

## HARNESSING THE NUTRITIONAL, PHYTOCHEMICAL AND PHARMACEUTICAL PROPERTIES OF *Drynaria quercifolia* RHIZOME POWDER INCORPORATED DOUGHNUTS

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### ABSTRACT

Drug discovery from plants have significantly contributed to treatment of many ailments. The oak leaf fern, namely *Drynaria quercifolia*, from the Polypodiaceae family of Pteridophyta is profusely seen in India's evergreen forests. It is mostly grown as a medicinal plant and is native to hot countries in Asia, Africa, and Australia. Also referred to as "Ashwakatri" in the Ayurvedic medical system *Drynaria quercifolia* is used by a number of tribal people to cure conditions like chronic jaundice, dyspepsia, fever, cough, and chest infections. The rhizome is mashed into a paste and administered topically to cure long-term sleeping disorders, headaches, and skin diseases. In many regions, this paste is combined with coconut oil and used topically. Doughnuts or Donuts are snacks relished by people of all age groups. Typically made of refined flour dough, doughnuts are deep-fried and come in ring or hole-shaped shapes. They are also frequently filled. However, the doughnut becomes a healthier snack when it is baked instead of fried. By using *Drynaria quercifolia* powdered rhizome as the foundation for doughnut flour, its nutritional makeup, medicinal properties and health advantages will be improved. 2.5g, 5g, and 7.5g of *Drynaria quercifolia* powdered rhizome were utilized in each donut. The sensory attribute of each variation of doughnut was determined. The proximate composition, micronutrients and phytochemicals present in the doughnuts with highest sensory score was identified.

**KEYWORDS** *Drynaria quercifolia*, Medicinal Properties, Nutrients, Phytochemicals