

*Polyphenols are antioxidants found in many plants and foods including grapes, green tea, chocolate, and red wine. They are known to play a role in the prevention of cardiovascular disease, but their specific actions are not entirely understood. New research illustrates the beneficial protective effects of dietary polyphenols taken with a meal.*

Polyphenols reduce absorption of toxic by-products of a fatty meal

Researchers recently investigated the impact of red wine polyphenols on the levels of malondialdehyde (MDA), a natural by-product of fat digestion known to increase the risk for heart disease and other chronic conditions.

In a randomized, crossover study, participants were fed three different meals consisting of dark meat turkey cutlets. The control meal consisted of turkey meat and water. The second meal consisted of turkey meat with polyphenols added after cooking (concentrated wine) followed with a glass of red wine (about 7 ounces). The third meal consisted of turkey meat with polyphenols added before cooking and then followed by a glass of wine.

At various stages of the study, researchers measured blood and urine levels of MDA and found that levels nearly quintupled after the control meal, while increases in MDA levels were completely prevented after subjects consumed the meals with polyphenols.

This study suggests that red wine polyphenols exert a beneficial effect by inhibiting absorption of MDA, a compound toxic to cells. In addition, these results demonstrate the potentially harmful effects of oxidized fats found in foods and the important benefit of dietary polyphenols in a meal.

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