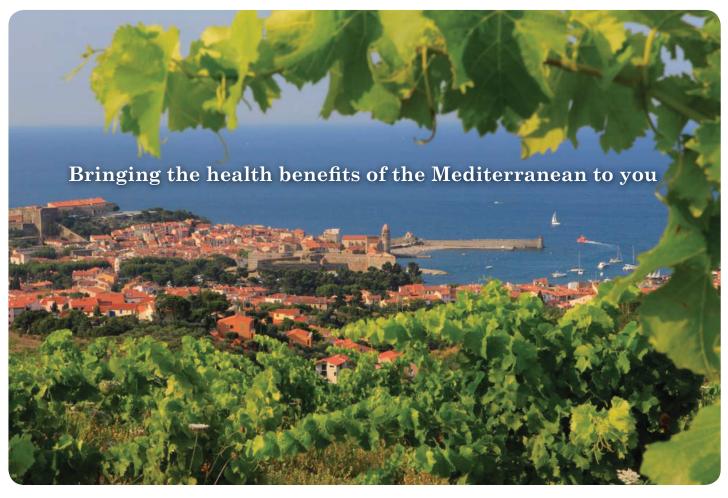
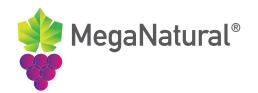


# Red Wine Grape Extract







## **MegaNatural**® MegaNatural® Red Wine Grape Extract

MegaNatural® Red Wine Grape Extract was developed to closely match the polyphenol profile of red wine. A 200 mg dose is formulated to be equivalent to the phenol levels found in a glass of red wine.

Published research is increasingly recognizing the role that plant polyphenols play in human health. The polyphenols found in red wine are specifically implicated with a positive role in health.

#### The perfect pairing with the Mediterranean diet

The food that we eat has long been associated with general health and longevity. Specific diets have been called out as being particularly healthful. The Mediterranean diet is arguably the diet we most often think of when we think of health, and red wine is an important component of this diet. With the abundance of science supporting the health conclusions from the Mediterranean diet and the contributing role that polyphenols play, it was natural to target

the polyphenols in red wine when developing our red wine grape extract. A myriad of research supports the health benefits of moderate red wine consumption.



#### **Alcohol**

Epidemiologists have investigated the role of moderately consumed alcoholic beverages on health. One of the major findings is that not all alcoholic beverages are equivalent. When normalized for alcohol content, it is clear that red wine has apparent benefits that other beverages do not.



#### HEALTH EFFECTS OF DIFFERENT TYPES OF ALCOHOLIC BEVERAGES

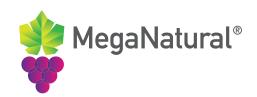
	ALCOHOLIC BEVERAGE		
	Red wine	Beer	Liquors
ENDPOINTS			
Cardiovascular mortality	++	+	+
All-cause mortality	++	+	+
RISK FACTORS			
Diabetes mellitus			
Insulin sensitivity	++	+	+
Lipid profile			
Apolipoprotein-Al	++	±	±
Endothelial function			
FMD dilation	++	+	+
MECHANISMS			
Oxidative stress	++	+	±
Inflammation	++	+	+

Table 1. ++: higher protective effect; +: protective effect; ±: not clear or no effect. Adapted from Chiva-Blanch, et al., 2013.

#### MODERATE RED WINE CONSUMPTION (30 g/day for men (two glasses) and 15 g/day for women (one glass)) Coagulation and **Endothelial function** Antioxidant effects Glucose metabolism Anti-inflammatory Lipid effects platelet function <u>effects</u> $\downarrow \downarrow$ $\uparrow$ $\uparrow$ Endothelin-1 Plasma Fasting glucose HDL Platelet $\uparrow$ antioxidant NO Insulin sensitivity Apo A-1 CRP aggregation capacity 1 **FMD** Paraoxonase-1 Leukocyte count Tissue factor LDL particles NF-кв Fibrinogen oxidation Leukocyte and Factor VII Oxidative DNA endothelial Von Willebrand damage adhesion factor MDA molecules **ENDPOINTS** Cardiovascular Mortality $\Downarrow$ All-cause mortality

Fig. 1. Cardiovascular effects of moderate red wine consumption. Apo A-1: Apolipoprotein-1; CRP: C-reactive protein; FMD: flow-mediated dilation; HDL: high-density lipoprotein; LDL: low-density lipoprotein; MDA: malon-dialdehyde; NF-kB: nuclear factor-kB; NO: nitric oxide; SOD: superoxide dismutase. Adapted from Chiva-Blanch, et al., 2013.

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



### MegaNatural® Red Wine Grape Extract

What is it about wine that gives it a more desireable effect than other alcoholic beverages?

What separates red wine from other beverages? It is the abundance of grape polyphenols! Anthocyanins, proanthocyanidins, flavonols,



flavan-3-ol monomers, stilbenes, hydroxycinnamic acids....red wine contains a veritable stew of polyphenol compounds and many of these compound classes have been shown to be beneficial to human health. Simply put, you would be challenged to find another beverage with the complexity concentration polyphenols and of

observed in red wine. It is no wonder that red wine has long been associated with a healthy lifestyle!

Knowing the results of studies done on red wines and how red wine differs from other alcohol-containing beverages, is it possible to prepare these polyphenols from red wine grapes so that the same benefits can be had without the alcohol?

#### MegaNatural® Red Wine Grape Extract is standardized to not less than:

- 60% Total polyphenols, on a dry basis
- 8% Total anthocyanins, on a dry basis

### Bringing the health benefits of the Mediterranean to you

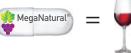
Polyphenolics set out to isolate the compounds in the grapes that evoke similar health benefits noted in the studies of red wines for use as a dietary supplement. MegaNatural® Red Wine Grape Extract is the result of that mission.



#### MegaNatural® Red Wine Grape Extract may:

- Promote healthy aging\*
- Support cardiovascular health\*
- Help with the relaxation of blood Help support the formation vessels\*
- · Help protect against free radical damage\*
  - of nitric oxide in the body\*

#### SERVING SIZE EQUAL TO ONE GLASS OF RED WINE



One 6 oz glass for a woman Two 6 oz glasses for a man

Moderate red wine consumption:

200 mg

A supplement containing 200 mg of MegaNatural® Red Wine Grape Extract provides approximately the same amount of polyphenols than would be present in one 6 oz glass of wine made from red wine grapes. Based on moderate wine consumption as defined above, men may choose to take two capsules.

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#### **Formulating**

#### with MegaNatural® Red Wine Grape Extracts

MegaNatural® Grape Extracts are 100% water soluble, so they can easily be added to functional beverages without precipitating out of solution. They can also be included in capsules, shots, shakes, gummies, gels, bars, powder mixes, and more.





#### **About Polyphenolics**

Founded in 1996, Polyphenolics is a science-driven organization dedicated to researching and developing innovative products using grape-seed-derived polyphenols to deliver specific and documented health benefits.

#### **Vertical Integration**

California Natural Color and its Polyphenolics business unit are divisions of E. & J. Gallo Winery, the largest premium wine company in the world, Polyphenolics has access to an abundant supply of fresh wine grapes, grown in California's Central Valley, and retains complete control over the entire manufacturing process — from the initial selection of wine grapes to the final extraction of finished material. The company goes beyond federally mandated traceability requirements, documenting all aspects of growing, treating, and processing the grapes. Through painstaking supply chain documentation and laboratory testing, Polyphenolics can substantiate freshness, identity, domestic origin, and absence of chemical contaminants and genetic modification.

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#### Contact Us

To learn more about using MegaNatural®-Red Wine Grape Extract or MegaNatural®-Red Wine Grape Extract in your dietary supplements, functional foods or beverages, call 800-557-0220 or contact:

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