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A REVIEW ON GINGER AND ITS REPORTED PHARMACOLOGICAL ACTIVITIES

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ABSTRACT

Natural dietary agents like fruits, vegetables, and spices have various health promoting effects which is an area of interest for both the scientific community and the public. Ginger is one of it. Ginger is rhizome of the *Zingiber officinale*, which is commonly fed in dietary condiments, typically considered to be safe and used as therapy to numerous sicknesses. Ginger and its ingredients show antioxidant property and prevent the harm of macromolecules, caused by the loose radicals/oxidative stress, anti-inflammatory, anti-cancerous, anti-microbial, anti-diabetic, neuroprotective, gastro-protective, anti-emetic and hepato-protective properties. This review covered the pharmacological properties possessed by Ginger.

KEYWORDS: Ginger, Zingiber officinale, Anti-diabetic effect, Natural drug.

INTRODUCTION

Medicinal flora and their ingredients show an important effect within the diseases treatment in particular with houses of being antioxidant, anti-inflammatory, anti-diabetic and anti-tumour impact. Ginger, the rhizome of the Zingiber officinale is commonly fed on dietary condiments, typically considered to be safe and used to therapy numerous sicknesses. It also indicates a cancer prevention activity via inactivating and activating numerous molecular pathways. In this review, we summarized the therapeutics function of ginger in diseases control through modulation of organic activities which include anti-inflammatory, anti-oxidative and various other properties.[1]

38. Ha, et al. (2012). 6-Shogaol, a ginger product, modulates neuroinflammation: a new approach to neuroprotection. *Neuropharmacology*, 2012; 63 (2): 211-23.
39. Shanmugam, K.R; Mallikarjuna, K; Kesireddy, N. (2011). Neuroprotective effect of ginger on anti-oxidant enzymes in streptozotocin-induced diabetic rats. *Food and chemical toxicology*, 2011; 49 (4): 893-7.
40. Sharma, P; Singh R. (2011). Neuroprotective Effect of Ginger Juice Against Dichlorvos and Lindane Induced Toxicity in Wistar Rats. *Planta Medica*, 2011; 77(05): 122.
41. Al-Yahya, et al. (1989). Gastroprotective activity of ginger zingiber officinale rosc., in albino rats. *The American Journal of Chinese medicine*, 1989; 17 (01): 51-6.
42. Levita; et al. (2018). Pharmacokinetics of 10-gingerol and 6-shogaol in the plasma of healthy subjects treated with red ginger (Zingiber officinale var. Rubrum) suspension. *Biomedical reports*, 2018; 9 (6): 474-82.
43. Fuzer; et al. (2019). [10]-Gingerol Affects Multiple Metastatic Processes and Induces Apoptosis in MDAMB-231 Breast Tumor Cells. *Anti-Cancer Agents in Medicinal Chemistry*, 2019; 19 (5); 645-54.
44. Ohnishi; et al. (2019). Shogaol but not gingerol has a neuroprotective effect on hemorrhagic brain injury: Contribution of α, β-unsaturated carbonyl to heme oxygenase-1 expression. *European journal of pharmacology*, 2019; 842: 33-9.
45. Lee; et al. (2018). Antibiofilm and antivirulence activities of 6-gingerol and 6-shogaol against Candida albicans due to hyphal inhibition. *Frontiers in cellular and infection microbiology*, 2018; 28(8): 299.
46. Tsuchiya, Y.; Kawamata, K. (2018). 6-Gingerol Induces Amiloride-Sensitive Sodium Absorption in the Rat Colon via the Capsaicin Receptor TRPV1 in Colonic Mucosa. *Journal of nutritional science and vitaminology*, 2018; 64(4): 287-91.
47. Ko, M.J.; Nam, H.H.; Chung, M.S (2019). Conversion of 6-gingerol to 6-shogaol in ginger *(Zingiber officinale)* pulp and peel during subcritical water extraction. *Food chemistry*, 2019; 270: 149-55.
48. Chatturong; et al. (2018). Ginger Extract and [6]-Gingerol Inhibit Contraction of Rat Entire Small Intestine. *Journal of evidence-based integrative medicine*, 2018; 23: 1-9.
49. Yadav AK, Reetu, Garg A. Antidiabetic effect of [10]-gingerol in streptozotocin and high fat diet induced diabetic rats. *Asian Journal of Pharmaceutical and Clinical Research*, 2019; 12(11): 77-80.