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Review article on herbal remedies used in COVID-19: "Ginger"

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ABSTRACT
Coronavirus is a contagious disease. It causes acute respiratory syndrome (SARS-Cov-2) and flu.SARS-Cov-2 was first detected in humans in 2019. More than 1.2 million people have died from the disease in the last 3 years. The purpose of this review is to focus on ginger, an herb that is used by many for its medicinal properties and has many benefits for humans.Ginger seems to have been used as a spice and medicine. It is also used as a food flavoring agent. Studies have shown that ginger can increase gastric juice and acid production. The main phytochemicals in ginger root include gingerol, bisabolene, curcumin, oleoresin, starch, essential oil and protein, which determine the medicinal properties of ginger. Ginger root was first cultivated in Asia and has been used as a medicinal herb for at least 2,000 years.Despite the global COVID-19 pandemic, the incidence of the disease among Sudanese people is still low, most likely because they use ginger as an herb in their daily practice. We believe that ginger is the best medicine for the prevention and treatment of covid-19 with its immune-boosting and anti-coronavirus properties.
Keywords:-Ginger, Covid-19, Herbs, Prevention, Coronavirus.

I. INTRODUCTION

Ginger is known as sringavera in Sanskrit, gingiberi in Greek, and then zingiber in Latin. Ginger is a well-known and widely used herb.Phytotherapy (herbalism or herbal medicine) is the scientific study of plants. Ginger has been a source of healing throughout human history. Ginger is a subtropical herb that grows from its roots. Ginger is rich in antioxidant compounds that prevent stress and DNA damage in the body. Therefore, the human body has to fight chronic diseases such as high blood pressure, lung disease, and heart disease.The World Health Organization (WHO) launched the campaigns named as "Save Plants" and "Save Lives". The use of ginger has health benefits and is widely used in Ayurvedic formulas and Chinese medicine. It is a stimulant and aids digestion, stomach pain, diarrhea and nausea. Ginger is widely used in home remedies for headaches, heart problems, menstrual problems, diabetes, and anemia. Ginger appears to show promise for safe use in the pharmaceutical,pharmaceutical and food industries.

SYNONYMS -ginger root, black ginger, ginger root, ginger.

Biological Source–

- Ginger consists of the dried rhizome of Zingiber officinale Roscoe,
- a plant from the **Zingiberaceae** family.
- Plant Taxonomy – Kingdoms: Plants Sub-Kingdom: Tracheobionta Region: Seed PlantFamily: Magnolia: Liliaceae - Monocots 21005803556000 Subclass: Zingiberaceae: Gen44 Zingiberaceae: Zingiberaceae Traits. : Zingiberofficinale Roscoe.

Origin and History:-

Ginger first appeared in the south of ancient China. Ginger is a member of the plant family, which includes cardamom and turmeric.The current name of ginger comes from the Middle English gingivere. It is believed that the Indians

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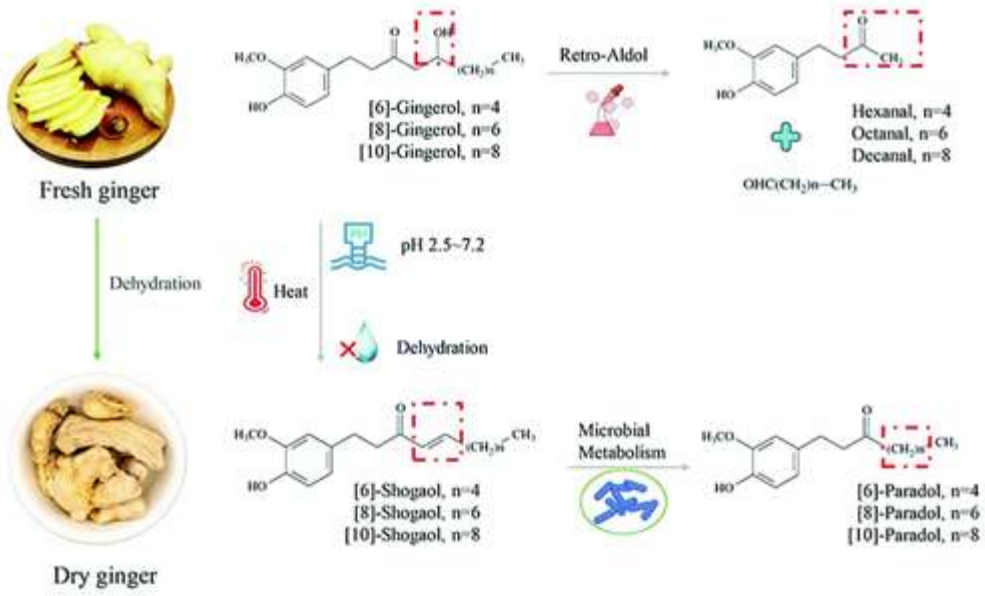
and Chinese have used ginger as a tonic base to treat many foods for over 5,000 years. According to Ayurveda it is used to treat heart and digestive problems. Ginger was used as an agent and was animportant commodity exported from India to the Roman Empire more than 2,000 years ago. Ginger is a very popular food in India.It is used as a spice in dark sauce, beans, tea and coffee. The best member of Zingiber is z. Iron skin remedy is also called garden ginger. It is an upright plant growing three to four feet tall (0.9 - 1.5 cm).2 m) with slender, sharp leaves 6 to 12 inches (15-30 cm) long. Ginger contains approximately 50% starch,9% protein, 6-8% lipid (glycerides, fatty acids, phosphatidic acid, etc.).

Chemical Composition:-

There are different types of ginger in its chemical composition. Ginger, ginger root, main components: 6-gingerol, 6-shogaol and 6-paradol. Ginger extract reduces biofilm formation in many bacterial species, including some Gram-positive bacteria (eg E.coli).g- Staphylococcus aureus and Bacillus) and Gram-negative bacteria such as Escherichia coli and Pseudomonas aeruginosa). Ginger oil contains a mixture of monoterpenes i.e.phellandrene, camphene, eucalyptol, linalool, limonene, citral, geraniol, citronellal, borneol and sesquiterpenes i.e. alpha-Curcumene, curcumene, beta-bisaquibolene, beta-bisaquibolene, beta-bisaquibolene, beta-bisaquibolene. -bisakibolen. some fatty aldehydes and alcohols. Fresh ginger also contains zingiberin, a cysteine protease with similar properties to rennet.



Antiviral Properties ofGinger:-

Fresh ginger has antiviral properties against Human Respiratory Syncytial Virus (HRSV) and Rhinovirus and supports its effectiveness in the treatment of respiratory tract infections. It has been suggested that fresh ginger may prevent bacteria from attaching to and entering cells by interacting with the G and F proteins. Ginger juice extract reduced feline calicivirus infection in pretreatment, co-infection treatment, and post-infection treatment, but not feline calicivirus infection for pretreatment purposes.Ginger extract contains propylene glycol, which has antibacterial properties. Future studies should use appropriate animal models to counteract the effects of ginger during the Covid-19 outbreak. Clinical trials are needed to examine the preventive and curative potential of ginger in SARS-CoV-2 patients treated with ginger or ginger+antibiotics.

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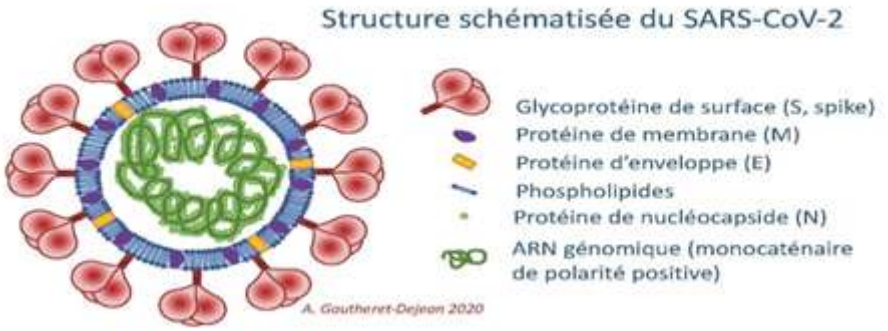

Anti-Inflammation Property of Ginger:-In ancient cultures, healers focused on herbs to strengthen the immune system. Ginger and many other products are used in many countries to support the immune system. Ginger increases serotonin and dopamine levels. This reduces pain that can cause depression. A new commensalin (co-administration of ginger extract-Lactobacillus acidophilus) has been reported to be effective in reducing intestinal inflammation by increasing the number of reversible pathways, including reducing the effect of oxidative stress and proinflammatory cytokines; improve intestinal pressure; and down-regulated COX-2. , iNOS and c-Myc expression (Deol et al.2018) Therefore, ginger has anti-inflammatory properties, improves immunity and is effective in the treatment of covid-19.

Antioxidant Activity:- Antioxidants are molecules that prevent the oxidation of other molecules. Antioxidants usually stabilize/inactivate free radicals before they attack target cells. Plant fruits, seeds, oils, leaves, bark and roots play an important role in the prevention of diseases because they are sources of antioxidants.
The antioxidant properties of ginger can helpprevent:-Heart disease. Neurodegenerative diseases such as Parkinson's, Alzheimer's and Huntington's. Crab.

Antibacterial Activity:-Ginger has strong antibacterial activity. In vitro studies have reported that it inhibits the growth of many pathogens, including Staphylococcus aureus and Gene Listen.Ginger exhibits this activity due to the presence of gingerol and acetaminophen, shogaol and zingerone.

Antiviral/AntifungalActivity:-Rhinovirus is a different virus that causes the common cold. Ginger powder extract is effective against many antifungal diseases. The most common anti-inflammatory compounds in ginger are gingerol and gingerol. Infections can make people seriously ill.Antiviral drugs are in development to treat COVID-19, including tocilisin, remdesivir, favipiravir, and dexamethasone, four of which are antiviral drugs.

Benefits of Ginger:-
The first recorded use of ginger dates back to BC. It dates back to 500 years. Ginger is made from the flowers of a tree native to Southeast Asia.

- It helps to clean the throat and breath.
- Helps relieve muscle aches and pains.
- It helps maintain brain health.
- Helps to solve digestive problems.
- It helps control cholesterol levels.
- It has anti-inflammatory properties.
- It helps to reduce stomach pain, reduce nausea and reduce pain.
- Supports kidney health.
- Contains A, B, C, E, B vitamins. Complex, magnesium, phosphorus, sodium, iron, zinc, calcium.

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- Ginger has anti-inflammatory and antioxidant properties that can reduce Covid-19 symptoms.
- Ginger is a powerful antioxidant that has been shown to be beneficial for the immune system.
- Ginger helps fight colds and is said to cure fever.
- Ginger is a powerful herb used worldwide for its extensive medicinal properties. In Ayurveda, it is called Mahaaushdi, which means that the use of this herb improves the function of the body and helps to remove toxins from the body.
- Modern research has shown that ginger has many therapeutic properties, including antibacterial, antifungal, and antioxidant properties, the ability to inhibit antibody formation, and direct reaction.
- Inaddition, ginger is effective against certain types of cancer, improves blood circulation, controls blood pressure, helps lower cholesterol, and has been linked to heart attacks.

Use of ginger in Coronavirus (COVID-19):- Coronavirus (COVID-19) is a contagious disease. The coronavirus also seems to cause more serious illness and death than the flu. The virus is spread by the acid of the saliva or by the virus that comes out of the nose when the patient coughs. Use ginger as an antibacterial, antioxidant, anti-inflammatory and anti-inflammatory agent.Ginger is an herbal remedy for covid-19 Ginger is an herb used not only for coronavirus but for many diseases, infections and more. It is also used to treat minor stomach pain,reduce osteoarthritis pain and even treat heart disease. Ginger is used in many ways and for many reasons. It is used only as a spice in the kitchen. It is also used in making "benishog", another pickled ginger.Ginger oil is distilled from its rhizome and used in the food and perfume industries.

NutritionFactsCalories:

- ✓ Calories : 80
- ✓ Total Fat: 0.8 g
- ✓ Sodium: 13 mg
- ✓ Carbohydrates: 18 mg
- ✓ Protein: 1.8 g
- ✓ Calcium: 16 mg
- ✓ Iron : 0.60 mg
- ✓ Potassium:- 415 mg

Side effects:-There are no side effects in small doses.Skin contact with ginger may cause redness, Minor side effects may include gas or bloating.
Effects of drug use:-There is no drug effect associated with the use of ginger.
Short-term effects:-The use of ginger has no short-term effects.
Long-term effects:-There are no long-term effects from the use of ginger.**When taken by mouth:-** Ginger may be safe, but - may cause minor side effects such as increased bleeding, diarrhea, discomfort, cardiac arrhythmias (if taken in excess).
CNS Nervous system depression (in case of overdose), diarrhea,heartburn, irritation of the mouth or throat.

Risks of Ginger:-

- Researchers have found that eating ginger during pregnancy increases the risk of miscarriage.
- Ginger may increase your risk of bleeding.
- It may not be safe if you have bleeding disorders. As with any herb or supplement, ginger can interact negatively with other medications you take. Burning Gas Stomach Pain Burning in the mouth.
- Cardiologists recommend that people taking blood pressure medication stay away from ginger.
- Consuming large amounts of ginger is thought to cause heart disease and irregular heartbeats.
- Ginger is a powerful ingredient and can cause stomach upset, stomachache, and stomachache when taken on an empty stomach.

Ginger Symptoms:-

- Bacterial wilt Rhizome
- fly Rhizome scale
- Juvenile leaf
- Nematodes

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- Budworm Leaf

Leaf deficiency may show symptoms 4 Group deficiency Lower and older leaves. Leaf color changes from light green to light green, leaf size changes and becomes smaller.

It has many types of defects-Nitrogen deficiency, Phosphorus deficiency Manganese deficiency, Calciumdeficiency, Sulfur deficiency, Iron deficiency, Boron deficiency, Zincdeficiency, Copper deficiency, Molybdenum deficiency.

II. CONCLUSION:-

This review is based on current and past research into the medicinal properties of ginger on COVID-19. Ginger is considered an herb. It has been used throughout history for its antiemetic properties. Ginger (Zingiber officinale Roscoe) or ginger is good for food, drink and traditional medicine.

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