

# Medicinal significance of grape variety cabernet sauvignon and *vitisvinifera*

## Medicinal significance of grape variety cabernet sauvignon and *vitis vinifera*

Grapes are considered to be clusters of berries that can be consumed endlessly as red, green and purple finger foods. Some grapes contain seeds while others are seedless and, they can be obtained as grape juice, grape jams, raisins and wines. Some of the world's greatest wines are produced from grapes as they contain essential raw materials both physical and chemical that provide numerous health benefits.

The components of grapes consist of skin, pulp and seed. Grape skins are coloring matter, tannins, aromatic substances, potassium and also some minerals. The pulp which makes up the volume of the berry contains cell sap or juice. Some grapes have seeds rich in tannins while others are purely seedless.<sup>1</sup> Grapes are important because of the great nutritional value they add to our diet. They have also been practiced for wound healing as a more natural remedy and their mechanism of actions are especially important in treatment of diseases. In a study conducted epidemiologic studies suggested from results that mild-to-moderate consumption of grape wine was associated with a reduced incidence of coronary heart diseases.<sup>2</sup>

A phytochemical qualitative analysis done by the researcher on Cabernet Sauvignon<sup>3</sup> (grape) skin powder revealed the presence of alkaloids, flavonoids, leucoanthocyanins, triterpenes and cardia glycosides. A significant amount of polyphenols, anthocyanins, carbohydrates, fats and proteins was also revealed from quantitative phytochemical and macronutrient analysis.

Documentation of this grape skin powder of the *Cabernet Sauvignon* variety was shown to exhibit significant increases in the rate of wound contraction, rate of epithelization and hydroxyproline content of the granulation tissue when rats underwent treatment with it.

In an additional study the potential of the oils of another grape *Vitis Vinifera* revealed important wound healing attributes because of their phytochemical constituents.<sup>4</sup> The qualitative phytochemical analysis of this grape *Vitis Vinifera* showed the presence of polyphenolic derivatives, leucoanthocyanins and fatty acids. This grape variety demonstrated the wound area contractions in rat models. This grape oil demonstrated significant antimicrobial activity against *Escherichia Coli*, along with great anti-inflammatory and antioxidant activities. Based on the content of the hydroxyproline obtained in this grape oil, it also suggested the effectiveness of it as a potential wound healing agent.

Volume 2 Issue 1 - 2016

### Shivananda Nayak

Department of Preclinical Sciences, University of the West Indies, Trinidad & Tobago

**Correspondence:** Shivananda Nayak, Department of Preclinical Sciences, Faculty of Medical Sciences, The University of the West Indies, Trinidad & Tobago, Tel +1868-662-2873, Email Shivananda.Nayak@sta.uwi.edu

**Received:** February 5, 2016 | **Published:** February 18, 2016

Both the varieties of grapes have proven to be most useful for many illness and we suggest the use of grapes as a whole, as a daily juice to keep everyone healthy. Overall grapes provide cardio protection, have great phytochemical constituents, effective inflammatory and antioxidant properties and are most certain a simple finger food that can be taken anywhere as a health snack.

### Acknowledgements

None.

### Conflict of interest

The author declares no conflict of interest.

### References

1. Dharmadhikari M. Composition of grapes. *Vineyard Vintage View Mo State Univ.* 1994;9(7/8):3–8.
2. Cui J, Juhasz B, Tosaki A, et al. Cardioprotection with grapes. *J Cardiovasc Pharmacol.* 2002;40(5):762–769.
3. Nayak BS, Ramdath DD, Marshall JR, et al. Wound-healing activity of the skin of the common grape (*Vitis Vinifera*) variant, cabernet sauvignon. *Phytother Res.* 2010;24(8):1151–1157.
4. Nayak BS, Ramdath DD, Marshall JR, et al. Wound-healing properties of the oils of *Vitis vinifera* and *Vaccinium macropon*. *Phytother Res.* 2011;25(8):1201–1208.