



Thumbs Up for Red Wine and Chocolate?



Long regarded as somewhat sinful indulgences, red wine and chocolate now appear headed for health food status as evidence of their health benefits piles up. Is it too good to be true?

Recent media headlines appear to debunk conventional wisdom and standard medical advice about nutrition and health, leaving people more confused

than ever. A recent article by Newsweek points out that people are increasingly relying on television, magazines, newspapers and the Internet for information about health and medicine, rather than their doctors. There is no shortage of information, as scientists, drug companies and physicians compete for the public's attention, research funds, and profits.

Unfortunately, the public looks for quick, simple answers, while scientists proceed in small steps and have to deal with ambiguity, setbacks and failures. Reluctance to commit to answers which may be contradicted by the next study is understandable. Studies vary greatly in size, design, and complexity, and research results are affected by a multitude of variables. The results are usually much more complex than the startling headlines suggest, and findings are often too tentative or inconclusive to guide public health recommendations. Thus it appears to the public they are getting mixed messages. Without an awareness of these issues and the ability to critically examine research reports, it is easy to jump to the wrong conclusions.

What about red wine?

The protective benefits of red wine attracted widespread public attention in 1991 after CBS aired a show on 60 Minutes called *The French Paradox*. They suggested moderate, daily consumption of red wine may explain why the French can indulge in high fat foods, smoke heavily, exercise little, and yet have one of the lowest heart attack rates in the world. Within weeks of the show, U.S. sales of red wine shot up 40%.² Researchers identified resveratrol as the likely protective agent. Resveratrol is a substance concentrated in grape skins, but it also occurs in berries, peanuts, and certain other plants. Resveratrol protects grapevines against fungal infections and has antioxidant, anticoagulant, anti-inflammatory and anti-cancer effects. It is also a plant estrogen which can increase HDL, the "good" cholesterol in the body.³

Resveratrol has been shown to extend the life of single-celled yeasts by up to 80%, and raises the tantalizing possibility that it may one day help extend the human life span.⁴ It is also the subject of ongoing research into the prevention and treatment of cancer,⁵ and may even help prevent periodontal disease and tooth loss by neutralizing gum-damaging free radicals produced by the immune system.⁶ Medical literature indicates that these findings are extremely preliminary and many more studies are needed before recommendations can be made regarding therapeutic use. The present consensus suggests 1 to 2 glasses of red wine a day may have significant health benefits,¹ but

too much alcohol is believed to increase risk for certain cancers, and resveratrol's estrogenic nature may cause side effects which are still largely unknown.

How about chocolate?

A 2001 study funded by the American Cocoa Research Institute (surprise!), found that cocoa powder and dark chocolate raised good cholesterol by 4%. Although the sample size consisted of only 23 participants, subsequent research confirmed a relationship between chocolate and improved cardiovascular health.¹ Antioxidants in cocoa powder have been shown to neutralize free radicals in the blood. This keeps arteries relaxed, and raises blood levels of HDL, reducing plaque formation and risk of blood clots.

Two recent studies of the Kuna people of Panama provide the strongest support yet for these properties and identify flavanols as the active component. The Kuna habitually drink 3 to 4 cups of flavanol-rich cocoa each day and suffer few heart problems. These rigorous, well-designed studies led by a Harvard Medical School researcher proved that at least one cocoa polyphenol is highly effective in enhancing key aspects of cardiovascular health.⁷

Experts recommend one ounce of dark chocolate (60% cocoa) or 2/3 ounce of extra dark (80% cocoa) per day. Avoid products containing milk, as it appears to block antioxidant activity.

Resources:

1. Food news blues. Kantorowitz, B.K. et al. *Newsweek* 3/13/2006: 44-54. Full text available on Academic Search Premier database at <http://sled.alaska.edu/databases/home.html> In Alaska call 1-800-440-2919 for access codes.
2. Wine & health. <http://www.intowine.com/health.html>
3. Red wine's health benefits may be due in part to "Estrogen" in grape skin. *Science Daily*, 12/19/1997. <http://tinyurl.com/mwjlk>
4. Small molecule activators of sirtuins extend *Saccharomyces cerevisiae* lifespan. Howitz, K.T. *Nature*, 07/11/2003 <http://tinyurl.com/qhq58>
5. Role of resveratrol in prevention and therapy of cancer: preclinical and clinical studies. Aggarwal, B. et al. *Anticancer Research*, 24(5A) 2004: 2783-840. <http://tinyurl.com/m7s6j>
6. Red wine touted as good for gum health. Hall, J. *Toronto Star*. 03/11/2006:A27. Full text available on Newspaper Source database at <http://sled.alaska.edu/databases/home.html> In Alaska call 1-800-440-2919 for access codes.
7. Dark chocolate's heart-health secret discovered. Weatherby, C. and Hartnell, R. *Vital Choices*, 3(60) 2/07/2006. <http://tinyurl.com/s2y9a>