

Fact Sheet - Grape Juice

Heard it through the grape vine!

Flavour Creations have created a new juice Dark Grape! This juice exhibits the benefits of 100% vine ripened grapes to create a great tasting and satisfying drink for you and your clients.

Introduction

Flavour Creations' Dark Grape Juice is derived from Concord grapes. According to *Avenue Vine: Wine News and Information Magazine*, Concord grapes contain a greater antioxidant capacity compared to other dark and white grapes¹.

Flavour Creations Dark Grape Juice contains no added sugar or artificial colours and flavours. It is full of the natural goodness of real vine ripened Concord grapes, thickened to pre-determined viscosities for the therapeutic treatment of dysphagia. Additionally, the high concentrations of polyphenols in dark grape juice impart a wide range of health benefits for consumers.

In recent years the health benefits of dark grape have become well known in the scientific community. It was first recognized during the nineties when the "French paradox" showed that moderate consumption of red wine was associated with low incidence of atherosclerotic cardiovascular disease in the French population².

Today science tells us that dark grapes impart valuable health attributes including the ability to reduce cholesterol, destroy free radicals and provide astringency and mouth feel while improving swallowing ability.

The antioxidant potential of polyphenols

Polyphenolic compounds are essential in plant cells for providing defense against microbial attacks and animal predators. Flavonoids represent the largest compound of polyphenols in dark grapes; these have antioxidant properties and are thought to protect plants against ultraviolet light, fungi, insects, bacteria and viruses³.

Polyphenols are found in the seeds and skins of dark grape¹. They impart free radical destroying properties and are responsible for modifying the plants' reaction to environmental substances

such as allergens, viruses and carcinogens, using the following mechanisms:

- Anti-inflammatory
- Antimicrobial
- Anticancer
- Anti-allergic

The antioxidant ability of polyphenols in dark grape is three times greater than that of green tea, vitamin E and C!⁴

Polyphenols and cardiovascular health

Studies show that consuming polyphenols in grape and grape juice strengthens blood vessels and enhances circulation. Polyphenols convert LDL (bad) cholesterol to a more harmless form that then passes effortlessly through the bloodstream, reducing the risk of heart attacks and strokes^{5,6}.

Other vascular disorders believe to be improved by grapes (specifically grape seed extract) include varicose veins, numbness and tingling in the arms and legs as well as painful leg cramps all of which can occur due to circulation difficulties⁵.

The astringent effect of tannins

Tannins are another polyphenolic compound; they attribute the sensation of astringency on the human oral surface⁷. Astringency can feel like the tightening and puckering of the muscles in the mouth. This is characteristic of beverages containing high concentrations of tannins, like grape juice, red wine, and tea and tonic water⁷. When tannins come into contact with salivary proteins in the mouth they change structure and a precipitate is formed, thus causing the characteristic feeling of astringency³. This is the first line of defense against animal predators for plants in the wild³.

When saliva precipitates in the mouth, the plant tannin becomes inactivated by the salivary protein and is able to be swallowed⁸.

The precipitation effect of tannins can be beneficial for people suffering from oral and respiratory difficulties as high consumption of tannin-lade beverages stimulate the salivary gland to produce protein-rich saliva and in turn heavily lubricate the mouth and throat⁸.

polyphenolic content in grape aid and reduce prevalence of cardiovascular conditions, but its astringent response in the mouth assists difficult lubrication and swallowing.

The health benefits associated with the consumption of grape related beverages are significant and well recognized in the scientific community. Not only does the

References

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