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## Collaborative Activity



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## Antidiabetic and Antihypertensive Properties of Naringin: A Review

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**Abstract:** Despite the availability of various medications that successfully lower blood glucose levels and blood pressure, diabetes mellitus (DM) and hypertension (HTN) continue to place a tremendous strain on global medical resources. The prevention of numerous complications, which remain the leading cause of mortality due to these diseases, is a key challenge in the management of these two disorders. Phytochemicals are a rich source of plant-derived molecules that are critical for the discovery of substances with medicinal potential. Flavonoids have a history of being important natural components with a variety of biological functions. Naringin, a flavanone glycoside found mostly in grapefruit and citrus fruits, is a natural flavanone glycoside. Obesity, diabetes, high blood pressure, and metabolic syndrome can all be treated with naringin. A few molecular pathways underpinning its beneficial properties have been discovered. Naringin has a wide spectrum of pharmacological properties, including anti-inflammatory and cancer-fighting properties.

**Keywords:** Naringin, Diabetes, Hypertension, Flavonoid, Insulin

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### Introduction

The use of herbal medicine for the treatment of various ailments has expanded dramatically (Frishman *et al.*, 2009). This is due to several causes, the most important of which is that herbal medication is a less expensive option with less unwanted side effects (Susalit *et al.*, 2011). Around 80% of the population in several Asian and African nations rely on indigenous traditional treatments for their primary health care requirements, which primarily consist of crude

herbal concoctions (Santé Omdl, 2005). According to studies, India has over 20,000 medicinal herbs, but only 7,000-7,500 of these are used by traditional practitioners to treat various ailments (Samy *et al.*, 2008). Compounds that give plants their colour, flavour, and smell are known as phytochemicals. The therapeutic characteristics and health benefits of medicinal herbs are regarded to be mostly due to these substances. Poisonous and toxic compounds are also found in

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