

Exploring the Therapeutic Potential of Bottle Gourd-Bael-Triphala Churna in Cancer Treatment

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Abstract: This study aims to investigate the anticancer activity of the herbal formulation using a hepatocellular carcinoma (HepG2) cell as an in vitro model system. Bael leaves (*Aegle marmelos*) In the same study, bael may be related to antioxidant and anti-inflammatory effects that protect cells. It is an ancient Ayurvedic formulation of three fruits (Amalaki, Bibhitaki, and Haritaki), known to promote detoxification and maintain gut integrity. Bottle gourd (*Lagenaria siceraria*) is hydrating, which could enhance the defenses of the body due to its nutrient profile.

Each of these ingredients is believed to have synergistic benefits for cancer prevention and fighting ability, infectious disease immunity, and maintenance of overall health. In this context, this combination could represent a complementary option of therapy to standard cancer treatments and should be tested in preclinical in vitro and in vivo experiments and subsequently by clinical trials for the evaluation of efficacy and safety in oropharyngeal cancer.

Keywords: Bael leaves, triphala, bottle gourd, anti-cancer activity, herbal formulation, cellular protection, immunity