



A REVIEW ON "A CLINICAL APPROACH TO GINGER"

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ABSTRACT

Ginger is a medicinal plant which has been widely used in Chinese, Ayurvedic and Unani herbal medicines all over the world and has a long history of use in traditional systems of medicine. Ginger, the rhizome of *Zingiber officinale*, is one of the most widely used species of ginger family & is a common condiment for various food and beverages. Ginger has a long history of medicinal use dating back 2500 years in China and India. It is also known as Maha Aushadh, as it treats so many diseases. It improves immune system and treats cough, cold, arthritis, colic, dyspepsia and many other diseases. The review article focuses on clinical approach and its benefits.

KEYWORDS: Ginger clinical approach and its benefits.

INTRODUCTION

Ginger has been used as a spice as well in India and China since ancient times. It was also known in Europe from 9th century & England from 10th century for its medicinal properties. Native Americans have also used wild ginger Rhizome to regulate menstruation and heart beat. Ginger is thought to act directly on the gastro-intestinal system to reduce Nausea. Ginger is known as popular remedy for nausea during pregnancy. Ginger is also used to treat various types of GI problems like morning sickness, colic, gas, bloating, loss of appetite and dyspepsia (discomfort after eating). According to Indian Ayurvedic medicinal system, Ginger is recommended to enhance digestion of food.

Besides these, Ginger has been reported as a pain relief for arthritis, muscle soreness, chest pain, low back pain, stomach pain and menstrual pain. It can be used for treating upper Respiratory Tract Infection, cough & bronchitis. As an anti inflammatory agent, it is recommended for joint problems. Fresh juice of ginger has been shown to treat skin burns. Active component of ginger is used as laxative and antacid medication. It is also used to warm the body for boosting the circulation and lowering high blood pressure. Because of its

warming effect, Ginger acts as antiviral for treatment of cold and flu. It is also used as flavoring agent in food and beverages and as a fragrance in soap and cosmetics.

BOTANICAL DESCRIPTION

Ginger is herbaceous Rhizomatous perennial reaching up to 90 cm in height under cultivation. Rhizomes are aromatic, thick lobed, pale yellowish, bearing simple alternative distichous narrow oblong lanceolate leaves. Leaves are long 2-3 cm broad with sheathing bases, the blade gradually tapering to a point. Inflorescence solitary, lateral radical pedunculate oblong cylindrical spikes. Flowers are rare, rather small, calyx superior gamosepalous, three toothed, open splitting on one side.

Chemical composition of Ginger

Name	Structure of Active Component of Ginger
6-Gingerol	(S)5 Hydroxyl-1 (4-hydroxyl-3 methoxy phenyl-1)-3 decanone.
8-Gingerol	(5S)5 Hydroxyl -1-(4-hydroxyl-3methoxy phenyl)dodecan-3-one.
10-Gingerol	(E)-1(4 Hydroxy-3-methoxy) (Phenyl)dodecan-3-one.

Ginger safety, dose, side effects & Drug Interaction

Safety: Ginger is recommended in US food and drug administration GRAs list. The British herbal compendium documents no adverse effects of ginger. Ginger appears relatively safe except in pregnancy.

Part Used: Rhizome.

Dose: A dose of 0.5-1.0 gm of ginger powder ingested 2-3 times for period of ranging from 3 months to 2.5 years did not cause any adverse effects. Most of research has been done with 1-2 gm of ginger powder, but in India average intake is around 8-10 gm/day.

Side Effect: Ginger is quite safe in therapeutic dose. For anti-inflammatory purpose. Some people have mild side effects including heart burn, diarrhea and general stomach discomfort. Some women have reported extra menstrual bleeding while taking ginger. Ginger might decrease blood sugar levels.

Drug Interaction:

- Medication that slow blood clotting (Anticoagulant/Anti-platelet drugs) interact with ginger.
- Some medications that slow blood clotting including aspirin, clopidogrel, diclofenac, ibuprofen, warfarin, heparin and others.

Clinical benefits of Ginger

Possible health benefits include

- Nausea
- Loss of appetite
- Morning sickness
- Motion sickness
- Pain
- Muscle pain & soreness
- Anti inflammatory effects
- Osteo arthritis
- Lower long term blood sugar levels
- Cough
- Cold
- Rhinitis
- Influenza
- Flu
- Chronic Indigestion
- Reduce Menstrual Pain
- Lowers Cholesterol Levels
- Prevent Cancer
- Colon Cancer
- Colic Pain
- Breast Cancer
- Pancreatic Cancer
- Alzheimer's disease
- Act as antioxidant
- Gingivitis and periodontitis

- Lower the risk of skin infections
- Protect against age-related to brain
- Protect against RSV Virus, a common cause of Respiratory infections
- Protect against stroke and Heart disease
- Helps in proper food transport and nutrient absorption and thus prevent mal-absorption.
- Protect against bacterial and fungal infections.
- Cures stomach ulcers and GERD.
- Protect against diabetes.

CONCLUSION

This article has outlined some of the clinical approach to ginger. So far, reveals the empirical use of ginger in several Ayurvedic medicinal products. This article aims at reviewing the most salient recent reports and use of ginger in some of several diseases and conditions.

REFERENCES

1. R. Grzanna, L. Lindmark, and C.G. Frondoza, "Ginger an herbal medicinal product with anti-inflammatory actions" *Journal of Medicinal Food*, 2005; 8(2): 125-132.
2. E. Langner, S. Griefensberg, and J. Gruenwald "Ginger history and Use", *Advances in Therapy*, 1998; 15(1): 25-44.
3. H. Chen, D. Soroka, Y. Zhu, and S. Sang, "Metabolism of Ginger Component [6] Research, 2013; 57(5): 865-876.
4. Wang C.C., Chen L.G., Lee L.T. and Yang L.L. effects of 6-Gingerol, an antioxidant from ginger, 6: 641-645.
5. Bhandari U, Sharma J.N. & Zafar R. The protective action of ethanolic ginger (*Zingiber officianle*) extract in cholesterol fed rabbits. *J. Ethnopharmacol*, 1998; 61(2): 167-171.
6. Srivastava K.C. Aqueous extracts of onion, garlic and ginger inhibit platelet aggregation and alter arachidonic acid metabolism. *Bil med*, 1984; 43: S335-S346.
7. Hasan H.A., Rasheed Rauf A.M., Abd Razik B.M. Rasool Hassan BA Pharmaceut Chemical Composition and Antimicrobial Activity of crude Extracts isolated from *Zingiber Officinale* by different solvents. *Pharmaceute Anat Acta*, 2012; 3: 184.
8. Govindarajan VS Ginger – Chemistry, Technology and quality evaluation Part-2 *Crit Rev. Food Sci Nuts*, 1982: 17: 189-258.