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Letter to the Editor

Areca catechu nut: a double-edged sword

Sir,

The chewing of Areca catechu nut, more popularly known as betel nut, is one of the ancient traditions in India and other South-east Asian countries. Other than its role played in religious practices and cultural rituals, areca nut has also been described to have various health benefits, particularly antihelminthic and antiviral properties, in the traditional systems of medicine like Ayurveda. It was observed to produce an antidepressant-like effect by elevating the serotonin and norepinephrine levels in hippocampus of rats.¹ It also exhibited analgesic and anti-inflammatory activities in mice, and displayed in vitro antioxidant activity.² Furthermore, it was found to improve spatial memory and learning behaviour in rats.³

However, it has been ranked as the fourth most popular substance of abuse in the world and it is estimated that about 600 million people worldwide chew areca nut.⁴ In one of the studies, areca nut chewing was found to increase the risk of having obstructive coronary artery disease by 3.5-fold.⁵ There has been a lot of debate on whether betel nut chewing can lead to development of cancers. There is evidence now that areca nut use is an independent risk factor for oral cancer, and head and neck squamous cell carcinoma.^{6,7} In another study higher prevalence of oral preneoplastic conditions like lichen planus, submucous fibrosis and leukoplakia were observed in betel nut chewers.⁴ In addition, areca nut extract was also found to worsen the ethanol induced gastric ulcers and produce significant gastric mucosal damage in rats.8 Thus, Areca catechu nut chewing may have beneficial or detrimental effects on health, thereby acting as the proverbial 'double-edged sword'. Any usage of the nuts should be done cautiously.

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