Current evidence strongly supports a contribution of polyphenols to the prevention of cardiovascular diseases, cancers, and osteoporosis and suggests a role in the prevention of neurodegenerative diseases and diabetes mellitus