Commentary

Cinnamon as an antioxidant

Lorenzo Loffredo^{*}

Department of Internal Medicine, Sapienza Rome University, Rome, Italy

Commentary

Cinnamon is basically used in the cooking as spice because of its aroma, which can be incorporated into food, aromas, and in some of the therapeutics. Approximately, there are about 250 species of the cinnamon species Cinnamon is having multiple aspects with the constituents present in it. This bark as well as the oils that are extracted from it shows various affects like; antibacterial, antifungal, antioxidant also as an anti-diabetic.

Cinnamon also has ant Various traditional ways of using cinnamon; It improves colon health, helpful in reducing colon cancer, it is a great anticoagulant which prevents the bleeding, used as flavoring agents and also added as flavor in chewing gums to refresh the mouth as it has the ability to remove bad breathe, it increases the blood circulation and thereby in improves the tissue regeneration, used as an flavoring agent, antioxidant, anti-cancer etc.

Antioxidant activity of cinnamon

Antioxidants are the most important driving forces that are in progress as humans respond to the free radicals, metabolic damage etc. The antioxidant compounds in cinnamon play a vital role in human life. The role of antioxidants is one of the main additives used in fats and oils. These are used in food industries for processing as they delay the food spoilage.

These also found to have various beneficial activities to give relief from the diseases. The extractions such as aqueous and alcoholic of cinnamon significantly inhibit fatty acid oxidation and lipid peroxidation. Also, different flavonoids having free radical scavenging activities as well as antioxidant properties were seen.

From the previous literature, it was found to be that, the essential oils like Eugenol is more effective than the other compounds. When compared to other 26 spices, cinnamon showed more antioxidant activity. Some of the antioxidant activities are:

Anti-cancer activity

By aqueous extraction of cinnamon, a chemical was synthesized from 2'-hydroxycinnamaldehyde derived from cinnamaldehyde, has the capability to reduce the tumor. Therefore, cinnamon can be used an anti-cancer agent.

Anti-microbial activity

Than the other plant extractions, the essential oils from this are more potent for the oral hygiene.

Anti-diabetic activity

By using the aqueous extraction of the cinnamon bark, many studies revealed that, it helps in reducing the blood sugar with its "insulin potentiating effects". It also helps in decreasing the cholesterol.

Neurological disorders

Cinnamophilin which is a novel thromboxane "A2 receptor antagonist" isolated from *C. philippinensis.*, which protects from the cell damage, thereby depriving the oxidative stress.

Anti-inflammatory activity

Cinnamon is having various flavonoids like quercetin exhibits the anti-inflammatory activity. Thereby, these have the potential to prevent the inflammation and even the inflammation mediated neuro-generated diseases.

Conclusion

As cinnamon is a spice, it is a part of food and thereby it helps us for eradicating various diseases. Each property in the extraction is essential and crucial for human health.

Most importantly, its antioxidant activity occurs through the receptor-mediated mechanisms. With the significant health benefits, further studies must be continued with clinical evidence.

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