

AYURVEDIC APPROACH TO TREAT SWINE FLU**Vijay Kumar*, Neha Shekhawat and Ashir**

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ABSTRACT

Ayurvedic medicine is one of the world's oldest holistic ("whole-body") healing systems. It was developed more than 3,000 years ago in India. Ayurveda, the traditional 'science of life', has a remedy for diseases when every other stream of medicine fails. Now, at a time when swine flu is spreading like wildfire across the world, Ayurveda has the remedy in the form of the miraculous herbs, like Tulsi, Aloe Vera, Giloy. In this review we going to discuss the various benefits of these ayurvedic herbs. These herbs are helpful to prevent swine flu. The known strains include Influenza C and the subtypes of influenza A known as H1N1, H1N2, H3N1 and H3N2. The spread among humans is through droplets expelled during cough and sneezing by an infected individual; any personal contacts increases the risk of transmission.

KEYWORDS: H1N1, Influenza, Swine Flu, Tulsi.

INTRODUCTION

Herbal medicines, also known as Phytomedicines or Botanical medicines, involves the use of plant parts (leaves, roots, stem, flowers, and seeds) for medicinal/therapeutic purpose.^[1] Swine Flu, also called pig influenza, swine influenza, hog flu, pig flu. Swine flu is an infection caused by any one of the several types of Swine influenza viruses. The known strains include Influenza C and the subtypes of influenza A known as H1N1, H1N2, H3N1 and H3N2. The spread among humans is through droplets expelled during cough and sneezing by an infected individual; any personal contacts increases the risk of transmission.^[2]

History: Swine influenza was the first proposed to be a disease related to human flu during the 1918 flu pandemic, when pigs become ill at the same time as humans. The first case of

Swine influenza was discovered in the year 1930 in pigs. Later on, it was detected in people that were close with pigs (such as pork processors and the farmers) and gradually developed into a cross species infection.^[3] Swine flu virus may mutate to be easily transferable among humans to pigs or vice versa. In 2009, a new strain of swine flu virus was detected in Mexico known as H1N1 flu. During 2009-10, World Health Organization declared the H1N1 influenza-A Swine Flu pandemic under level 6 criteria with about 60.8 million cases of this virus detected and 12,469 human deaths having occurred in United States. The Spanish Influenza was a real disaster with a death toll of 20-100 million people.^[4]

Structure of influenza virus: It is an orthomyxo virus that contains the glycoprotein's Haemagglutinin (H) and Neuraminidase (N) (Fig.1). For this reason, they are described as H1N1, H1N2, depending on type of H or N antigens they express.^[5]

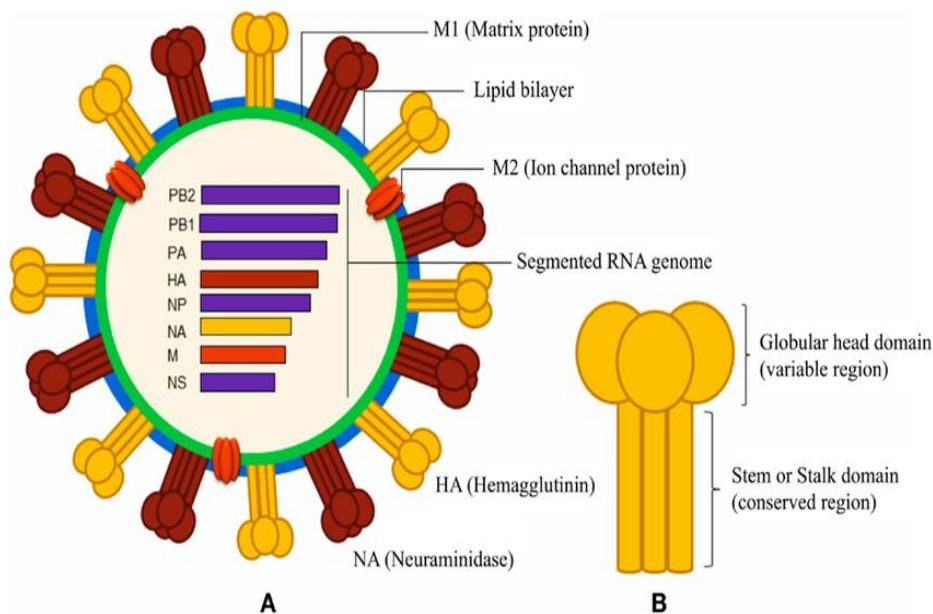


Fig. 1: Structure of influenza virus.

Symptoms of Swine flu

The symptoms and signs of Swine Flu have similarity with most influenza infections that include, Fever (100° F or greater) along with cough, nasal secretions, fatigue, Sore throat, Headache. Some patients may also get body rashes, sore throat, chills, nausea, body aches. It has been observed that majority of persons infected by Swine Flu are youngsters suffering from collateral tissue damage (Fig.2).^[6] The incubation period from exposure to this virus with first signs/symptoms appearing is about one to four days with an average of two days.

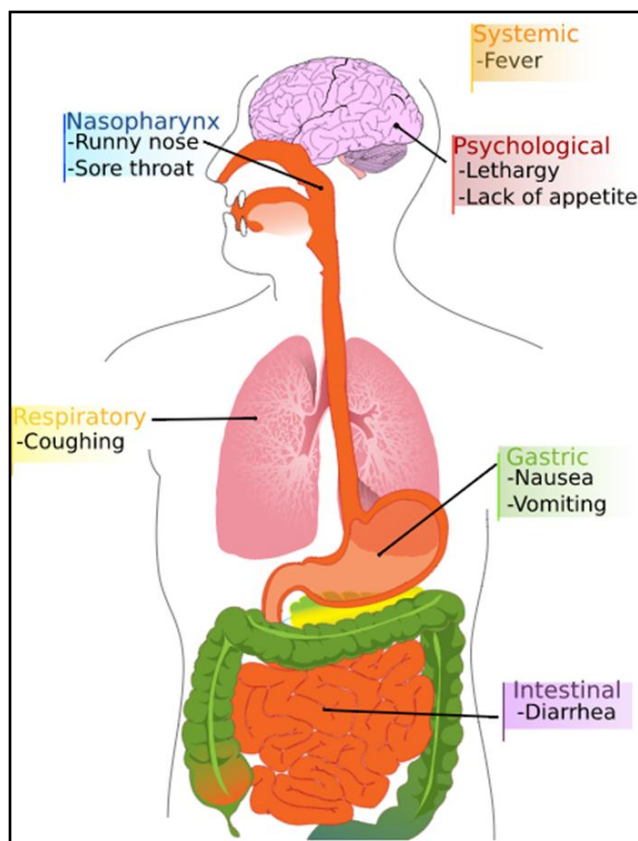


Fig. 2: Symptoms of Swine Flu.

Ayurvedic Approach for the Treatment of swine flu

Tulsi

Ayurveda is the system of traditional medicine first practiced in ancient India. It traces its origins to the Veda scripts. It is based on the belief that the balance between the five elements has to be maintained. The elements are grouped together to form three doshas that help to classify all individual constitutions of people, diseases, herbs and other non-herbal remedies and therapies. The doshas are Vata (air or nerve oriented), Kapha (water or mucoid type) or Pitta (fire type).

Ocimum tenuiflorum (synonym *Ocimum sanctum*), commonly known as holy basil, tulasi (sometimes spelled thulasi) or tulsi, is an aromatic perennial plant in the family *Lamiaceae* which is native to the Indian subcontinent and widespread as a cultivated plant throughout the Southeast Asian tropics.^[7]

Tulsi is cultivated for religious and medicinal purposes, and for its essential oil. It is widely known across the Indian subcontinent as a medicinal plant and a herbal tea, commonly used

in Ayurveda, and has an important role within the Vaishnava tradition of Hinduism, in which devotees perform worship involving holy basil plants or leaves (Fig.3).

The variety of *Ocimum tenuiflorum* used in Thai cuisine is referred to as Thai holy basil (Thai kaphrao); it is not to be confused with Thai basil, which is a variety of *Ocimum basilicum*. *Ocimum* is a genus of aromatic annual and perennial herbs and shrubs in the family *Lamiaceae*. Its best known species are the cooking herb Cooking basil, *O. basilicum* and this medicinal herb Tulsi (holy basil), *O. tenuiflorum*. Most culinary and ornamental basil plants are cultivars of *Ocimum basilicum*.^[8]

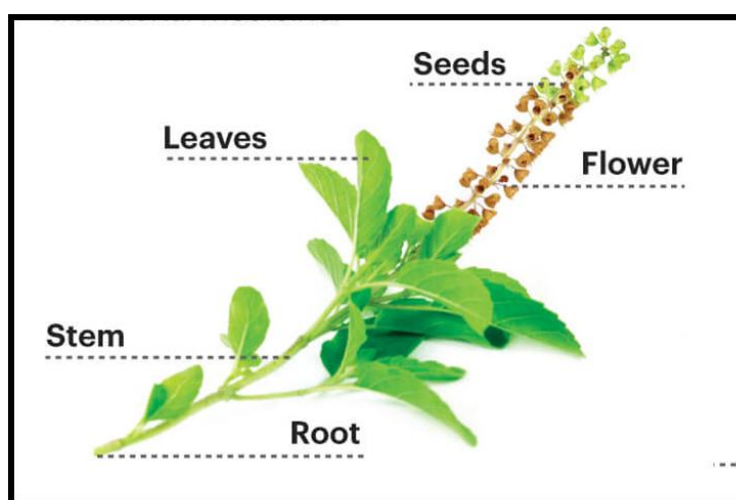


Fig. 3: Parts of Tulsi used as traditional medicine.

Tulsi (Sanskrit:-Surasa) has been used for thousands of years in Ayurveda for its diverse healing properties. It is mentioned in the Charaka Samhita, an ancient Ayurvedic text. Tulsi is considered to be an adaptogen, balancing different processes in the body, and helpful for adapting to stress. Marked by its strong aroma and astringent taste, it is regarded in Ayurveda as a kind of "elixir of life" and believed to promote longevity.

Tulsi extracts are used in ayurvedic remedies for a variety of ailments. Traditionally, tulsi is taken in many forms: as herbal tea, dried powder, fresh leaf or mixed with ghee.^[9]

Essential oil extracted from Karpoora tulasi is mostly used for medicinal purposes and in herbal cosmetics.

Ayurveda, the traditional 'science of life', has a remedy for diseases when every other stream of medicine fails. Now, at a time when swine flu is spreading like wildfire across the world,

Ayurveda has the remedy in the form of the miraculous herb, the basil leaves commonly known as Tulsi. **Wonder herb** Tulsi, the purest and most sublime plant, has been known and worshipped in India for more than five millennia for its remarkable healing properties. Considered as an 'Elixir of Life', this wonder herb has now been claimed to keep the deadly swine flu at bay and help fast recovery in afflicted persons.^[10]

"The anti-flu property of Tulsi has been discovered by medical experts across the world quite recently. Tulsi improves the body's overall defence mechanism including its ability to fight viral diseases. Even when a person has already contracted swine flu, Tulsi can help in speeding up the recovery process and also help in strengthening the immune system of the body. Tulsi improves the body's overall defence mechanism including its ability to fight viral diseases.

Tulsi or holy basil is revered and worshipped throughout India for its amazing medicinal properties. It is known to:

- a) Relieve stress
- b) Strengthen the immune system
- c) Enhance stamina
- d) Relieve congestion and colds
- e) Promote healthy metabolism
- f) Relieve inflammation
- g) Lower cholesterol
- h) Provide rich supply of antioxidants

Many medicines exploit its curative powers, especially treatments for common colds and flu. Have five duly washed leaves of Tulsi (known as Basil in English; medicinal name *Ocimum sanctum*) every day in the morning. Tulsi has a large number of therapeutic properties. It keeps throat and lungs clear and helps in infections by way of strengthening your immunity.^[11]

Aloe vera

Aloe vera is a plant species of the genus *Aloe*. It grows wild in tropical climates around the world and is cultivated for agricultural and medicinal uses. Aloe is also used for decorative purposes and grows successfully indoors as a potted plant.

It is found in many consumer products including beverages, skin lotion, cosmetics, or ointments for minor burns and sunburns (Fig.4) There is little scientific evidence of the effectiveness or safety of Aloe vera extracts for either cosmetic or medicinal purposes.^[12]



Fig. 4: Aloe Vera Plant.

Immune boosting benefits of Aloe Vera

Aloe Vera has long been praised for its medicinal health benefits. Aloe contains numerous minerals that are vital to the growth and health of the body's system. It's no wonder that this beautiful prickly plant scores high as an influenza and swine flu buster.

Recent Studies show that Aloe Vera is a wonderful tonic for immune system health and helps with the absorption of vitamins and minerals. Aloe is also antibacterial, antiviral, and anti-inflammatory. This is the key to its being able to stimulate the immune system. Consuming Aloe Vera in high concentrated dosages, can stimulate the production of white blood cells that help to fight influenza viruses and other illnesses. Therefore, it can be useful for the treatment and prevention of influenza due to the content of acemannan found in Aloe.^[13]

Commonly available plant and very helpful in getting relief from the Swine Flu, Aloe Vera has an attested direct effect on the immune system, strengthening it and replenishing the lost energy. All you need to do is cut one Aloe Vera leaf and wash it properly. Squeeze out the gel and mix with lukewarm water. Drink the mixture once a day. One spoon of gel should be sufficient in each dose.

For good health **2 ounces** can be taken per serving. If person sensitive to the diuretic properties of Aloe, consume the inner fillet (clear part) of the plant or bottled form. The green skin, although is nutritious, can cause diarrhea in some individuals.

Aloe Vera is safe for adults of all ages, pregnant or nursing mothers and children. If taking oral corticosteroids medications, like prednisone, beclomethasone, or methylprednisolone do not take it while using Aloe. It can develop a potassium deficiency and other toxic symptoms that those medication may trigger.^[14]

Giloy

In Ayurveda, Giloy is one of the most essential herbs in use. In recent times it becomes popular as its name is linked in the treatment of Swine Flu. It is also known as Guduchi in India. It is also known as Madhuparni, Amrita, Chinnaruha, Vatsadaani, Tantrika, Kundalini and Chakralakshanika in different parts of India.^[15] *Tinospora cordifolia*, (Fig.5) which is known by the common names heart-leaved moonseed, guduchi and giloy, is an herbaceous vine of the family *Menispermaceae* indigenous to the tropical areas of India, Myanmar and Sri Lanka.



Fig. 5: *Tinospora cordifolia*.

Giloy pacifies all the three Doshas so it is quite effective in diseases of Tri-dosha origin. Below are few of the numerous benefits of Giloy.

- a. Giloy possesses antiseptic and analgesic properties.
- b. It is used in common skin conditions and gout.
- c. Juice is taken with Neem and Amla (Indian Gooseberry) it is very effective. We can see the effect in couple of weeks.
- d. Juice of 1 feet long branch of Giloy and seven leaves of Tulsi (Holy Basil); boiled and taken as a herbal drink enhances body's resistance level up to three times. It also increases platelets count, which decreases considerably in Dengue fever and Swine Flu. So it is one of the potent remedy for Swine Flu and Dengue.

- e. Giloy is quite useful in thirst, vomiting, loss of appetite, abdominal pain, liver disorders, jaundice, acid-peptic disorder, dysentery and worms. During indigestion the juice is taken or the paste of the leaves is given with butter milk.^[16]
- f. Giloy is effective in cardiac debility, blood, disorders, rheumatoid arthritis, splenomegaly, gout and anemia. Because of its Snigdha Guna and Madhura Vipaka; Guyduchi is also a very good aphrodisiac (drug that stimulates sexual desire).
- g. Giloy benefits a lot in prameha – urinary insufficiencies specially diabetes and other disorders of urinary bladder. In Diabetes it juice is taken in good amount regularly.
- h. Its juice is considered very effective in removing both external and internal toxins. It also cleans out the brain toxins that concern mental function.
- i. Giloy is used in chronic fever, malaria and typhoid fever. It is taken with honey. Also the stem of the plant with pipili (piper longum) is taken.
- j. Giloy reduces burning, normalizes temperature, improves appetite and increases the strength.
- k. Leaves and root can be used in excessive bleeding during menstruation or if one have bleeding after abortion or delivery. 5grams of its crushed leaves juice is taken in 2 to 3ml in half cup of water and given to the patient till its condition improve.
- l. Giloy is outstandingly good for respiratory troubles particularly in asthma. Patient can chew its root and bark every day for fast results.^[17]

Dosages

Giloy stem powder should be taken in routine to nourish the body physically as well as psychologically. 3-6 gm of powder is beneficial.

CONCLUSION

From this review we conclude that swine flu can be treated with Ayurvedic herbs. In this review we discussed three ayurvedic herbs those are beneficial in swine flu. Tulsi has a large number of therapeutic properties. It keeps throat and lungs clear and helps in infections by way of strengthening your immunity. Aloe Vera is a wonderful tonic for immune system health and helps with the absorption of vitamins and minerals. Aloe is also antibacterial, antiviral, and anti-inflammatory. Consuming Aloe Vera in high concentrated dosages, can stimulate the production of white blood cells that help to fight influenza viruses and other illnesses. Giloy increases platelets count, which decreases considerably in Dengue fever and Swine Flu. So it is one of the potent remedy for Swine Flu and Dengue.

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