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DOI: http://ijmer.in.doi./2022/11.01.147

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :7.816(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:1(7), January: 2022
Online Copy of Article Publication Available (2022 Issues): www.ijmer.in
Digital Certificate of Publication: http://ijmer.in/pdf/e-Certificate%20of%20Publication-IJMER.pdf
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd January 2022
Publication Date:10th February 2022
Publisher: Sucharitha Publication, India

CHEMICAL COMPOSITION AND MEDICINAL VALUES OF GINGER

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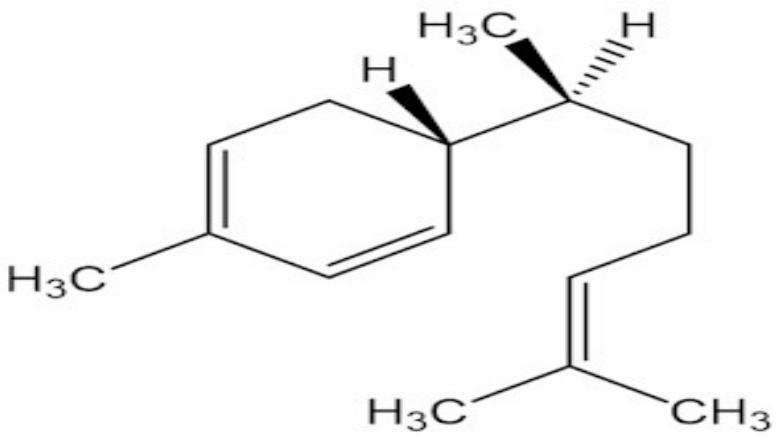
Abstract

Ginger is obtained from the underground stems or rhizomes of Zingiber officinale which is a trophical herbaceous perennial. Belonging to the family of Zingiberricacae. In our country, Ginger is used for medicine as well as spices. Ginger contains phytochemicals. Ginger is used as immune booster. Various health benefits of Ginger are relieving nausea, aids digestion, reduces oxidative stress, reduces the risk of heart disease, Ginger mitigates obesity, reduces muscle pain, boosts bone health, cure cough. Ginger is also effective against pancreatic cancer.

Keywords: Tropical, Ginger, Phytochemicals.

Introduction



In India, Ginger is used as a medicine as well as spices. Ginger is used to prevent nausea resulting from haemotherapy and motion sickness. According to ayurvedic system in India it is also used for digestion of food. Ginger is also effective against pancreatic cancer.

1.1 Spicy chemical in Ginger

ZINGIBERENE

30% of essential oil.

Ginger' s flavour is influenced by a number of compounds. The pungency of fresh ginger comes from gingerol, whist flavour also comes from Zingiberene.

Cooking Ginger breaks down gingerols into the compound zingerone, which is less pungent, and a significant contributor to Ginger's flavour. Another class of compound s formed during cooking are the shogaols, which also contribute to flavour and pungency.

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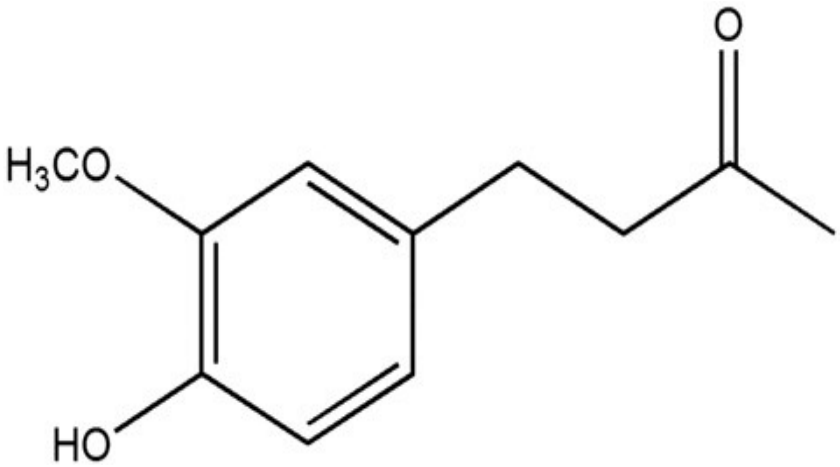

ZINGERONE

1.2 Phytochemicals in Ginger

Ginger contains essential oils which gives aroma. Ginger contains 1-2 % volatile oil, 5-8 % resinous matter, starch and mucilage the oil of Ginger is a mixture of over 24 constituents, consisting of monoterpensand sesquiterpenes etc., It contains the secondary metabolites. It generally be divided into volatile compounds and nonvolatile phenolic compounds. The major ones of which have pungent properties.

1.3 Ginger is an immune booster

Ginger is used to boost immune system because of its anti – bacterial nature.

Health benefits of Ginger

- Ginger relieves nausea
- Ginger aids digestion
- Ginger reduces oxidative stress.
- Ginger reduces the risk of heart disease.
- Ginger mitigates obesity.
- Ginger reduces muscle pain
- Ginger boosts bone health
- Ginger cure cough.

Conclusion

It can be concluded that ginger is a good source of antioxidant and most of the antioxidant components exhibit higher activities in alcoholic media as determined by different assays. Hence, apart from its medicinal properties, ginger can also be used as an antioxidant supplement. Ginger is used to boost immune system because of its anti – bacterial nature.

REFERENCES

- Ahmed R, Sharma S (1997). Biochemical studies on c ombined effect of garlic (Allium sativum Linn) and ginger (ZingiberofficinaleRosc) in albino rats. Indian journal of experimental biology 35: 841-843.
- Chen I, Chang C, Ng C, Wang C, Shyu Y, Chang T (2008). Antioxidant and antimicrobial activity of Zingiberaceae plants in Taiwan. Plant Food Hum. Nutr., 63(1): 15-20.
- Craig WJ (1999). Health-promoting properties of common herbs. Am. J. Clin. Nutr., 70(3): 491S.
- Hall C (1997). Structure-Activities of natural antioxidants. In" Antioxidant Methodology. In vivo and in vitro. Concepts., Ed. By Aruoma, OI and Cuppett, SL, AOAC press: Champaign,
- Harish R, Shivanandappa T (2006). Antioxidant activity and hepatoprotective potential of Phyllanthus niruri. Food Chem. 95(2): 180-185.


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- Nwinuka N, Ibeh G, Ekeke G (2005). Proximate composition and levels of some toxicants in four commonly consumed spices. J. Appl. Sci. Environ. Mgt., 9(1): 150-155.
- Odebunmi E, Oluwaniyi O, Bashiru M (2010). Comparative Proximate Analysis of Some Food Condiments. J. App. Sci. Res., 6(3): 272-274.
- Oyaizu M (1986). Studies on product of browning reaction produced from glucose amine. Jap. J. Nutr., 44: 307-315.
- Prieto P, Pineda M, Aguilar M (1999). Spectrophotometric quantitation of antioxidant c apacity through the f ormation of a phosphomolybdenum complex: Specific application to the determination of Vitamin E. AnalyBiochem., 269: 337-34