

## Effect of Nutmeg in Breast Cancer

## CHAPTER 23

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### **ABSTRACT:**

*BACKGROUND: Aggravation is one of a significant natural reaction toward injury. Cytokine and arbiter are created by macrophage during the provocative cycle. Mitigating is essential to treat the perilous of persistent aggravation related with constant sickness. Different plants and their determined mixtures have been utilized in the treatment of aggravation including Myristica fragrans. The current examination was intended to decide mitigating capability of nutmeg seed ethanolic separate and unadulterated quercetin extricate from M. fragrans on LPS animated murine macrophage cell line.*

*In our program to search for new AMPenacted protein kinase (AMPK) activators from plants that apply conceivable anticancer property, we tracked down that an EtOAc concentrate of Myristica fragrans (nutmeg) incited AMPK compound in human chest infection MCF7 cells. Two critical diarylbutanetype lignans, macelignan and mesodihydroguaiaretic destructive (MDGA), were separated as powerful guidelines from this concentrate. Treatment of chest harm cells with two blends impelled cell apoptosis, demonstrated by cleavage of poly(ADPribose) polymerase (PARP) and Ser 15 phosphorylation of p53. Also, macelignan and MDGA inside and out curbed the state advancement of MCF7 chest harmful development cells on sensitive agar. Intraperitoneal implantation of macelignan and MDGA (20 mg/kg) covered the tumor improvement of 4T1 mammary sickness cells. These results show that the chemopreventive effects of two critical diarylbutanetype lignans from Myristica fragrans (nutmeg) may be connected with selection of apoptosis obviously through AMPK inception.*

**Keywords:** *Myristica fragrans(nutmeg), AMPenacted protein kinase (AMPK), breast cancer*

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### **INTRODUCTION:**

Myristica fragrans otherwise called 'nutmeg' is mainstream in many pieces of West Africa as a spice. Nutmeg is most popular as the kitchen flavor got from the seed of the nutmeg tree, Myristica fragrans. Toxicologically, it is best depicted as a substitute psychotomimetic substance of misuse. Verifiably, pandemics of nutmeg inebriation were portrayed when the