

## The subcontinent spice mix: A step beyond heartburn, its role in the prevention of heart disease

Madam, over the past few decades a lot of work has been done on the role of spices, its involvement in the carcinogenic pathway and its role in the mucosal irritation of the gastro intestinal track. Although its harmful effects are well studied, the health benefits of saffron, chilli,

cardiovascular preventative mechanisms due to their anti oxidant properties that may hinder the processes that lead to the formation of atheromas and hence everyday use is preventive against atherosclerosis. In a study done with Saffron<sup>1</sup> administering 50 milligrams of saffron twice a day led to a significant decrease in Lipoprotein Oxidase for up to 6 weeks. This showed that it is preventive in patients with coronary heart disease.

Additionally, a general increase in energy expenditure, especially after chilli<sup>2</sup> intake has been postulated to decrease the likelihood of obesity which is a potent risk factor for Coronary Heart Disease. In a randomized control cross over design<sup>3</sup> men who were given a chilli blend had a lower resting heart rate and an increased effective myocardial perfusion pressure time as opposed to men who were on a bland diet. This shows that chilli works in various ways in prevention from coronary heart disease.

Studies done on oregano<sup>4</sup> from a polyphenol rich spice mixture has shown to reduce malondialdehyde concentrations in plasma and urine after ingestion. Hence cooking food rich in oregano can significantly decrease the concentration of malondialdehyde which suggests a potential health benefits against atherogenesis and hence against coronary heart disease.

Curcumin which is the principle ingredient of turmeric which is a polyphenol responsible for the yellow colour of the curry turmeric has been used to treat a variety

of oregano and turmeric have been investigated but are not widely known. The underlying biological plausibility and threshold amounts have been tested and proven in animal models.

Some clinical trials in humans have shown

of diseases in traditional herbal medicine but lately a review<sup>5</sup> done showed its benefit as an anti-inflammatory, anti-oxidant, and anti-thrombotic agent all having cardiovascular protective effects. The effect of curcumin in decreasing serum cholesterol level has also been observed.

South Asians while on one hand being genetically predisposed to the deadly metabolic syndrome do have a covert health benefit from the spicy foods that are relished in their region. The importance of the subcontinent spice mix needs more studies to evaluate its true beneficial effect.

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