HE UNIVERSITY OF TRANS-DISCIPLINARY
HEALTH SCIENCES & TECHNOLOGY

U Heritage Amruth

A Magazine For Healthy Living, The Natural Way





SOURCE OF LIFE

Amruth is a sanskrit word meaning 'immortal', local name for Tinospora cordifolia, a plant used in India for its rejuvenating properties

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Heritage Amruth is not a magazine or an organization. It believes that there is a design, purpose and use in every element of nature. It believes that there is science underlying most of our health traditions. It believes that we should build upon wisdom, not forget it. That we should live in harmony with nature, not fight it. It believes that every plant, every animal, every human being is a miracle. It believes in life.

A PREVIEW TO OUR FORTHCOMING ISSUES

DECEMBER 2021 ANO-RECTAL DISEASES

Due to change in life style. anorectal diseases like piles, fistula in ano, fissure are becoming quite common. Avurveda has a very effective and easy treatment for anorectal diseases without any complications Ayurveda texts explain about Arshas (piles). Bhagandara (fistula) etc. as that which trouble the person like an enemy....



FEBRUARY 2022 BACK PAIN

HeritageAmruth

Extended hours of sedentary work, without any physical activity, is more than enough to offer an array of back pain problems, with each of them having a different twist to the spine. Explore this issue for the natural and effective cures for the pain in your back....



APRII 2022 SKINCARE

Ayurveda is a perfect combination of art and science for natural beauty. In Ayurveda, it is all about inner wellness which will then reflect a healthy glow on your skin. Read this issue for the best treatments for most of the skin ailments.....



JUNE 2022

OBESITY AND WEIGHT LOSS

Avurveda can provide a holistic treatment for overweight and obesity. A traditional treatment program in Ayurveda aimed at weight loss primarily recommends lifestyle changes and appropriate modification in daily diet to improve health along with oral medications that would help in optimizing the metabolism steadily...



AUGUST 2022 HOME REMEDIES

Chances are you all must have used a home remedy at some

point: herbal teas for a cold. essential oils to dull a headache herbal decoctions for immunity or grandma's almond milk for a better night's sleep. Now. research findings have proven that most of these remedies are more than just old wives' tales. Read this issue for such timetested home remedies for health.



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OCTOBER 2022 CARDIAC CARE

Recognizing its importance as a vital organ governing the systemic circulation, Ayurveda pays special attention to save heart from any direct or indirect trauma and also from various factors which may in turn precipitate a heart disease. Ayurveda cardiac treatment comprises of finding the root cause of the problem and correcting it. Ayurveda also give right diet, lifestyle and herbal remedies to manage heart health.

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Dr Sharad Kulkarni

different cure approaches (in addition to Ayurveda): like Homeopathy, Naturopathy, Siddha, Unani, Acupuncture and Yoga. Such a hybrid approach is known to have spawned remarkable



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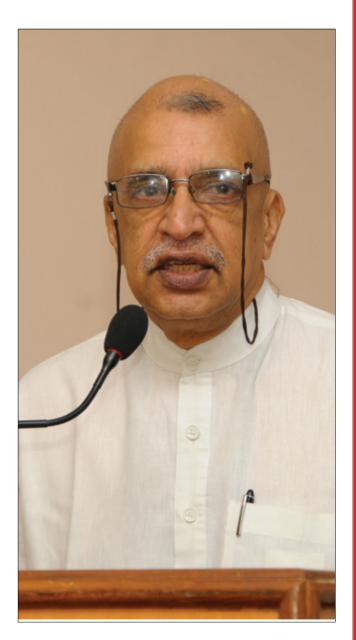
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Disclaimer Note: All views and opinions expressed in the respective articles are sole responsibility of the authors - Editor

Can Ayurveda help manage **Covid Pandemic?**



here is increasing clinical evidence from different Indian states that demonstrates that Ayurveda is contributing to COVID. The reputed medical journal (J-AIM) managed by the Pune University has compiled peer-reviewed case studies from different states on Ayurveda management of COVID. These indicate that physicians effectively manage respiratory symptoms, fevers, fatigue, metabolic disorders and low saturation including long standing COVID with safe, classical Ayurveda formulations. In our own university hospital, I-AIM Healthcare Center, we have effectively treated several COVID patients who voluntarily came to us for help including patients who were afflicted with black fungus or mucormycosis.

However, one needs to clarify to readers that Ayurveda does not manage COVID with antiviral herbal formulations. So, the guestion arises, how does Ayurveda contribute to COVID without antimicrobials? To understand this phenomenon, it is necessary to break the myth that antivirals are the only means for managing symptoms of COVID.

While it is justified to treat COVID-19 and other infections with appropriate antimicrobials biomedicine, it is irrational to insist that they must be managed similarly by anti-virals by other systems of medicine which have a different way of understanding biological change. If one were to give an analogy from music, consider how absurd it would be for a dominant community of musicians to insist that musical expression is only possible through jazz, symphonies or sonatas and all other cultural musical expressions like a raga, makosa, or Chinese opera are not music because their structure, instruments. notation are different.

Ayurveda has a 'systemic' biological theory (dosha vichar) different from the molecular and germ theories of Western medicine. It has a sophisticated scheme to diagnose and treat complex physiological imbalances. It has an incredibly large armoury of 400000 herbal and herbo-mineral formulations in contrast to around 4000 globally known modern drugs. These Ayurveda formulations are digitized in the GOI-CSIR database called the "Traditional Knowledge Digital Library (TKDL)".

Readers must become aware that the test of any knowledge, like in the example of music above, is not based on any unique method or concepts, however profound, but by assessing if its theories and practices can consistently be applied to transform and solve real-life problems. To reject and ignore a solution because its logic of mode of action is different from a particular dominant medical knowledge framework is sheer prejudice and betrays ignorance of plurality and its implications.

Furthermore, while evidence from outcome data is indeed a credible way to establish effectiveness, it must be realized that absence of large-scale trial data is not tantamount to lack of evidence. Data is directly a function of public investment in clinical research and the truth is that such investment in AYURVEDA has been pathetically low. The recent Clinical Case

Repository Portal designed by the Ministry of AYUSH to collate and analyze real life case studies is the first step in compilation of extensive data.

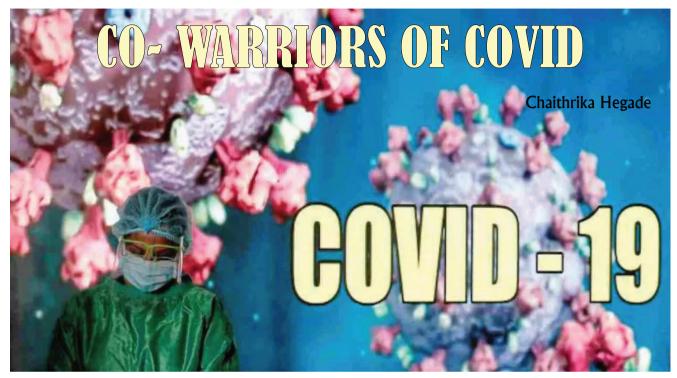
Demanding clinical trial data from Ayurveda as the sole prerequisite to establish credibility without substantial investment in data generation is like asking great cooks in ethnic communities unexposed to competition, to produce a Michelin award to certify their competence when this is evident from the fact that millions consume ethnic delicacies with delight.

Ayurveda is a legally licensed system of medicine in India. It is India's living cultural heritage. Ayurveda physicians are only its carriers. The entire scientific community in 'public interest' needs to assume ownership and responsibility for its revalidation. The analysis of the last 10 years of data on real life clinical practice, from clinical records of at least a hundred good Ayurveda hospitals and thousands of clinics should be the first "joint" health sciences venture.

It is in national interest to break silos across medical streams. More immediately, we need to recalibrate the national COVID management program to adopt integrative health care protocols. This is especially important for post-COVID syndrome where antivirals may be irrelevant.

> Darshan Shankar **Managing Editor**

PLANTSCOPE



Covid-19; a disease caused by the novel strain of Corona virus. It is a devastating pandemic for the conventional system of medicine. But Ayurveda, on the other hand, is well acquainted in combating this disease without producing any complications.

Lt was the time of Covid-19, second wave. A village existing in the cradle of nature was not really affected by the dreadful Corona virus. One fine morning, a 44-year-old man named Shreekanth from the village started feeling feverish after getting up from the bed. Gradually the fever increased and along with fever; tiredness, body ache, cough and headache also started. Because of the fear of Covid, they immediately rushed to a doctor who was running a clinic in a nearby town.

The symptoms of the patient were similar to Covid-19. Hence the doctor advised the patient and the family members to go for the test. As feared, the test results came positive for the patient. As the symptoms were moderate, the patient was given some medicines and advised for isolation. His fever decreased on the first day. But again, it started in the next morning and the patient could not get up from the bed due to high-grade fever and body ache.

At this juncture, the family decided to approach an Ayurveda physician who was practicing in the same village. The Ayurveda physician gave them some oral medicines and advised proper diet. His fever and headache disappeared in one day and this time it did not recur. After around five days, his cough was also better. Patient started feeling hungry, his fatigue was reduced and started feeling more energetic. After 20 days, he was free from all the symptoms and was back to his normal routine.

According to Acharya Charaka, a physician should not worry about naming a disease when he is able to analyze and give the treatment. Covid-19 is a viral disease which mainly affects the respiratory system. Persons affected with the Covid-19 usually exhibit the symptoms like: cough, sore throat, fever, loss of smell, loss of taste, headache and body ache. In severe cases, respiratory distress and dropping of oxygen saturation occurs. The intensity and duration of symptoms vary in each person. Few people affected by the corona virus will not exhibit any symptom.

If we analyze Covid-19 through the perspective of Ayurveda; it is a disease affecting Pranavaha srotas and vitiates all the three doshas. The medicinal plants having antiviral, antitussive (reduce cough), antiinflammatory, antipyretic (reduce fever) properties will help in treating Covid-19. Ayurveda has a wide range of single and compound formulations which can be given to Covid-19 patients by considering the prakruti (body constitution) and strength of the patient and of the disease as well.

Ayurveda plays a great role in treating post Covid complications, building the strength and immunity during post Covid phase. Many of the rasayana (rejuvenative) formulations can be administered to those recovering from Covid-19 after considering the strength of their digestive fire or such formulations can be administered once their digestive fire comes to normalcy. These rasayanas help in rejuvenating the body especially the respiratory system and gives overall strength to the body.

Here, we discuss a few herbs which are very effective in treating Covid and post Covid phases:

PIPPALI: Botanically identified as *Piper longum*, it belongs to the family Piperaceae (pepper family). It is known as Hippali in Kannada, Thippali in Malayalam and Tamil, Pippali in Telugu and Hindi and long pepper in English.

How to identify the plant?

It is a slender, much branched climber. Leaves are 5-9 cm long and around 5 cm wide, arranged in alternate fashion. They are ovate with an entire margin. Apex is acute and the base is cordate to subcordate. Aerial roots are produced at the nodes that help to clasp the host plant. Male and female flowers are present in different plants. Male spikes are greenish-yellow, fleshy, cylindrical, with minute flowers. Female flowering spikes are erect and yellow; fruiting spikes are cylindrical and oblong. Fruits are tiny berries, globose, and on ripening turn into black. Hence, Pippali has the synonym Krishna in Sanskrit.

Part used: dried corns



Properties: It is one among Trikatu (three herbs which are pungent in taste). The other two are: Piper nigrum (Maricha) and Zingiber officinale (Shunti).

	Fresh form	Dry form
Taste	Sweet	Pungent
Quality	Heavy for	Light for
	digestion	digestion
Potency	Cold	
Action on	Increases kapha	Balances Vata and
dosha	dosha	Kapha dosha

Role of Pippali in treating Covid -19

- Pippali helps is expelling sputum from the lungs and reduces cough.
- It helps to relieve fever and increases the digestive fire.
- Pippali produces tingling sensation when it comes in contact with the saliva. That is how it can sensitize the taste buds of tongue and helps in relieving loss of smell.
- Pippali is a rasayana dravya and can be used in post Covid phase also, to strengthen the respiratory system and to rejuvenate the body.

Research studies have also proved that Pippali has anti-inflammatory, antitussive and antipyretic properties.

When we look closely into the fruit of Pippali it is very similar to the alveoli of lungs which are the functional unit of lungs. Ayurveda has a principle called loka purusha samya vaada (Doctrine of sign), which denotes that whatever is present in nature is present in the human body and vice-versa. One can select the herbs to act on a particular organ/cells or tissues by the similarity they have with the plants. By using this principle, our Acharyas started using Pippali in the diseases of respiratory system.

Other uses

- It improves the digestive fire, useful in respiratory disorders, skin diseases, ascites, diabetes, indigestion and disorders of spleen.
- Pippali when mixed with honey is useful in obesity, cough, asthma, tuberculosis, fever and acidity. It acts as aphrodisiac, increases cognitive functions. When mixed with jaggery, it is useful in indigestion, chronic fever, anorexia, cardiac disorders, worm infestation etc.

Pippali in the form of food and drink

Pippali can be used as a spice in order to give pungent taste to the food items.

Note: Pippali when used in excess amounts and for a longer duration has its own side effects. Hence, one should use it judiciously. Ayurveda has explained the intake of certain drinks in each season which help to maintain the impaired system of the body due to the influence of external environment. During rainy season, the digestive fire will be impaired which makes the body susceptible to diseases. To maintain the digestive fire, one should take pippali mixed with the watery portion of curd called mastu. It should be taken in the first month of rainy season.

Mode of usage: 1 gm of pippali powder is added to one glass (150 to 200ml) of thin watery portion of curd. It has to be taken in the morning along with or soon after taking food for one month in apparently healthy adults

VASA: Botanically it is known as *Adathoda vasica* and belongs to the family Acanthaceae. In Kannada, it is called Aadusoge, Adathodai in Tamil; Adolakam in Malayalam; Addasaramu in Telugu, Malabar nut in English and Adosa in Hindi.

How to identify the plant?

Adathoda vasica is an evergreen shrub. Leaves are



opposite, elliptic-lanceolate with an entire margin. Apex is acute. Flowers are bilipped (hence it has a synonym in Sanskrit called simhasya- flower looks like that of opened mouth of an animal). Flowers are white in colour (because of which it is called Vaajidanta, meaning the flowers are white like that of the tooth of horse) with yellow or red streaks on throat arranged in a spike inflorescence.

Part used- Leaves and flowers.

Properties: Vasa has bitter and pungent taste, is cold in potency, dry in nature and light for digestion. It balances kapha and vata dosha.

Role of Vaasa in treating Covid-19

- Vasa acts as an expectorant to bring out the sputum and thus helps in reducing the cough.
- Vasa also helps in reducing fever.

Research studies have proved that Vasa has antitussive, expectorant and bronchodilator properties.

Other uses

- Vasa is used in respiratory diseases like productive cough, asthma, bronchitis, in fever, skin diseases, bleeding disorders, jaundice etc.
- Take 5 to 10 leaves of vasa, crush them and soak in water for 15 minutes. Taking bath in this water helps to alleviate fever and some of the skin diseases.
- Gulkand can be prepared by using the flowers of vasa. This can be given in bleeding disorders and respiratory tract diseases.

KANTHAKAARI: Botanically, it is known as Solanum xanthocarpum, belongs to the family Solanaceae (brinjal family). In Kannada it is called Nelagulla; Kandan kattiri in Tamil, Kantamkattiri in Malayalam, Nela mulaka in Telugu, Yellow berried night shade in English and Choti kateri in Hindi.

How to identify the plant?

Solanum xanthocarpum is a diffuse herb that grows upto 1.5 m. Stems are hairy. The plant has thorns on all parts except berries (hence, in Sanskrit it is known as kanthakaari- which has thorns). Leaves are ovate-oblong, margins are lacerate (deeply cut) and the tip is acute. Flowers are bluish-purple in color. Fruit is a berry, turns into vellow color on ripening.

Part used – Whole plant, fruit and root.

Properties: Kanthakaari is among Dashamoola (group of ten drugs where the roots are used in the treatment). It is pungent and bitter in taste, hot in potency, light for digestion, having ruksha (dry) and teekshna (piercing) property. It balances the kapha and vata dosha.

Role of Kanthakaari in treating Covid-19

- Kanthakaari can be used in treating cough and dyspnoea (difficulty in breathing).
- It can also be used in treating the fever.
- Kanthakaari when used in post Covid phase helps to rejuvenate the respiratory system.



Research studies shows that it has antiinflammatory, analgesic, bronchodilator, antioxidant and expectorant actions.

Other uses

Kanthakaari increases the digestive fire. It is used in kaasa (cough), shwasa (difficulty in breathing), jwara (fever), rhinitis, intestinal worm infestation etc. It is good for heart muscles, gives strength to the tissues especially to the respiratory system.

HAREETAKI: It is known as Terminalia chebula botanically, belongs to the family Combretaceae. It is known as alalekaayiin Kannada; kadukka in Malayalam; Kadukkai in Tamil; Karaka in Telugu; Myrobalan in English and Harad in Hindi.

How to identify the plant?

It is a medium-sized deciduous tree with dark brown to black colour bark. Leaves are alternate to subopposite with the presence of two glands near the top of the petioles or sometimes glands are absent. Flowers greenish white in colour, with an offensive smell. Fruit is hard, greenish yellow in colour, obovoid in shape and obscurely 5-ribbed. It is found to grow in dry and moist deciduous forests of Karnataka, Kerala, Tamilandu, Andhra Pradesh, Telangana, Bihar, Himachal Pradesh and MadhyaPradesh.

Part used - Fruit



Properties: Hareetaki is one among Triphala (combination of three fruits - Hareetaki, Vibhitaki and Amalaki). Hareetaki has five tastes except salt, mainly astringent in taste. It is laghu (light for digestion) and ruksha(dry). Hareetaki balances all the three doshas and is an excellent rasayana (rejuvenative).

Role of Hareetaki in treating Covid-19

- Hareetaki helps to reduce the cough.
- Because of its rejuvenative action, Hareetaki helps in strengthening the whole body, and brings relief in tiredness during post Covid phase.

The above-mentioned actions are supported by the research studies which states that Hareetaki has antioxidant, anti-inflammatory and antitussive properties.

Other uses

- Hareetaki improves the digestive fire, intelligence and memory.
- It is good for the eyes, hair and skin.
- It relieves inflammation, provides nourishment to the body and prevents aging process.
- Hareetaki is a wonder herb used in a number of ailments like cough, tuberculosis, sore throat, skin diseases, diseases of eye, wounds, obesity etc.

Hareetaki in the form of food

Powder of Hareetaki or Triphala can be mixed with dough to prepare chapatti.

GUDUCHI: It is botanically known as *Tinospora* cordifolia and belongs to the family of Menispemaceae. It is known as Amrita balli in Kannada; Dussiramu in Telugu; Amritavalli in Malayalam, Giloy in Hindi and Amrida valli in Tamil.

Guduchi means "the one which protects from diseases". It is also called Amrita, which refers to "the one which possess the qualities of the nectar". There is a mythological story about the origin of Guduchi. Long ago, the demons and Gods started churning the ocean to get the rare nectar out of it. After sevral days of continuous efforts, the amrita (nectar) started flowing. It is believed that while Lord Vishnu was distributing the nectar to Gods and the angels, few drops of nectar fell on mother Earth. These nectar drops transformed into the form of Guduchi plants.

How to identify the plant?

Guduchi is a perennial, dioeceous (separated in to male and female plant) climber; branches with scattered lenticels; bark is corky, flaking off with age. Matured stems produce long, thread-like aerial roots. Leaves are simple, arranged in alternate fashion, heart-shaped and smooth up to 15 cm long and 13 cm broad. The flowers are yellowish-green in colour, emerge in bunches. Fruits are drupes, turns bright red on ripening, globose, to 6 mm across. Seeds are in the shape of halfmoon (hence it has a synonym called Chandrahasa in Sanskrit).

Part used - stem and leaves



Properties: Guduchi has astringent taste, is light for digestion having hot potency. It balances all the three doshas.

Role of Guduchi in treating Covid -19

Guduchi mainly helps in reducing fever and improving the digestive fire in Covid-19.

- It also helps in relieving cough.
- Guduchi is considered as the best rasayana dravya (rejuvenative) which helps in regaining the overall immunity of the body which gets suppressed during Covid-19.

Research studies states that it has immunemodulator. antioxidant, antipyretic properties.

Other uses

- Guduchi improves metabolism.
- It is good for the eyes.
- It is used to treat jaundice, burning sensation of the body, diabetes, skin diseases, gout, hemorrhoids (piles), anaemia, intestinal worm infestation, anaemia etc.

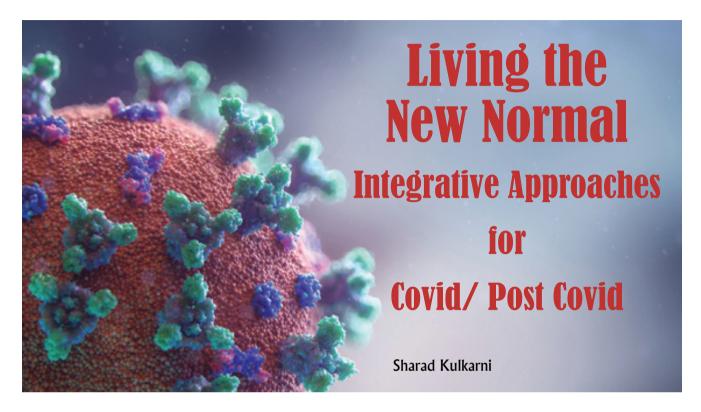
Guduchi in the form of food

Tender leaves of Guduchi are considered as the best leafy vegetable mentioned in Ayurveda. It is safe to use Guduchi in the form of food. Fresh leaves of Guduchi can be used in dosa batter or to make chutney, sambhar, tambuli etc.

Apart from the above-mentioned herbs, Ayurveda has an array of drugs which can be used in treating Covid-19. A physician has to select the right herb for the patient by using his intelligence. Nature has provided with these herbs as our strong allies in warding off the Covid- 19 disease and a multitude of other diseases. So, these herbs are in word and in effect true COVID WARRIORS!

Stop being CoViD worriers, take the help of these CoViD warriors.

Dr Chaithrika Hegade is an Ayurvedic practitioner from Karnataka, email: chaighatta@gmail.com



With the COVID-19 pandemic, mankind is facing a global health threat for which no specific therapy has yet been scientifically established. Here, let us have a look at a few integrative approaches in its management....

The onset of the globe-trotting pandemic COVID-19 has triggered a sweeping impact on several lives. WHO (World Health Organization) was informed of the initial cases of pneumonia in Wuhan city on 31st December 2019. On 7th January 2020, the Chinese authorities identified novel coronavirus as the cause, which was termed 2019-nCOV before it was titled COVID-19 virus.

On 11th March 2020, as the virus rocked the entire globe, WHO characterized the outbreak as a pandemic. Since then, we all have been a witness to the wreckage caused by the virus. So, far 21.9 crore cases and 45.5 lakh deaths have been reported (which might have inflated as you are reading this). Coronavirus has

gobbled up around 3.4% of the total world population. Isn't this figure alarming? This means, if you know 100 people, probably, you will never see 3-4 of them again. This is known to be the greatest challenge mankind has encountered since World War II.

With time, this 5-10 micrometer virus is known to have mutated into several variants to continue hosting on human lives. Even the virus has turned smart in this era of Artificial Intelligence. Virus having its own brain; is it not surprising? Besides finding its way into several books, articles, discussions, news channels; the virus has recapped to us certain terms like pandemic, quarantine, lockdown, the new normal, containment zone, PPE kit, WFH (work

from home), social distancing, 1st wave, 2nd wave and so on. Unfortunately, this addition to vocabulary has happened during a time of crisis.

Apart from disrupting world trade and movements, this celebrated villain has turned almost everyone's life upside down. It has overhauled how we learn, greet, interact and work, as social distancing regulations have sparked off more of virtual existence, both professionally and personally. Most of us wonder if life will never be the same, so shall we adapt to this new normal?

Now, the new normal is; not wearing a mask can call for a penalty, you are suggested to wear gloves when stepping out of house, if your body temperature shows as even 99 degrees; you cannot enter the grocery store, hand sanitizers have become as essential as carrying a purse. Earlier, you might be enthused to attend a marriage party in the family, now, you might turn the invitation down outright. Traveling, outings, get-togethers might be something like the good old days.

Those who have had been infected might be still recovering. The ones who are still in the safe zone are frightful of taking home the virus. As a result, undue stress has been reported among the population. If you are distressed, the virus may or may not get you, but you will, most likely, develop some mental or physical sickness. It is believed that most illnesses first hatch in our mind before taking control of our body.

So, is there any natural way to outsmart the virus, the fears and mental stress?

Of course, there is a proven science that has been practiced for centuries, and is known to offer organic treatments. It is called Ayurveda!

What is Ayurveda?

Developed in India more than 3,000 years ago, Ayurveda is one of the world's ancient holistic healing systems. This term is a combination of two Sanskrit words; Ayur, which means life and Veda, which means knowledge or science. Ayurvedic cures being with internal cleansing through special diets, natural remedies, yoga, massage and meditation.

According to the concept of Ayurveda, there should be a balance between mind, body and spirit to good health and wellbeing. The primary objective of Ayurveda is to promote a lifestyle that keeps you at bay from diseases; both mental and physical. Also known as the 'Mother of All Healing', Ayurveda aims at expelling the impurities from the body, reducing symptoms, magnifying resistance to diseases, bolstering emotional (mental) health and bringing harmony in life.



It emphasizes more on prevention of diseases and promotes maintenance of health through right thinking, nourishing diet and lifestyle.

Ayurveda and Life Energy

Ayurveda and the followers of this science believe that every person is made of 5 basic universal elements: air, water, fire, space and earth. Therefore, if your mind, body and spirit are in alignment with the universe, you can cherish robust health and vice versa. These elements of the universe compound in the human body to form three life energies, known as doshas.

- Vata dosha space and air
- Pitta dosha fire and water
- Kapha dosha water and earth

Vata is the subtle energy related to the movement processes of our body, like breathing, muscle and tissue movement, blinking, throbbing of the heart, and all movements in the cell membranes and cytoplasm. If Vata is in balance, it promotes flexibility and creativity. If outbalanced, it precipitates fear and stress.

Pitta administers our metabolism, assimilation, absorption, digestion, nutrition, and body temperature. If Pitta is in balance, pitta, it promotes intelligence understanding. If outbalanced, it triggers jealousy, hatred and anger.

Kapha is the key energy that is in charge of the body's structure, like tendons, muscles, bones, and

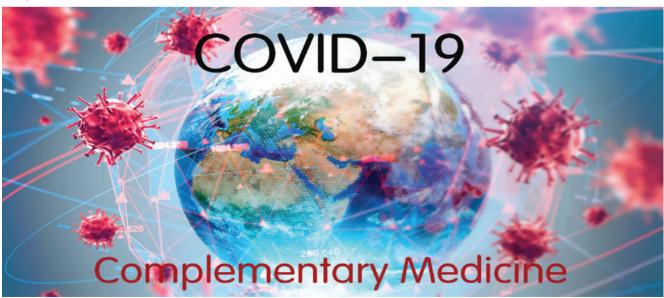
creates the "glue" that binds the cells together, identical to the characteristics of water and earth. Kapha dishes out the water, significant for the functioning of all body systems and parts. It greases the joints, conditions the skin, and sustains immunity. If Kapha is in balance, it magnifies love, forgiveness and serenity. If outbalanced, it catalyzes greed, attachment and malice.

Therefore, how our body works is governed by these doshas. Each one of us inherits a unique blend of the three doshas or energies. Normally, one is stronger than the other two. Ayurveda believes that the play or combination of these doshas is what determines the good or poor health (both physical and emotional) of a person. So, now you can identify which one is dominant over the others.

Life often throws challenges as well opportunities at us. Although we may or may not have control over the intricacies of life, but what we have control over is our choice; our choice to choose the diet and lifestyle. By and large, these are the decisions that determine the quality of our life.

Integrative Approaches to Safeguard from Illnesses

Integrated solution is a tailor-made model based on the patient's clinical history, diagnosis, treatment curriculum, his or her physical and mental response, socio-economic status and spiritual beliefs. This



includes different cure approaches (in addition to Ayurveda) like Homeopathy, Naturopathy, Siddha, Unani, Acupuncture and Yoga. Such a hybrid approach is known to have spawned remarkable results not only in terms of diagnosis but also in effective healing.

So, now, let's walk through these different methodologies one by one.

Homeopathy: Homeopathy, also known as homoeopathy, has been practiced for over two centuries. It was developed in Germany in the late 1700s. Homeopathy follows the belief 'like cures like'. In plain words, the illness symptoms can be treated with the same symptoms in small doses. This is how the body's natural defense can be activated. Sounds confusing?

For example, cutting onions can give you teary eyes. Therefore, it forms a part of the cure for allergies. Similarly, remedies for other illnesses are made from a herb called arnica, poison ivy, crushed whole bees and white arsenic.

Homeopaths (Homeopathic doctors) add water or alcohol to make the ingredients mild. After this, they jiggle the mixture, for it to synthesize completely. This process is also called 'potentization'. Homeopaths conceive this mechanism transmits the healing essence. They also follow the dogma that the lesser the dose, the more efficacious the

medicine. Interestingly, after the process, most of these cures no longer comprise any molecules of the original ingredient. These medicines come in different forms, like tablets, sugar pellets, gels, creams, liquid drops, etc.

Naturopathy: Naturopathy is a medicine system that involves using natural methods to cure the body. This includes several therapies, exercise, herbs, nutritional counseling, massage, etc. It is a combination of traditional remedies with some characteristics of modern science. Naturopathy is based on treating the whole person, i.e., the body, mind and spirit. Instead of working on the symptoms, it focuses on eliminating the root cause of the illness. This is the reason a Naturopath may spend 1 to 2 hours in the quest to dig out the root. He or she may ask questions about lifestyle habits, health records, stress levels and may also prescribe a lab test, if required.

This type of approach focuses more on prevention and education rather than offering temporary relief.

Siddha: Siddha, which means 'one who is accomplished', is another genre of herbal and natural medicine that is practiced in the southern part of India, Tamil Nadu. In Jainism, Siddha is generally used to refer to enlightened souls. The Siddha concept of health is the same as Ayurveda's, i.e., both depend on herbs for treatment. But the curing process follows a different protocol.



The Ayurveda drugs are of vegetable origin, whereas, Siddha drugs are based on metals and minerals.

It is practiced by perfected masters who have acquired physical and spiritual perfection or enlightenment. Siddha medicines are known to reinvigorate the dysfunctional organs that are the cause of the disease.

Unani : Unani or Yunani is a non-Indian form of an ancient medicinal system. It actually originated in Greece by Hippocrates (460-377 BC) but was practiced by Muslims in South Asia and modernday Central Asia. Therefore, it is also known as Perso-Arabic traditional medicine. The Arabs were the ones to integrate Unani into the Indian culture in around 1350 AD. According to the principles of Unani, the human body comprises earth, air, water, fire – the four basic elements. These elements are available in the body at different temperaments and forms like hot, cold, dry and wet. Any imbalance in these entities is what eventuates a disease.

Unani physicians lay emphasis on the diet and digestive system while treating the patient. Specific diet charts couples with medicines are prescribed as a part of treatment.

Acupuncture: Acupuncture is another non-Indian traditional medicine. With its origin in China, it got integrated into Indian civilization. Therefore, Acupuncture is also known as Indo-China medicine.

The treatment involves inserting needles at certain body (acu) points, to various depths. No matter how fearful this may sound but it is safe as it's done by a trained professional. Acupuncture is said to reactivate the flow of energy (chi/qi) along the meridians or pathways in the body. The primary objective is to balance the energies, which can cure many illnesses and boost longevity.

Yoga: With its origination in India, Yoga is a completely non-drug therapy. Rig Veda, the ancient Indian scripture, features the first mention of the word 'Yoga'. Also known as the mind-body cure, Yoga focuses on the communication between the mind, body and behavior to magnify our body functions, health and longevity. It involves various physical postures, breathing techniques, concentration, and relaxation or meditation.

The paramount aim is to de-escalate pain, depression, fear, and induce a sense of physical, emotional, and spiritual hardihood. When this is partnered with the Ayurvedic treatment, it has proved to lower the levels of stress and insomnia to a pronounced extent. Due to the several benefits of Yoda, it has been acknowledged worldwide. International Yoga Day is celebrated every year on 21st June.

One or some of these solutions can be integrated with Ayurveda to outrun the monster of the pandemic. However, it is recommended to seek the advice of your doctor before adding or opting out of any approach.



Ayurveda - Approved tips for better recovery post-COVID

There is a quote that I came across on the internet and messaging apps, "Always stay positive but not in your corona test report". People find creative ways to convey their message with a dash of humor.

Going through or coming out of the quarantine could be nothing less than a sentence for a few days. While battling with the virus, parents could not see their kids and vice versa. However, this is the time when one needs family and friends close by.

But these precautions are crucial for your betterment and your dear ones. Remember, this is just a phase that will pass by. So, please do not ignore and take utmost care. Rather, utilize this time of isolation as the opportunity to develop the attitude of gratitude and meditating, so that when you recover, you are brimming with more energy than ever before.

There are certain safety nets you must build if you are recovering and even if you have already recovered. At the same time, I suggest following these precautionary measures to those as well who have still been out of harm's way.

- · Take the prescribed medicines regularly until the doctor asks to discontinue.
- Wash your hands and face with soap and water regularly.
- Stay at home, if possible, especially the ones above 60 years and below 5 years or suffering

- from illnesses like diabetes, sugar, BP, asthma or any chronic ailment.
- Maintain social distancing and wear a mask when you step out of your house.
- Avoid frequenting closed spaces like malls, etc. with insufficient fresh air.
- Ensure adequate nutrition through a balanced diet.
- If there are any warning signs like fever, immediately breathlessness. seek medical assistance.
- Practice breathing exercises to boost lung capacity, for example, anulom-vilom, Bhramari, ujjayi pranayama
- Practice Yoga to build stronger immunity and body functioning.
- Meditate to develop self-control, cleansing, selfawareness and right mindfulness.
- Eat and sleep on time. Get six to eight hours of sleep every night.
- Do not push yourself hard while exercising. Begin with slow walks.
- Soak yourself in morning sunlight for 30 minutes every day.
- Avoid eating fried, sugary and processed foods.
- Soak overnight 1 date, handful of raisins, 2 walnuts, 2 almonds and eat on empty stomach in the morning.
- Drink warm water in sufficient amounts to stay hydrated.
- Do gadget fasting at least 1 hour before sleep and 1 hour after waking up.
- Practice gratitude before retiring for the day.



As they say, a stitch in time saves nine, so if you take adequate precautions, you can keep yourself and your loved ones safe from the clutches of disease. Make these steps a part of your everyday regime and enjoy bursting health.

Please note: All the suggestions shared above are for awareness purposes only and should not be treated as a replacement for any medical advice. Please consult your doctor before making any changes to your everyday routine.

Do's and Don'ts of Ayurveda

According to Ayurveda, the heart is known as the center of Prana (life force). The reason is, the heart pumps oxygen-rich blood and nutrients to different parts of the body. According to the philosophy of Ayurveda, every single body comprises of three different energies, also known as doshas: Vata, Pitta, Kapha. Dosha is a Sanskrit word that means 'that which can cause problems'. These doshas are the key players behind our good or bad health (physical, mental and spiritual).

Ayurveda follows the ideology that the world comprises of five elements — vayu (air), teja (fire), aakash (space), prithvi (earth) and jala (water). A synthesis of these elements results in doshas and the ration of each dosha varies from person to person. This ratio is what forms the roadmap to health. So, let's zoom in on each dosha one by one.

Vata (also known as ether), comprises oftwo elements: air and space. It is often depicted as cold, dry, rough, light, spacious and flowing. The autumn season characterizes vata for its flaky and calm days. People with vata dosha are usually slender, animated, and inventive. They are known for quick-wittedness, but have a short span of focus. So, distraction also forms an ingredient of their nature. Their mood relies immensely on the food they eat, people around them and the weather. So, here are some strengths and weaknesses of people with vata dosha.

Strengths: multitaskers, quick learners, subtle, brimful of energy, their heart can be easily won, kind by nature, exceedingly creative, benevolent, accommodating, naturally lean

Weaknesses: fluctuating mood, absent-minded, anxious, prone to anxiety, vulnerable to the cold, may suffer from sleeping disorder, appetite is hit-ormiss, susceptible to digestive disorders, susceptible to cold weather, poor circulation (cold feet and hands even during summers)

Here are the everyday dos and don'ts for people with vata composition.

Dos	Avoid
Engage in moderate exercise	Dried fruits
Eat steamed vegetables, sweet	Cold showers
fruits	Coffee
Drink hot water a few drops	Chocolate
of ginger juice	Cold drinks
Munch 3 nutritious meals	Strenuous
Dive in bed before 10 pm	exercising
Meditate	Alcoholic drinks
Express your creativity	Skipping meals
Self-massage with sesame oil	Raw vegetables
Take frequent baths	Bitter foods
Eat grains including quinoa	
or rice	

Pitta based on the two elements; fire and water, people with pitta disposition are known for a staunch personality. Pitta is often depicted as sharp, light, hot, liquid and oily. The summer season characterizes pitta for its warm and sunny days.

Mostly, people of this category have a well-built and athletic body. Pitta dosha people are also impactful leaders. They are competitive, goal-oriented and self-motivated. However, some people may find their hostile and obstinate nature offensive, which can give way to discord.

Strengths: quick-learners, dynamic leaders, enthused for success, intellectual, skillful, self-determined and tenacious, good metabolism, healthy hair and skin.

Weaknesses: prone to discords, anxious, difficulty in being patient or get angry easily, cravings for food, fluctuating moods when starving, likeliness to develop acne and inflammation, subtle to hot temperatures.

Dos for Pitta Prakruti	Avoid	
Focus on work-life	Caffeine	
balance	Foods with sour,	
Intake of dairy products	salty and pungent	
Intake of sweetener fruits	tastes	
like coconuts, melons,	Overworking	
mangoes, plums, grapes	yourself	
Add some physical	Consuming large	
activities to your regime	quantities of food	
Oil massage with olive,	Intake of sour foods	
coconut or other cooler	like grapefruit,	
oils	berries, apricots	
Engage in leadership roles	Going out in hot	
Meditate	temperatures for a	
Take adequate amount of	long time	
rest	Skipping meals	
Laughing is a great	Spicy foods	
therapy	Steaming hot	
Drink room temperature	showers	
water		

Kapha based on earth and water, people with kapha disposition are known for being weighty, stable, soft, slow and cold. The spring season characterizes pitta as this is the season when the world steps out of hibernation mode.

People with kapha dosha are generally brawny, caring, oily, slow, soft. They have thick hair, soft and large eyes, radiant skin. They enjoy being a support system for others. Kapha dosha people seldom feel agitated, they take life placidly.

Strengths: thoughtful, understanding, trustworthy, content, sympathetic, romantic, tolerant, supportive, composed, prudent, loyal, sturdy bones and joints, hale and hearty immune system.

Weaknesses: resist change, slow metabolism, susceptible to weight gain, tend to oversleep, lethargic, may hold on to things or relationships even when not required, breathing problems (i.e., asthma, allergies), prone to depression, heart disease, mucus buildup, susceptible to depression, need consistent encouragement.

Dos for Kapha Prakruti	Avoid
Exercise regularly Keep warm and stay away from dampness Dry massage for balanced circulation in the body Massage with sesame oil Maintain cleanliness	Oversleeping Dairy products Foods with sweet, salty and sour tastes Cold showers Intake of nuts
Develop a regular sleep routine Liquid diet once a week Apples, apricots, pomegranates, cranberries and other lighter foods Pungent spices like ginger, pepper, cayenne to be	Wheat, oats and rice Eating less cooling and moist foods
included in the diet Practice self-love meditation Maintain warm body temperature	

Some Simple Ayurvedic Tips and Recipes

You might have often heard this quote, You are what you eat'. According to Ayurveda, diet forms an important part of your wellbeing. The kind of diet you should take depends on the constitutional types Doshas; Vata, Pitta and Kapha especially when it comes to healing. Therefore, you should choose foods that are appropriate for your dosha. It should be healthy as well as detoxifying.

Here are some cooking tips for you to modify your cooking according to your dosha.

To Balance Vata:

- Keep away from cooling foods, for example, maple syrup, coconut oil, and drying grains (millet, corn, quinoa, etc.)
- · Prefer cooking in ghee, sesame and sunflower.
- · Choose a blend of grains, such as brown rice and barley or you may stew white rice with another grain.
- Dash in warming spices like, asafetida, fresh ginger, cumin, etc.).

To Balance Pitta:

· Abstain from eating foods that are warming or pungent in nature like arugula, honey, moringa, black pepper, etc.



- · Prefer grains that are syrupy and reasonably heavy like rice, barley, oats.
- · Avoid using warming and pungent spices, based on your degree of imbalance.
- · Toss in cooling spices, such as mint, cilantro, saffron, cardamom, coriander.
- · Prepare food in ghee, coconut oil or sunflower oil.

To Balance Kapha:

- · Use fewer dairy products.
- · Salt should be used in moderate amounts.
- · Choose lighter vegetables, such as carrot, cucumber, zucchini, etc.
- · Opt for pungent tastes, like sprouts, broccoli, bok choy, etc.
- · Use lighter grains, like millet, quinoa, buckwheat.
- It is advisable to use less oil in cooking. Sunflower oil, ghee, olive oil and mustard oil are recommended.
- · Dash in warming spices, such as rosemary, black pepper, cinnamon.

Here are a few simple recipes that you can easily prepare at home and are healthy for your gut as well.

Baked Vegetable

- 5 cups of vegetable sliced into wedges (you may use beetroot, carrot, sweet potatoes, zucchini or any seasonal vegetable and even a mix)
- · 2 tablespoon oil, like olive oil, coconut oil, sunflower oil, ghee
- · 1/4 tablespoon salt
- · ½ tablespoon cardamom (elaichi) powder
- · 1 tablespoon fresh herbs, nicely diced, like rose petals, cilantro, basil, mint, etc.

Take a small pan and heat the oil. Once heated, add the spices along with salt and stew (for 1-2 minutes) until

you feel the pungent aroma. Now, place the chopped vegetables into a baking dish and add the oil mixture. Stir it and let it rest for some time (2-3 minutes) to ensure that it coats nicely. Add some water so that it does not stick to the pan. Bake at 190 C for 15-30 minutes, depending on the kind of vegetable and the length of the wedges. You are all set!

The Golden Milk

In Ayurveda, golden milk is known to be the Healing Magic.

- · A boiling pot
- · 1 teaspoon turmeric (haldi) paste
- · A teaspoon of oil, preferably coconut oil
- · 1 cup almond/soy milk
- · 1 tablespoon honey
- · Pepper to taste

Pour the almond/soy milk into the pot, add the turmeric paste and pepper. Keep stirring until it comes to a boil. Add honey and stir again. Now, pour this into a cup, add the oil and whisk well. And you are ready to slurp! This milk acts like magic in detoxifying the liver and improves metabolism. Besides, it is anti-inflammatory and pain-relieving.

May the near future bring an end to this pandemic and the beginning of a "not-so-normal" lifestyle in which we finally decide it is time to build a healthier, more inclusive and sustainable society.

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Covid and Immunity



The COVID-19 pandemic has been unique and unprecedented in several aspects and has challenged health care systems across the globe. It turned the world's attention to the im-mune system, the body's defence force against disease causing bacteria, viruses and other or-ganisms that we touch, ingest and inhale every day.

Our immune system has many ways to fight an infection, one way is forming proteins often called antibodies and another is through activating cells that help to kill the pathogen. The immune response differs from person to person and it has more to do with the existing situation of a person depending on factors like severity of disease or comorbidities.

We all know that getting vaccinated during the ongoing Covid-19 pandemic isn't the only preventive measure to boost immunity. While it plays a major

part, we need to emphasize basic ways and adopting Ayurveda in our life for a healthy and happy living.

Covid in Ayurveda Literature

Covid and similar infections are mentioned in Ayurveda as Aupasargika roga / Infectious diseases. They usually spread through following modes:

- Prasanga mutual relationship
- Gatrasansparsha- physical contact
- Sahabhojana sharing food
- Nihashwasa inhaling the exhaled air of a patient

- Shayya sleeping closely
- Asana sitting close to each other
- Vastra, malya, anulepana sharing clothes, towels, handkerchiefs, cosmetics of infected person.

Infectious disease becomes pandemic due to contamination of Vayu (air), Jala (water), Desha (place or soil), and changes in Kala (season) leading to Janapadodwamsa (mass destruction).

Immunity-Vyadhi Kshamatva

The best way to protect oneself is to prevent from getting infected and develop immunity to fight against the infection. Ayurveda beautifully explains this concept under the heading of Vyadhi Kshamatva. The word Vyadhi means disease and the word Kshamatva refers to resistance. So, both put together denotes the capacityto resist a disease. Ancient texts define Vyadhi Kshamatva as Vyadhi bala virodhitvam: capacity of the body to fight against the disease, encounters the strength of the disease which has already manifested and **Vyadhi utpadaka hetu pratibandhakatvam:** capacity of the body to prevent the causative factors of disease from producing the disease.

Concept of Ojas and Bala

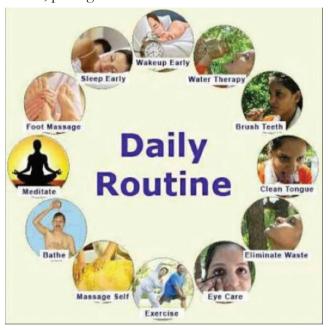
Ojas is defined as the essence of all the seven dhatus (tissues) beginning with Rasa dhatu and ending with Shukra dhatu. Diet and regimen having properties similar to Ojas are responsible to nourish and maintain the bodily compounds, whereas diet and regimen having opposite properties are contradictory to Ojas, so responsible for disease production and increased risk for the diesease to manifest. Ojas is considered to be the abode of life, which means loss of Ojas leads to destruction of human body.

Ojas is very well understood in terms of Bala. Bala signifies the physical and mental strength of the body. It has been classified into three types:

- **Sahaja Bala:** refers to the strength present naturally at the time of birth.
- Kaalaja Bala: refers to the strength bestowed by favourable time like young age, and season like winter.
- Yuktikruta Bala: strength acquired by following proper dietary regimen and life style.

Ayurveda emphasises on improving Yuktikruta Bala by following the below recommendations:

Nitya sevaneeya ahara / Sadaa pathya: implies those food articles which are recommended to be taken regularly to maintain health and to fight against diesase. It includes milk, ghee, honey, rice, wheat, barley, coriander, green gram, gooseberry, raisins, pomegranate and rock salt.



Dinacharya: daily regimen which every individual should follow to keep doshas/ bodily humors balanced on day to day basis. It includes:

- Danta dhavana proper brushing of eeth with selected herbs which prevents entry of micro organisms entering the system.
- Jihva nirlekhana tongue scraping to improve taste and appetite
- Kavala-Gandusha gargling of mouth / holding medicated liquids in mouth
- Pratimarsha Nasya instilling medicine inside the nostrils
- Anjana applying collyrium in eyes
- Vyayama regular physical exercise
- Abhyanga oil application over head and body
- Udwartana massaging the whole body with medicated powders

Rutucharya: following seasonal regimen as per changes in the season in terms of food and activities help the body to cop up with seasonal fluctuations.



Aahara Vidhi Vidhan: eating food at proper time in a conducive environment as per guidelines help to build a strong body.

Rasayana Chikitsa: Rasayana literally means to rejuvenate. It involves intake of Rasayana drugs such as Ashwagandha, Guduchi, Yashtimadhu, Amalaki which act as immuno modulators and prevent disease manifestation and progression.

Aachar Rasayan / Sadvritta / Code of conduct: righteous activities of mind and social well behaviour helps to improve the mental strength.

Ayurvedic Recommendations

Ministry of Ayush has provided certain guidelines to improve immunity and combat COVID. They are:

- Drinking warm water throughout the day.
- Daily practice of Yogasana, Pranayam and meditation for at least 30 minutes.
- Regular use of turmeric, cumin, coriander, garlic in cooking.

Medicines to improve Immunity

- Chyavana prash 1tsp in the morning and evening on empty tomach followed by hot water/ warm diluted milk.
- Turmeric powder 1/2tsp with 150 ml hot milk once or twice a day, known as golden milk.
- Tablet Guduchi ghana vati
- Ashwagandha tablet
- Drink herbal tea/decoction (Kadha) made from 3 gm powder comprising of Tulasi (Basil)-4 parts, Dalchini (Cinnamon)-2 parts, Shunthi (Dry

Ginger)-2 parts, Kalimirch (Black pepper)-1 part, mixed in 150 ml hot boiled water once or twice a day. Add Gud (jaggery)/munakka (raisin)/ Choti Elaichi (cardamom) to improve taste and flavor.

Simple Ayurvedic Procedures

Nasal application - Apply Sesame oil / Coconut oil/ Cow Ghee or Anu Taila in both the nostrils in morning and evening.

Oil pulling therapy - Take 1 table spoon sesame oil or coconut oil in the mouth. Do not drink, swish in the mouth for 2 to 3 minutes and spit it off followed by warm water rinse. This can be done once or twice a day.

During dry cough / Sore throat - Steam inhalation with plain water OR fresh Pudina (Mint) leaves OR Ajwain (Caraway seeds) OR Karpur (Camphor) can be practiced once in a day.

Lavang (Clove)/Mulethi (Liquorice) powder mixed with natural sugar/honey can be taken 2-3 times a day in case of cough or throat irritation.

* These measures generally treat normal dry cough and sore throat. However, it is best to consult qualified physicians if these symptoms persist.

The above measures can be followed to the extent possible as per an individual's convenience. Treatment protocols need to be designed as per geography, one's own constitution, age, food habits.

Dr Rashmi R, Ayurvedic physician at I-AIM, Bangalore, email: dr.rashmir@iaimhealthcare.org

Go Corona Go



Yes, we all want this dreadful pandemic to end at any cost. Panchakarma therapy can play a great role in case of prevention and management of Covid-19 cases right from home isolation patients to patients managed in I.C.U. setup.

The dimensions of pandemic require an urgent harnessing of all knowledge systems available globally. Ayurveda has enough potential and possibilities to be employed both for prevention and treatment of COVID-19. Panchakarma is a branch of Ayurveda medicine that deals with both purificatory and palliative medicine and modalities. Ayurveda physicians have described performing the Panchakarma in the preliminary stage of disease itself, which may fight the viral entry into the body or may reduce viral load in the infected individual.

Ayurveda management

While planning for the management of COVID 19 with Ayurveda and Panchakarma, we can plan it according to different stages of the disease. Some of the important points that should be kept in mind during its management are: preventing the virus entering the cells, stopping its replication inside human body and reducing the damage that occurs to tissues.

Panchakarma for Prevention in COVID-19

These are some measures which can be adopted for Prevention:

Panchakarma is a branch of Ayurveda medicine that deals with both purification and palliative aspects. Covid-19 is a pandemic disease of recent outbreak, affecting almost all age group people worldwide. Allopathic medicine is doing its best to fight with severity as well as mortality of Covid-19. However, we can strengthen the current treatment protocol of Covid-19 by integrating Ayurveda and Panchakarma measures into it. Depending upon the severity, stages of the diseases as well as associated comorbidities, different Panchakarma therapies like Kavala, Nasya, Virechana etc. can be advocated.

- Oil pulling therapy- Take 1 table spoon sesame or coconut oil in mouth. Do not drink, Swish in the mouth for 2 to 3 minutes and spit it off followed by warm water rinse. This can be done once or twice a day.
- Gargle with lukewarm water added with a pinch of turmeric and salt. Water boiled with Triphala, Yastimadhu also can be used.
- Nasal instillation of medicated oil i.e., Nimba taila, Anu taila, Sesame or Coconut oil or Goghrita (cow ghee) twice daily.
- Steam inhalation using water boiled with Saindhava lavana, Ajwain, Tulsi once/ twice daily.
- Shodhana can also be an option of preparation of the host to fight with the virus.

Role of Panchakarma in different Symptoms of COVID-19

Respiratory Tract Symptoms

- Kavala with Tila taila, lukewarm water mixed with Saindhava Lavana or with other Kwatha (having antiviral property) is helpful in the respiratory symptoms of COVID-19 patients such as sore throat, dry/ wet cough and breathing difficulty.
- Nadi Sweda using Dashamoola kwatha or hot water fortified with medicated medicines also can be used for breathing difficulty and chest pain.

Lepa (external application of medicinal paste)
with anti-inflammatory/ muscle relaxant drugs
can be used in the conditions like sinusitis, sore
throat, dry cough, breathing difficulty, chest
pain, body ache etc. its mode of action is by subcutaneous absorption of drugs.

G.I.T. Symptoms

- Administration of different type of enema is found to be beneficial.
- Gandusha with Irimedadi Taila or any other medicated oil can be used in case of loss of taste for COVID 19. It also helps in decreasing viral load of oral cavity.

Psychological Symptoms

Psychological symptoms often noticed in Covid-19 patients are anxiety, depression, loss of sleep and panic attack. Takra dhara, Shirobhyanga, Shirodhara, Nasya, and Padabhyanga etc. can be utilized to help the patients with these symptoms.

Neuro-Psychological conditions

Many patients have neuro-psychological symptoms like insomnia, restlessness, anxiety etc. Masthaka lepa, Thalam, Shirodhara, Ksheera Dhara, Nasya, and Basti etc. can be used.



Neurological Conditions

- Udvartana is full-body powder message done using herbal powder or paste in a rhythmic motion.
- Basti according to the condition in the form of Kala, Karma and Yoga Basti in combination of Sneha Basti and Kashaya Basti, Dhanyamla dhara, Ksheera Dhara, Shirodhara and Kashaya Dhara also is advised to strengthen the body muscles and regaining the lost strength.
- Upanaha can be used in headache, chest pain, tightness of the chest, arthralgia, myalgia etc.

Musculoskeletal System

Different kinds of Snehana and Swedana Karma like Abhyanga, Patra Pinda Sweda, Shastika Shali pinda Sweda, Dhanyamla Dhara etc. are helpful in musculoskeletal symptoms like body ache, joint pain etc.

Cardiac Conditions

- Cardiac conditions can be treated with ayurvedic treatments like Uro Basti, Shirodhara, Kashaya Dhara, and Ksheera dhara, Abhyanga (oil massage) or Pizhichil.
- Nadi Sweda also can be advised for complaints of chest pain, chest tightness and breathing difficulty. Nadi Sweda relaxes skeletal muscles,

induces hyperemia and tissue metabolism and thus helps in pain relief and also acts as temporary bronchodilator.

Panchakarma in different Stages of Pathogenesis of COVID-19

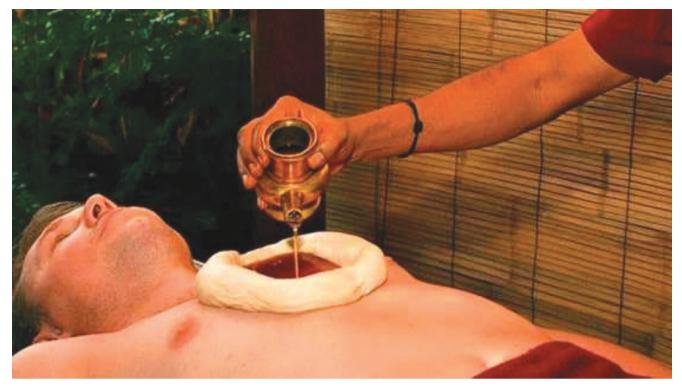
The main aim of the treatment is to arrest the progress of pathogenesis of Covid -19 in different stages:

Nasal Tract

- Pratimarsha Nasya with taila or gritha (preferably anutaila, Ksheerabala 101, Shadbindu taila, coconut oil, Goghrita, Yastimadhu gritha etc.) can be advised. It may act as barrier to virus cells on the nasal epithelium.
- Dhumapana using Vasa, Ghrita, Madhu, Jyotishmati, Haridra etc., also can be used to prevent the virus entering the nasal epithelium.

Upper Respiratory Tract including Oral Cavity

 Kavala (gargling) with lukewarm water mixed with salt and Haridra churna (turmeric powder) can be used. The oil dissolves all the microorganisms of mouth and draws out toxins from the digestive tract of human body. Because of fat soluble nature of microbes, they can easily mix with oil and move out of the body. The



emulsification process may be responsible for the formation of a soapy layer which contains all microbes. The emulsification process alters the sticking of microbes and removes the superficial worn-out squamous cells and improve oral hygiene. Gandusha using tila taila is also found to be beneficial.

- Steam inhalation also can be administered in reducing the symptoms. Steam inhalation improves ciliary functions and helps in mucociliary clearance.
- Dhumapana also can be suggested for oral hygiene and reduction of viral load.

Lower Respiratory Tract

- Deepana, Pachana medication (Pippali Churna, Trikatu Churna, Panchakola Churna etc.) followed by Snehapana (Panchatikta Ghrita, Vasadi Ghrita, Kantakari gritha, Indukanta gritha, Shatpala gritha) and later Vamana (emesis)/ Virechana (purgation) should be administered for purification of the body by expelling the doshas.
- Deepana and Aama Pachana is a method for correcting the metabolism and digestive system. Abhyanga and swedana (Oil Massage + Steam Bath) helps in rejuvenation of the body and expulsion of toxic waste through skin.

 Basti and sneha virechana also are found to be beneficial (Dashamooladi Basti, Guduchyadi Basti etc.).

Stages with Complications

A) COVID-19 with moderate symptoms

Patients of COVID-19 with moderate symptoms like chills, chronic productive cough, fatigue and body aches, shortness of breathing etc.; in these conditions, patients can take food and medicines orally but they usually present with tastelessness, loss of appetite etc. Therefore, it is better to use other routes of drug administration like topical (mastaka lepa, lepa etc.), intramucosal (Kavala, Gandusha, Anjana etc.), transdermal (Abhyanga) per nasal (Nasya, Dhumaana etc.) and per rectal (Basti) etc.

B) COVID-19 with severe symptoms

Patients of COVID-19 with severe symptoms or under ventilation support present with severe breathing difficulty, chest pain and other respiratory, GIT, CNS and circulatory symptoms. In this situation, route of drug administration except oral route may be useful for patients. One can use topical, intramucosal, transdermal, per nasal and per rectal route for drug administration



Panchakarma for Post COVID-19 Management

Life after COVID infection may not be smooth-sailing. A study says that 78% Covid-19 patients develop heart condition (based on a small sample). Clinicians have observed that Covid-19 leads to other long -term health complications involving kidneys, lungs, liver and even eyes in patients after discharge from hospital. Some symptoms, such as fatigue and loss of taste and smell can persist beyond the period of contagion. Also, still there is no clear idea on how long the acquired immunity to Covid19 will last.

According to Ayurveda concepts, there will be DhatuKshaya and Angimandya Avastha in post COVID-19 infection. Hence Deepana Pachana and Dhatu Poshana treatment may be beneficial in this stage. Along with this, Purva Karma, Pradhana Karma and Pachad Karma of Panchakarma can be used in the management of post COVID complications. For this, Abhyanga, Shirodhara, Nasya, Kavala, Gandusha, Basti can be used. Along with these, Samsarjana Krama and Asthamahadosha

Varjaniya Bhava can be practiced in case of post COVID complications.

Murdhni Taila: Many COVID patients go through psychological trauma during or after the disease. Murdhni Taila can be used in Shirobhyanga, Shiropicchu, and Shirodhara which is helpful in managing anxiety and stress. Sleep disorders are also obvious in many cases. Murdhni Taila helps in these complications also.

Shodhana: Cleansing of dosha present in the body by administering Panchakarma is essential before Rasayana. Moreover, it normalizes the body physiology hence it can be adopted.

Samsarjana Karma: Peyadi Karma (drinks) is advised to the patients after Panchakarma to normalize the digestion. Peyadi Karma should be rich with carbohydrate, protein, fat and other micronutrients. In case of COVID-19, plenty of water, high rich protein, vitamin and minerals are needed. Therefore, Peya etc. we can fortify with different pulses and vegetables are advised.

Concluding Remarks

Panchakarma is one of the prominent Ayurvedic tools used to restore balance in the body. Panchakarma is designed to allow the body to rid itself of wastes that have accumulated and lodged in the body, including the circulatory, nervous, and digestive systems. Once this cleansing process is complete, the body can resume its natural functioning without interference.

History of Indian Medicine has been a testimony to Panchakarma that has been serving the society during several pandemic situations since times immemorial. Panchakarma therapies have potency to improve Oja (vigor) and Bala (immunity), and acquiring of signs of normal health.

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Activate vour Own Ventilator

S Ramesh Babu

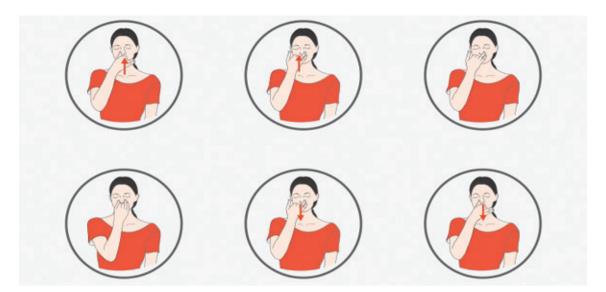
Corona the pandemic has instilled the greatest fear of life. The basic activity that keeps us alive has been threatened. Yes, your Breathing!

Jenerally, people have respiratory issues or people with generic cold and cough, all go through a process of this breathlessness and difficulty in breathing and they look for a solution that will help them to recover their breath quickly. But this pandemic has set in a paradigm shift to the problem of breathlessness. Anyone who gets slightest temperature or cold gets anxious and consequently finds it hard to breathe. The fear of death that people have been witnessing on all the channels has created more panic than the actual numbers. Yes, it is not a simple thing because only those who experience it can feel the real pain.

But there is always a solution when you listen to your inner self or look out for a solution. Generally, every problem always is surrounded by a solution in the nearest vicinity.

Whenever there is breathlessness. there is a sure shot situation where the oxygen levels in the body is depleted. Varmam comes to the rescue of the problem of breathlessness and drop in the oxygen levels.

COVID-19 is a respiratory illness SARS-CoV-2 with caused bv range of symptoms from mild, selflimiting respiratory tract infections to severe progressive pneumonia. multiorgan dysfunction and death. A portion of individuals with COVID-19 experience life-threatening hypoxia requiring supplemental oxygen and mechanical ventilation. Management hypoxia in this population is contraindication complicated bv non-invasive ventilation limitations in access to mechanical ventilation and critical care staff, given the clinical burden of disease. Positional Varmam therapy is readily deployableandmayultimatelybeused to treat COVID-19 related respiratory failure in resources limited settings; and, it has been demonstrated to improve oxygenation and is easy to implement in the clinical setting.



Varmam has several definitions and it is a way of life. Varmam is the divine life force that is flowing within us and the interruptions caused during the attack of the virus during this pandemic can be handled by following our own traditional system. This involves a series of practice that instantly makes the life energy reach every part of the body and increase the oxygen supply throughout the body. The differences have been recorded pre and post covid infection, and this has been tested.

The reason we are presenting to you this process here is that it can be used anytime there is an oxygen depletion in the body, and not just for the pandemic or attack of a virus.

Activate your own Ventilator

We are presenting to you a 3-stage process to activate your own ventilator to boost your oxygen levels instantly.

A small note we would like to add here .:

- The sounds mentioned here Om (no religion bias) and U are not mantras but are sounds that resonate with the body and make the energy flow throughout the body.
- Once the oxygen levels go up after following the procedure, it does not drop at least for 4 hours.
 So, this can be used as SOS and also to recover from the deficit that the body is facing.
- Instant boost from 94 to 99 and 100, 85 to 96 etc. has been observed.
- All stimulation is using mild gentle feather touch only. No pressure is applied.

Stage 1: A few of the Varmam can be activated which will make the body instantly receive and enhance the oxygen levels. If the person is unable to stimulate the Varmam, he/ she can be helped by another person or after doing the remaining stage 3, this can be repeated. (Sometimes it is possible that stimulation of Varmam is not possible due to poor condition of the individual.)

Uchi Varmam

Name: Uchi Varmam

Location: Center of the head

Stimulation: Using your mid three fingers, with the middle finger on the varmam location, rub in horizontal direction for 5 to 10 times.

Nema Vamram

Name: Nema Vamram

Location: Center of the forehead

Stimulation: Using your mid three fingers, with the middle finger on the varmam location, rub in horizontal direction for 5 to 10 times.

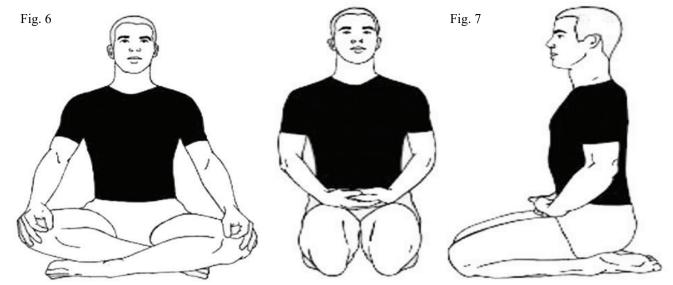
Mel Adappai

Name: Mel Adappai

Location: Below the nostril and above the lip. Stimulation: Using your mid three fingers, with the middle finger on the varmam location, rub in horizontal direction for 5 to 10 times.

Keezh Adappai

Location: Below the lower lip above the chin. Using your mid three fingers, with the middle finger



on the varmam location, rub in horizontal direction for 5 to 10 times.

Ottu Varmam

Location: On the chin.

Place the thumb in the lower side of the chin and 3 fingers on top the chin and give left and right movement for 5 to 10 times.

Stage 2: This can be done if the person doing this is not in panic / anxiety / depressed situation.

- Sit down on the floor with both legs folded (Sukhasana) as showing in Fig 6.
- Hold your thumb and index finger and place the palm facing upwards on the knees (Chin Mudra).
- Deep inhale through the nose and while exhaling chant "Om" thrice.
- Deep inhale through the nose and while exhaling chant "Imm" 10 to 21 times as per your convenience and level of comfort in breathing.

Stage 3: If the situation is panicky and the SPO2 levels are low, follow this without doing any of the above-mentioned steps in other stages. You will see instant spike in levels of oxygen which will help the person to regain strength and then after a few rounds once stability is reached then they can do the rest and follow all the stages.

- Sit in Sukhasana or Vajrasana (Fig 6 and 7)
- Place the palm on the thighs just above the knees. Apply mild pressure when you perform the respiring process.
- Inhale deeply through the nose.

- Bend forward, and with a pouted mouth, exhale creating a 'U' / 'Oo' sound as if you are blowing a balloon. Blow as hard as possible so that the lungs can expand to the maximum.
- Repeat this procedure as many times as possible.

While doing this, you will be throwing out lot of phlegm, hence to avoid frequent getting up to spit out the same, you can keep a mug with warm water and little rock salt added to it and can keep spitting the phlegm that comes out in the mug and dispose it later.

Frequency of repetition:

This can be repeated daily based on the levels of breathing difficulty faced by the individual.

- · Most critical breathing and low oxygen levels, repeat it once in 4 hours.
- Moderate breathing trouble and fluctuating oxygen levels, repeat it once in 6 hours.
- Initial stages of breathlessness and stooping oxygen levels, repeat it once in 8 hours.
- For prevention purposes all the 3 stages can be inculcated in our daily lives and can be done at least twice a day.

Stay Healthy. Stay Safe. Stay Prevented. Stay Oxygenated.

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Coronavirus is a nasty microbe that can damage your body to a great extent. If your infection is from moderate to severe, there are high possibilities that the virus did some noticeable amount of damage to your respiratory system. People with mild infection also need to be careful in the post-infection stage as the symptoms of other health conditions that are triggered by the virus may surface.

Feeling drained and lethargic is quite natural as your body becomes weak after having battled with the dangerous coronavirus for many days. And this is why, even after you have tested negative and your body has killed all the viruses, you have to shower yourself with utmost care and love. Doing so will ensure that you are completely healed and healthy again.

Mild or moderate COVID-19 usually lasts about two weeks for most people. But others experience lingering health issues continuing much after the recovery from the acute phase of illness as well. This is referred to as post covid syndrome in general. People living with post-COVID syndrome are sometimes known as "long haulers." The National Institutes of Health refers to long-term COVID-19 symptoms as PASC, which stands for **post-acute sequelae of SARS-CoV-2.**

The Cause for Post-COVID syndrome

It is very evident that people with certain risk factors (including high blood pressure, diabetes, obesity, smoking and other conditions which will compromise the immune responses) are more likely to have a serious bout of COVID-19. But there is no clear link between these risk factors and long-term problems. In fact, long COVID can happen even in people with mild symptoms. It is believed that people with many comorbidities may suffer more from PASC than with less comorbidities.

What are the Post Covid complications?

Similar to any other viral infections, Covid-19 also presents with sequels of mild to moderate joint pain, ankle swelling, bowel disturbances, cough, sleeping issues, fatigue etc. A few other popularly observed symptoms include extreme hair fall and dyspnea on excursion. Certain other cases have shown altered smell and taste sensation for longer durations as well. These symptoms depend on how the immune system responded to the illness. People with lesser immune response are more susceptible to the complications as described above.

It is observed that when affected with Covid-19, those who are under medications for lifestyle diseases such as hypertension and diabetes may have a spike in their normal blood parameters despite having regular medications. Gradually it is coming back to control. But in the meantime, it might have caused sufficient organ damage or tissue damages. Therefore, understanding the condition is really crucial.

Possible Long-term effects

- Breathing Issues A severe case of Covid-19 can produce scarring in the lungs which can lead to shortness of breath. This can be reversed by breathing exercise and therapies. But it will take time to recover to previous levels.
- Heart Problems Covid-19 infection can sometimes lead to inflammation of heart muscles which may show as shortness of breath, palpitation and rapid heartbeat.
- Kidney Damage Severe Covid-19 infection for a longer duration can cause kidney damage. But such incidents are not very common among those who recovered.
- Lost or Distorted senses of taste and smell

 As the virus affects mainly the cells of nose, the characteristic feature itself is identified as the loss of taste and smell. Usually, they will regain the taste and smell in 10-14 days. But several such instances have happened where they do



not regain the actual senses. Either there would not be any smell or taste or they may experience strange altered sensation. Though not lifethreatening, prolonged distortion of these senses can be devastating and can lead to lack of appetite, anxiety and depression.

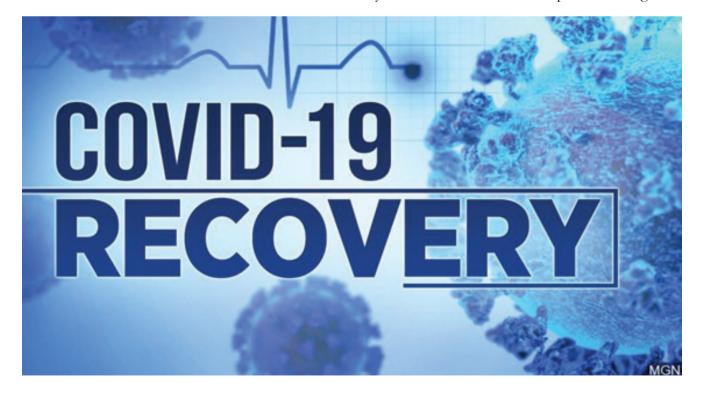
- Neurologic problems There is no clear evidences available about the Covid-19 which affects nervous system directly or deeply. Some individuals develop medium to long-term symptoms following Covid-19 infection, including brain fog, fatigue, headaches and dizziness.
- Mental Health issues This is the most alarming issue which is being faced globally. After surviving Covid-19, some people are left with lingering anxiety, depression, hallucination, fearfulness and other mental health issues. Physical changes such as pain and weakness can be complicated by long periods of isolation, stress from job loss and financial difficulties, and grief from the deaths of loved ones and the loss of good health. This is the area which require maximum attention. Proper counseling and rehabilitation will be very much useful for the survivors to come back to normal.

- Uncontrolled Hair fall and dry scalp This is one of the popular complaints after Covid-19 infection. This could be possibly due to the improper digestion and metabolic instabilities. Such things will eventually lead to lack of nutrition to the follicles causing them to fall.
- Ankle swelling and joint pains Like any other viral infection, Covid-19 is also characterized by joint pain and swelling due to prolonged inflammatory responses of body. In some people, the pain and swelling may last more than 6 months. Proper diet and therapies will help them to recover from such issues very well.

Role of Ayurveda

As mentioned earlier, Covid-19 induces high levels of physical and mental stress. So, a general protocol for managing the sequel will not help in successful management. Customized and symptom wise management is very much needed.

A good diet and exercise will definitely be of great help. Along with breathing exercises such as Pranayama, Yoga and meditation are also required for detoxifying both body and mind. Several Ayurvedic formulations will help in recovering from



Diet Chart for Digestive health

To Consume	To Reduce	To Avoid
Cucumber, Green leafy vegetables,	Red and Green Chilly, Pumpkin,	Sausages, Colocacia, Vinegar,
Bitter gourd, Ridge gourd, Carrot,	Snake gourd, Papaya, Ground	Pineapple, Pickle, Fryums -
Garlic, Onion, Ash gourd, Zucchini,	nut, Potato, Cabbage,	Papad, Chicken, Alcoholic
Rice, Wheat, Quinoa, Ragi, Almond,	Cauliflower, Tea, Coffee, Soft	beverages, Clams, Prawns/
Black Raisins, Banana Stem, Yogurt,	drinks, Chocolates, Paneer, Khoa,	Shrimps/ Lobster, Tapioca,
Buttermilk, Sprouts, Apple, Banana,	Cream of milk, Cartilaginous	Carbonated drinks, Deep
Pear, Water melon, Sapodilla,	Fishes, Red meat, Horse gram,	fried foods, Ready to Eat
Gooseberry, Guava, Duck meat,	Dal, Niger seeds, Lettuce,	foods, Maida based foods,
Duck Egg, Bony Fishes - Small,	Jaggery, Sugar, Ice creams,	Yam, Brinjal
Broccoli, Knol khol, Turmeric,	Capsicum	
Ginger, Cashew nut, Walnut, Honey		

major sequels. Concentrating on blood purification and liver purification have been observed to yield better outcome than treating the sequel as such. Kashayams like Guloochyadi Kashayam, Vasaguloochyadi Kashayam, Rasna Sapthakam Kashayam, etc. will help in easing the recovery.

Formulations like Annabhedi sindooram, Loha sindooram, Vilwadi Gulika, Doosheevishari Gulika, Shaddharanam Choornam, Yogaraja Guggulu, Arogyavardhini Vati, Anu Tailam, Ayush kwatha choornam, Kabasura kudineer etc. will help in reducing hair fall, improving digestion, removing fatigue, reducing joint pain and improving overall well-being. Inhalation of fumes of Aparajitha Dhoopa Choorna is found to have good results in improving the smell sensation. Also, it is being observed that the regular intake of Kabasura Kudineer and Ayush Kwatha Choornam helped to improve the lung capacities and reduced the breathing difficulties as well.

The above-mentioned formulations and activities are to be performed under medical supervision only. Self-medication is always dangerous and can invite several complications. Above everything, getting vaccinated can actually slow down the spread of Covid-19 and the associated sequels. A proper diet can also help in improving the absorption. The chart shown here might help in understanding the possible diet alterations so as to maintain the digestive health.

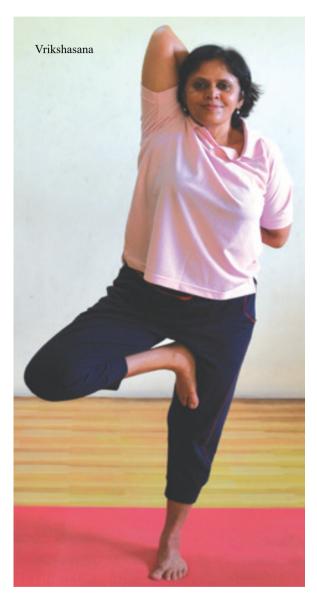
Immunity promoting AYUSH medicine (to be prescribed only by practitioners permitted under law for prescribing the medicine/therapy under specific stream)

Ayush Kwath (150 ml; 1 cup) daily, Samshamani vati twice a day 500 mg (1 gm per day) or Giloy powder 1 -3 grams with luke warm water for 15 days, Ashwagandha 500 mg twice a day (1 gm per day) or Ashwagandha powder 1-3 grams twice daily for 15 days and Amla fruit one daily/Amla powder 1-3 grams once daily. Mulethi powder (in case of dry cough) 1- 3 gram with luke warm water twice daily Warm Milk with ½ teaspoonful Haldi in (morning/evening) · Gargling with turmeric and salt · Chyawanprash 1 teaspoonful (5 mg) once daily in morning (as per directions from Vaidya.)

It is also suggested by the Ministry of AYUSH that the use of Chyawanprash in the morning (1 teaspoonful) with luke warm water/ milk is highly recommended (under the direction of Registered Ayurveda physician) as in the clinical practice, Chyawanprash is believed to be effective in post-recovery period.

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Yoga for Immunity



The lockdowns of pandemic has made hopeless homebound situation for most of us with ample annoyance. Although the unlock phase post lockdown is most welcome; fear, anxiety and uncertainty have besieged the major population; especially among the COVID recovered individuals. The health experts predict that this pandemic will

Geetaa Singh

eventually transmute to endemic (means it will not go away). So the threat of infection is not ruled out. Reports on other respiratory related viral and bacterial infections are equally prevailing, and bothering COVID recovered individuals in various other ways.

Now that the mass vaccination drive is in progress, number of active COVID cases has considerably reduced. We must know that vaccines are not cure; they are just temporary protection tool as the microorganisms rapidly mutate nullifying the effects of vaccine. Antibiotics and other medicines help recover but leave behind endless side effects. Hence, prevention is better than cure.

A verse from Charaka Samhita (30.26) says "Swasthasya Swasthya Rakshanam Aturasya Roga Nivaranam" meaning that a healthy way of living aims to rejuvenate and preserve the health of the healthy and alleviate the disease of the sick. It simply means build a strong body, boost body's natural immunity and become resistant to any microbial attacks.

Let us understand a bit of immune system. The immune system is the network of glands, nodes and organs that work to protect the body from bacteria, viruses, fungi and other harmful organisms. It requires a constant supply of energy and nutrients to maintain optimum function and performance. Toxins in the environment and in food, poor diet, stress, lack of sleep and exercise can all adversely affect the functions of the immune system. A strong immune system can destroy a virus/ bacteria or fungus within a few days, preventing the illness and further strengthen the immune system.

Our immune system is made up of special organs, cells and chemicals. The main parts of the immune system are: white blood cells, antibodies, the lymphatic system, spleen, thymus and bone marrow. It is in the bone marrow; thymus; lymph nodes present in the neck, behind the ear lobes, armpit, chest, around the shoulders, abdomen (belly), groin region, calf muscles, spleen, tonsils and mucous membranes especially present in the bowels, where the cells of the immune system do their actual job of fighting off germs and foreign substances. When any of the parts of immune system is not functioning optimally, the body is vulnerable to illness and infections.

How Yoga can improve Immune system?

Yoga is perhaps one of the most effective and time tested natural immunity boosters along with other habitual practices like right diet, proper sleeping pattern, good hobbies, positive thinking etc. When these are routinely included in our daily life, the natural immunity percolates into the body. According to Ayurveda and Naturopathy, immunity can be improved by anyone irrespective of age. All one needs to do is follow a disciplined lifestyle with constant efforts.

Simple therapeutic movements of joints, stretches and restorative yoga postures stimulates the lymphatic system and help in the easy flow of lymph fluid though out the body. Asanas that open the chest and throat are good for stimulating the thymus, inversion poses help improving the flow of lymph and immune cells throughout the body. Twisting poses and hip openers help to activate the secondary organs of the immune system, including the spleen and the lymph nodes. Modified versions of forward bends, back bends helps in supporting and strengthening the body's natural defences.

The breathing techniques and meditation help relax the nervous system and boost an immune response by stimulating the parasympathetic nervous system. The Pranayama practices are extremely useful for COVID recovery and to strengthen immunity. The vibrations of **Bhramari** practice are a proven tool where nitric oxide is produced in the nasopharyngeal region which helps in killing microbes. The kriyas like Kapalabhati and Bhastrika have

similar effects and are powerful detox tools. Jala neti helps to clear sinuses and reduces headache. Vamana douti is powerful abdominal detoxification kriya, helps improve digestion and assimilation. Jala neti and Vamana douti should be done only under expert guidance using gently warm saline. Both these krivas are extremely helpful in managing COVID induced allergic wheezing.

As the COVID victim is so much stressed physically, mentally and emotionally, deep and mindful relaxation is exceptionally beneficial to calm the mind and balance the mind. Anapanasati and chakra meditation are very powerful technique to achieve this. Thus, yoga clearly impacts the immune system.

COVID is a devastating disease with lasting side effects. Entire vitals go weak and a strange fear is deep seated in subconscious mind. Boundless fatigue lingers and inhibits to begin an exercise routine. Hence, always begin the yoga routine to suit your capacity under the expert guidance. Among the below recommended asanas and other practices post recovery, start with as less as 20 to 30 min/day. As you build the capacity, extend up to 60 min/day for at least 5 days a week.



Yoga postures for Immunity

Breathing Exercises/ Therapeutic movements (Warm up): To be performed in standing posture

- Hands in and out; hands stretching at different angles
- Toe and ankle movements; thigh lifts; Leg-to-hand kicks alternate and opposite
- Toe walk, heel walk, gentle squats, knee lunges
- Waist rotations and lateral bends and gentle spinal twists
- In seated posture Limbering of hamstring and calf muscles, tapping quadriceps, shoulder rotations forward & backward, shoulders up/down, pumping of shoulders, karna chalana (rotation of ear lobes) and thymus stimulation by tapping the centre of chest in Aadi mudra

Asanas

- Standing: Suryanamaskar to the best of your ability until profuse sweating. Urdhwasana, Ardha Chakrasana, Ardha Katichakrasana, Parshwakati Chakrasana, Utkatasana, Dhrita Utkatasana, Vrikshasana, Ardhabaddha padmottanasana and Adhomukha swanasana.
- Sitting: Titiliasana, Mandukasasa, Uttana Mandukasana, Parivritta Mandukasana, Baddhakonasana, Upavistakonasana, Vakrasana; Gomukhasana, Vajrasana and Balakasana.
- Supine: Poorvottanasana, Chatushpada peetasana, Ekapada Pavanamuktasana; Dwipada Pavanamuktasana; Supta Vajra Deepasana, Matsyasana and Sethubhandasana.
- **Prone:** Bhujangasana; Triaka Bhujangasana, Bekasana, Ekapada rajakapotasana, Urdhwamukha Shwanasana, Sarpasana, Ekapada and Dwipada Shalabhasana, Makarasana and its variations.

Pranayama

- Anuloma-Viloma with mukha douti
- Vibhagiya Pranayama
- Naadishuddhi pranayama
- Bhramari pranayama

Meditation

- Anapanasati / Chakra meditation. Adopt Linga mudra
- Deep Relaxation or Shavasana





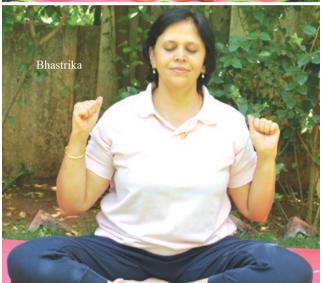
Krivas

- Kapalabhati
- Bhastrika
- Jala neti (5% saline 25-35° warm water)
- Vamana douti
- Kunjal Kriya (last three to be done only under expert guidance)

Additional holistic routines to follow

• Eat healthy food in moderate quantity. Excessive intake makes you feel tired and lethargic. Incorporate one serving of herbal tea every day (Recipe is given in the end).







- Spend time with the five elements of nature (pancha bhootas) sun, air, water, earth and space. Hence, sun bathe, deep breathe, drink ample water to detox the body, walk in garden/park (barefoot if possible) and isolate in quiet place to meditate (observe your incoming and outgoing breath). When your mind wanders with negative thoughts, the prana shakti (life force) decreases and thus your immunity decreases. Hence meditate with positive affirmations.
- Fast once a week. Fasting need not be going totally hungry. Fasting with natural fruit juices, buttermilk, fruits and soups is a good way to flush out toxins and enhance immunity.
- Develop good hobbies, chant mantras, involve in volunteering to help others and charitable activities. It makes you feel good. When you feel good, the happy hormones will be secreted in ample and boost the immunity naturally.
- In case you are constipated, adopt a suitable method to clear the bowels daily.

Check your immunity level by these selftests

- Spot jogging for 2 minutes nonstop. If you can still breathe comfortably without breathlessness or panting, you have good immunity. You can grade your immunity level based on how soon you will go breathless.
- Inhale deeply and hold the breath. Longer you are able to hold higher is your immunity. Minimum holding of air in the lungs for 15-20 seconds is essential for average or good immunity.
- Similarly, exhale and hold the breath. Holding up to 45-50 seconds in empty lungs is an excellent sign of good immunity.
- Perform sit-ups (12-15 for females) and pushups (25-30 for males) non-stop for one minute. Count the numbers you are able to do effortlessly and without feeling tired.

My Experience with Covid

I would like to conclude this article with my own experience as a COVID victim of first wave. Being a Yoga Therapist and senior citizen, my body was flexible and strong enough to do 2-3 hours of Yoga and 1 hour walk per day. Despite the severity of



infection, I did not panic in home isolation. I was calm all the while, did all the work by myself, repeated the affirmation of getting well soon and conduct the classes with same enthusiasm. Visualized my energetic commands for online classes, said my prayers and profusely thanked God and everyone who sent timely help. I believe that the yogic energy I was generating day after day with diligent practice helped me pass this phase comfortably without hospitalization. I kept my mental and emotional balance with utmost equanimity.

Samatvam Yoga Uchyate (Bhagavd Gita verse 2.48) meaning Equanimity is Yoga. Yes, that worked well. I was able to remain cheerful in this adverse condition and go through the routine without much disturbance. My phone was my companion. read all ayurvedic tips for post COVID care, yogic philosophy, energy channels and meditated on chakra balancing. I entertained myself with Candy Crush, walked on terrace twice for 30-40 minutes and I was all geared up to keep my respiratory system stronger. I believed to keep myself positive and deal with the situation gracefully. I was fortunate to resume conducting my online yoga classes within 45 days of attack despite suffering almost 40% lung infection. I learnt to be vigilant and take timely action without procrastinating with any of the initial symptoms. I recommend everyone to follow all COVID care rules because it is there everywhere and we have to learn to live with it.

Herbal tea for strong immunity and overall health

Ingredients: Lemon leaves 200g, grass Lavancha (khus/ vetiver) roots 200g, Sogade Beru (Sarasaparilla, Hemidesmus indicus) 300g, Ashwagandha roots 100g, Krishna Tulasi leaves 250g, Bay leaves 50g, Yashtimadhu (licorice) roots 250g, Turmeric roots 200g, Dry Ginger roots 250g, Cinnamon 100g, Cardamon 100g, Saunf (fennel seeds) 100g, Jeera (cumin) 150g, Cloves100g, Black pepper 50g, Hippali (long pepper) 50g, Methi daana (fenugreek seeds) 50g, Acorus (Baje, vacha) 50g, Star anise 50g, Amrutha balli (giloy) 150g

Sundry all the items for 4-5 hours in full sunlight. Breakdown all the hard roots to small pieces before milling. Mill all the items to a fine powder. Store in air tight container. It does not matter if a few items are not available.

To make the tea: Boil one full spoon in 200 ml water till it reduces to almost half. Add jaggery or sugar candy (misshri/kallu sakkate) and very little milk. You can filter or drink it as it is.

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Post Covid Meals



Once you have recovered from COVID-19 and are out of quarantine, your body needs strengthening for quick healing. Good nutrition helps your battered body build up its energy levels as fast as possible. Intake of easy-to-digest food in frequent and small measures is recommended at this stage as the body and mind are both vulnerable and not in a condition to labour hard over three big elaborate meals.

Anyone who has gone through the suffering and stress of COVID infection in the last 18 months has mostly experienced fatigue, weakness, and the loss of energy, appetite, strength, muscle mass and weight post recovery. The road to complete recovery from COVID-19 is tiring. Besides sleep and rest, eating healthy is an essential now to aid in healing. The food should be easy and comforting to chew and swallow and it is best to eat foods that do not cause distress to the digestive system or any other part of the body.

The right kind of food and fluids can make your road to recovery extremely easy. Make sure that you eat a protein-rich diet as it accelerates healing. Lentil (dal) soups, meat stew, boiled eggs, nuts, and seeds are the easiest ways of incorporating protein into the diet. The body needs more building blocks (protein) to support the immune system and help repair the body tissues during recovery. Vitamins and minerals also help it along. The path to recovery from post covid illness is long but with a good amount of wholesome nutritious diet, one can kick back this sickness in a faster mode.

Here's what to include in your post-COVID-19 diet: For Low energy levels / Tiredness

Frequent sipping of fluids like soups / juices/medicated water is recommended. Set yourself a target to drink 2-3 litres of hot to warm water / jeera/ginger water each day. Include soups, thin milk or juices, try drinking at the end of any meal - drinking before or during a meal may cause you to feel too full. Examples: Milk (skimmed), Buttermilk, Green gram soups, Mixed vegetable soups (Carrot/ Beans/ Gourd veggies like Bottle gourd, snake gourd, Ash gourd etc.).

For High hydration

Enough water, low salt lassi, coconut water, butter milk with a dash of cumin and mint, chaach, and fresh juice with seasonal fruits (without adding sugar), bael ka sharbat (it is high in fibre). Chicken or vegetable broth soup

For Poor Appetite / Nausea

Eat foods which are warm, soft, light to digest/easily digestible like red rice porridge/ Ragi malt/Vegetable soups/ Green gram soups. Eat small frequent meals 4-6 times per day. For nausea-bland foods may be better tolerated.

For Loss of taste / Taste changes

Regularly clean your teeth, tongue scraping is essential. Try sharp, spicy foods if you experience taste changes as these have a stronger taste. Try extra salt/ pepper to add more taste to meals. For dry mouth, try sucking on fruit bites (dehydrated fruits), sour candies/ herbal lozenges, Bhavana shunti as these can stimulate saliva production.

The immunity Boosters

Blend one small amla, half a carrot and apple each, one tomato, quarter of a boiled beetroot and half cup pomegranate; dilute it with little water to suit your taste.

Kadha: To 300 ml boiling water add 10 basil (tulsi) leaves, four lightly crushed peppercorns, half inch grated ginger and one pinch cinnamon. Reduce the concoction to half and add one teaspoon honey. A simple concoction of coriander, cumin and fennel seeds (saunf) or lemon and barley water is good for general well-being.





Sample Diet Plan

The main focus of this sample diet plan is to help rebuild immunity and restore energy levels. Keeping multi-color/ rainbow colors in your plate is the key to strengthen your immunity, no single food serves the purpose. Prefer small 4-5 small meals.

Early morning: 1 glass of warm ginger lemon water +2-3 soaked Almonds +4-5 raisins

Breakfast: Rice porridge/ Puffed Ragi porridge/ Idli/Dosa/ Green gram dosa/ Vegetable upma Mid-Morning foods: Apples, Banana, Oranges/ Mosambi, Tender coconut water, Thin mixed veg soups/ Green gram soups

Lunch: multi grain flour dosas + Double boiled red rice + sambar+ Rasam + Steamed any gourd vegetables

Evening snacks: Makhana / puffed rice with Ginger lemon tea, Dry fruit laddoo, a bowl of salad or low-fat curd at room temperature, figs and dates, a spoonful of pumpkin, chia or flax seeds, boiled peanuts or chick peas, a fistful of nuts (including almonds, walnuts), sweet potato chaat or seasonal fruits.

Dinner: Moong dal khichdi, Vegetable upma, Ragi dosa + sauted gourd vegetables

Bedtime: warm turmeric -pepper milk can be preferred. 1 glass milk (boil with 3 anjeer + 1 tsp poppy seeds + 4-5 almonds + haldi)

* This is a sample diet chart - it differs according to patient's digestive capacity.

Do's

 Maintain good hydration levels by frequent sipping of warm water or Tulsi-Ginger tea with lemon+ Honey, Turmeric + pepper milk or any fruit juices initially. till good digestive capacity is resumed.

- Prefer Jeera water for drinking throughout the day.
- Incorporate good amount of Vit C rich foods like Lemon, Oranges, Pomegranate, Guava in diet.
- More intake of Plant based diet like multi grains, vegetables and green leafy veggies. Different color fruits and vegetables provide different vitamins and minerals.

Avoid

- Sugary drinks, coffee, tea and alcohol as it can lead to further dehydration and increase in inflammation in the body.
- Raw foods/ salads
- Packed/canned foods, spicy, oily foods
- Avoid over doing Herbal drinks/ kadha assuming it to be immune boosters - All herbs do not suit everyone -check with your Ayurvedic physician and to be taken according to one's body type.

Other than these post-Covid diet tips, you need all the nutrients that are necessary for your health. Recovery post-COVID will take some time, you need to eat, rest a lot and also put all the bad experiences behind you for becoming truly healthy.

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Festive season Feast

Neevitha Arun Prabhu

By their very nature, feasts and festivals are special times, not just in the sense that they are extraordinary occasions but more so in the sense that they are separate from ordinary times. Let us savour in some traditional snacks and sweets from southern India.

The traditional foods are found to be the best combination of love from mother and nativity. They are the best soul mates to enjoy festive season along with feast for eyes. The making and processing of traditional foods will cherish our good childhood memories and understand the uniqueness of food quality. The nutritive value of traditional foods includes the caloric value, protein nature and also availability of essential nutrients.

The small tricks and tips are essential to be followed for the better quality of the product. The easily available simple and basic ingredients give us 'n' number of varieties in different styles. The age-old recipes hold cultural heritage, high grade of food technology and sweet love. The various food products in home-based recipes bring joy, enthusiasm, excitement and fun to enjoy festive season. Come let us celebrate and spread love with traditional recipes!

Karupatti Kozhukattai

This is served during Ganesh Chaturthi in the southern region of India. The colour of modak is unique and it can be great source of energy as well. **Ingredients:** Palm jaggery 1 cup, Water 1 ½ cup, Rice flour 1 ½ cup, Cardamom powder ½ tsp, Dry ginger powder 1 tsp and Grated Coconut ½ cup



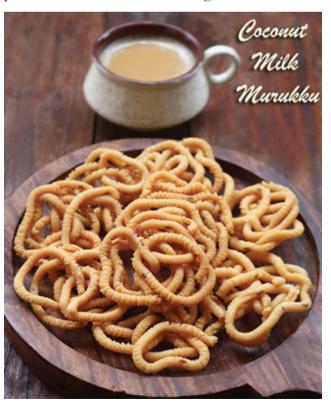
Add palm jaggery in a sauce pan with water, let it boil. Strain it and keep it aside. Add coconut, cardamom powder and ginger powder along with strained jaggery syrup; allow it to boil with rice flour and water in low flame. Cook till the mixture leaves the sides of the pan. Cool them completely, shape into ball and arrange in a steamer plate and then steam for 10 minutes. Remove and serve.

Thengai paal Murukku/ Coconut milk Murukku

This is one of the favourite snacks prepared during Diwali season in south India. The most appealing colour and fragrance of this snack allows to taste more and enjoy.

Ingredients: Rice flour 1 cup, Urad dal flour 1/4 cup, Black or white sesame seeds 1 tsp, Butter 1 ½ tsp, Salt as needed, Hing a pinch, thick coconut milk ½ cup and 1 tbsp and refined Oil for deep frying

Mix flour, salt, hing, butter and sesame seeds. Add coconut milk little at a time and make soft smooth dough. Never try to pour in the whole coconut milk immediately. Heat the oil in kadai/ pan. When oil is hot, reduce the heat to medium. Take a small portion of dough and put it inside the murukku maker, try pressing it in a circular motion to get desired shape of murukku and then gently drop it into the hot oil. Once it is cooked the sizzling sound stops and it is the right time to take out the pale white (not brown) coloured murukku out of oil, and then place it in a colander to drain excess oil. Repeat the same process for the rest of the dough.





Kandhar Appam

This is served as a special neivedanam for Lord Muruga and comes under traditional Chettinad sweet appam.

Ingredients: Raw rice one cup, Urad dal 3 tbsp, Fenugreek 1 tsp, Powdered Jaggery 1 cup, Grated coconut ½ cup, Cardamom powder ½ tsp, Oil for deep frying.

Wash and soak the rice, dal and fenugreek together for 2 hours. Drain the water and add in the mixture into mixer with grated coconut, powdered jaggery and little water; grind it into a smooth dosa batter consistency (do not add too much of water while grinding). Add cardamom powder and mix well. Heat oil in flat kadai, pour in the batter gently with a ladle. Cook it in slow flame until you get light brown colour. Flip and cook the other side of appam.

Surul Appam

This is a famous recipe in Tanjore where this snack meal serves as a sweet and nutritious one for supporting health of kids and elderly people.

Ingredients: Maida one cup, Raw rice flour 1/4 cup, Channa dal boiled 1 cup, Grated coconut 2 tbsp, Cardamom 2 nos, Jaggery 200 gm, Turmeric powder a pinch, Salt to taste.

Make a batter with maida, salt and raw rice flour in dosa batter consistency. The stuffing includes smashed, boiled channa dal which can be cooked

with jaggery, cardamom, turmeric powder and coconut until the mixture turns slightly thick. Prepare appam with batter using the appam pan and keep the stuffing in the middle of each appam and roll it. Serve hot with little ghee on top.



Mix Fruit Ada

This is a festive delicacy in Kerala, a steamed food which is prepared in a delightful way

Ingredients: Wheat flour one cup, chopped fruits: mango, jackfruit, banana etc. (1 cup each), rice flakes ½ cup, Sugar ½ cup, Cardamom powder ½ tsp, Grated coconut ½ cup, Chopped almonds and cashew 1 tbsp

Smash the fruits in a bowl along with rice flakes, sugar, coconut, dry fruits and cardamom. Make loose and soft dough with wheat flour using water and start spreading a little quantity of dough on a small rectangle shaped fresh banana leaves. Use the fruit mixture as stuffing at the centre of the dough and start spreading it all over the dough like for puran poli. Fold the two edges of leaves along with stuffed dough. Repeat the same procedure for remaining dough. Keep it in the idli maker or steamer for about 10 to 15 minutes. Steamed fruit recipe is ready to serve.



Paal Paniyaram

This is one of the milk based, sweet recipes offered to God during special prayers. The soft juicy balls soaked in milk serve as one of the favourite recipes for school going kids.

Ingredients: Raw rice ½ cup, Urad dal ½ cup, Parboiled rice 1 tbsp, thick coconut milk ½ cup, cow's milk ½ cup, sugar ½ cup, refined oil for deep frying, cardamom powder ½ tsp, salt to taste

Soak rice with dal for about 3 hours, grind it along with salt. The batter should be in dropping consistency where it should be light, fluffy and smooth with less amount of water in it. Heat the milk with sugar and cardamom powder, keep it aside. Mix the coconut milk into it (Do not pour in when the milk is hot or warm). Heat oil in kadai, make it into low flame, drop tiny balls of batter into the oil, pale golden colour indicates that the cooking part is done. Now add all the fried balls into the milk mixture, allow it to get soaked for about 15 min. Serve and enjoy.



Sweet Seedai

This sesame sweet is different from chikkies but highly recommended for adolescent group for strength and energy.

Ingredients: Sesame seeds 2tbsp, raw rice flour one cup, jaggery one cup, one tbsp roasted grated coconut, one tbsp roasted chana dal powder, 2tsp fine roasted urad dal powder, Refined oil for deep frying

Slightly roast the rice flour in a pan. Do dry roasting of sesame seeds also separately. Mix all the ingredients in a bowl. In half cup of boiling water, allow jaggery to get dissolved in it (do not allow the jaggery syrup to boil), strain the jaggery syrup. Pour in the hot jaggery syrup into the mixture taken. Gently mix it and allow it to cool. Make small balls

of the dough prepared, do deep frying in hot oil (with medium flame).



Vella Panniyaram

This is a special chettinad dish preferred during Diwali, which we can try it for evening snack also.

Ingredients: One cup leveled raw rice, around one tbsp urad dal on heap of raw rice, ½ tsp sugar, salt to taste, water as needed

Soak rice and dal for 2hrs; drain them and transfer into a mixer, grind it to a fine paste by adding water little by little. Transfer it into a bowl, add salt, sugar, and water if need to bring it to dosa batter consistency. Heat oil in a kadai, pour in the batter using a deep curved ladle. Let it raise and puff up in low flame. Flip over and cook on the both the sides. Drain and serve with hot spicy tomato chutney.



Ribbon Pakoda

A special spicy snack, always goes along with Diwali namkeens. As the name specifies its shape, it is still found to be the best snack in small packets, found everywhere in southern region of Tamilnadu.

Ingredients: Besan / chick pea flour 2 cup, salt to taste, raw rice flour 1 ½ cup, red chilli powder 1 tsp, pepper powder 1 tsp, Ajwain seeds 1 tsp, Turmeric powder ½ tsp, Refined oil for deep frying

Prepare the dough with required amount of water and little hot oil (2 tbsp). Dough should be in soft and smooth where it can be readily poured from the mould (chakli maker) the hot oil. Repeat the process with remaining dough using the mould. Drain the excess oil using colander and store it in air tight container



Bun Halwa

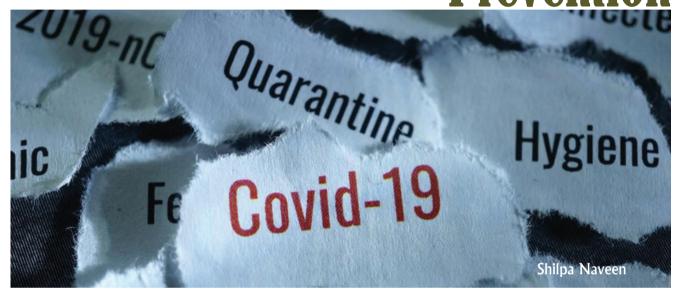
This is an easy to make ready sweet which takes its unique place in wedding occasions.

Ingredients: Powdered rusk one cup, sugar one cup, 1 ½ cup water, Ghee ½ cup

Add half cup of ghee and roast the powdered rusk along with it on a medium flame. The colour of the mixture should turn dark brown. Pour in the content into the boiling sugar syrup with continuous stirring. Now add the remaining ghee into it, keep stirring, and let the halwa leave the sides of the pan without sticking. Garnish it with roasted cashew and almonds.

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Daily Practices for Covid Prevention



Lifestyle being good acts as a synergist for good health, and a poor one for poor health. Following up a proper daily schedule and making it perfect by maintaining Dincharya can give wonderful results to your health and help in the prevention of infectious diseases as well as Covid.

As per Ayurveda, proper lifestyle or the person following Dinacharya (daily regimen), Ritucharya (seasonal regimen) as explained by ancient Acharyas lives a disease-free life. This practice acts as the first line of defense against the destabilizing influences of an external environment. A man is said to be healthy (Swastha) whose body humors (Dosha), tissues (Dhatu), digestive system (Agni) and excretory products (Mala) are all in the state of equilibrium along with normal mental status and spiritual pleasantness and happiness. In the crisis of corona virus or any other infectious outbreak, the self-protective measures to be applied are done by following Dinacharya.

During the pandemic outbreak, the first and foremost objective for an individual is maintaining hygiene or cleanliness which could reduce almost 70% risk of gaining the infection. Some of the measures involved in Dinacharya are about keeping and maintaining a healthy lifestyle. To become healthy is not just about physical fitness but also the mental status of a person.

Lifestyle Tips - Bramhe Muhurta Uthishta (waking up before sunrise)

Waking up early in *Bhrama muhurat* and exposure to bright light in early morning results in the release of serotonin (neurotransmitter biochemically derived

from tryptophan) which contributes to feelings of well-being and happiness and keeps the person active and alert. Since our bodies are naturally tuned-in to the rising and setting of the sun, the ideal time to wake up is at dawn. This allows the cells in your system to soak up the tempered rays of the sun and get charged for the day ahead. Since we all know the circadian cycle have a particular naturally tuned system for waking up and sleeping times in our body.

Ushnajalapana (Drinking lukewarm water)

Drinking lukewarm water in the morning before wash helps to flush out any toxins that may have accumulated in your body overnight. This water helps to clean the GIT system, cleanse the kidneys, and activates peristalsis. Many people have a habit of starting a day with tea or coffee, which is not good for health. As tea disturbs the metabolism which results in constipation which is the cause of diseases or a day start with a mixed drink disturbs the body mechanism. So, start your day by taking a glass of lukewarm water makes your mind body pleasant.

Dantadhawana (Brushing your teeth)

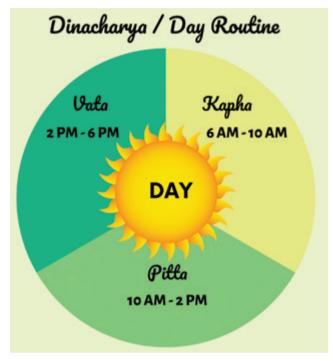
Brushing your teeth or cleaning teeth with a soft toothbrush having astringent, pungent, and bitter tastes or with the barks of Khadir (Acacia catechu), Arka (Calotropis gigantea), Karanja (Pongamia pinnata), Vata (Ficus benghalensis) and Arjuna (Terminalia arjuna) like astringent plants should be used for brushing which cleanse and refresh the mouth. These drugs have properties of Kriminashaka/ Jantughana (antiseptic), Vranaropaka (wound healer) and Raktashodhaka (blood purifier). Brushing brings freshness, takes away the bad odour, coating of teeth and creates desire for food.

Jivhanirlekhana (Scrape your Tongue)

Gently scraping the tongue from the back to forward by tongue cleaner made up of gold, silver or iron stimulates the internal organs, helps in digestion, and removes bad odour and dead bacteria. Ideally, Vata dominant Prakruti persons can use a gold scraper, Pitta dominant Prakruti persons can use a silver one, and Kapha dominant can use copper. Nowadays, stainless steel can be used by all people in routine due to their easy availability and cheap rates.

Dhumpana (Medicated Smoking)

To prevent the onset of diseases one should inhale herbal smoke (Dhumpana) daily with drugs like Haridra (Curcuma longa), Yashtimadhu (Glycyrrhiza glabra), Shallaki, Laksha (Laccifer lacca), Udumbara (Ficus racemose) and Tagara (Valeriana jatamansi) etc. which are lightened with fire and release the smoke which needs to be inhaled. It gives strength to the throat and improves voice. Smoking with medicated herbs helps to clean the respiratory tract, including the pharynx and oral cavity due to its anti-microbial action.



Dhupana (Fumigation)

Dhupana is defined as fumigation carried out by using the fine powder of some universal dhupana dravyas like Neem (Azadirachta indica), Vacha (Acorus calamus), Tagar (Valeriana jatamansi), Hingu (Ferula assa foetida), Pippali (Piper longum), Sarshapa (Brassica juncea), Ashwagandha (Withania somnifera) with ghrita (ghee) with the intention of Nirjantukarana (disinfection).

Any steam therapy can also be used like steam of Pudina leaves (mint) or Ajwain (caraway seeds) can be practiced once a day. This method was given in the measures of self-protection in the crisis of COVID19 presented methods was by Ayush Ministry (2020). Dhupana can be done in the house for disinfecting rooms and for protection against pandemic like COVID19.



Nasya (Instillation of medicine in nostril)

Applying sesame oil or ghrita (ghee) in both the nostrils (Pratimarsha Nasya) in the morning and evening helps to increase immunity. This was the method given in our text for treating Urdhvajatrugata Vikar (diseases of the supra clavicular region) and for boosting immunity which is now given by Ayush Ministry (2020). The nasal route is the best route for tackling Shiroroga diseases (disorders of the head).

Vyayama (Exercise)

Vyayama is nothing but any physical activity which is desirable and capable of making the body strong. It helps to improves circulation, strength, and endurance. It also keeps one relaxed and have a sound sleep, improves digestion and elimination. According to Ayurveda, the consequences resulting from physical exercise do not only bring lightness to the body, but it helps to remove all imperfection and augmentation of the digestive fire.

Pranayama (practice of breath regulation)

In Sanskrit, "prana" means life energy and "yama" means control. Breath regulation (pranayama) include modulation of the pace of breathing viz. slowing down or pacing the breath, chanting humming sound and retention of breath etc. Some studies are found on different types of yoga breathing practices explained in Hathyoga like Kapalbhati, Bhramari which are

found successful in influencing the neurocognitive abilities, autonomic and pulmonary functions as well as biochemical and metabolic activities in the body. After exercise, sit quietly and do some deep breathing exercises which helps to balance the bodily humours which are as follows:

For Vata -12 alternate nostril breaths can be done For Pitta - 16 Shitali breaths (curling up your tongue lengthwise and breathing through it);

For Kapha - 100 Bhastrika (short, fast breaths)
All these Pranayama improves the overall performance of body, increase chest wall expansion and almost all lung function by making efficient use of abdominal and diaphragmatic muscle and improve the respiratory musculature which results

in prevention of respiratory diseases like covid-19.

Meditation

Meditating every morning and evening at least 15 minutes is very important. Trying the "Empty Bowl Meditation" can be helpful (Empty Bowl Meditation induces a calm, blissful state of mind by using the breath to access the kundalinishakti—the divine spiritual power that inhabits every human being).

How to Practice Empty Bowl Meditation

Begin by sitting comfortably and quietly in a crosslegged position, facing east or north, with the palms up and placed opened on and curved like empty bowls on your knees. Open your mouth slightly and gently press your tongue against the roof of your mouth, behind the front teeth.

As you sit quietly, observe your breath, letting your lungs work naturally without conscious effort. Focus on your breath, maintaining awareness of the tip of your nose and the feeling of the cool air entering the nostrils. Notice the warmth of the outgoing air. After about five minutes, visualize the movement of your breath. Picture the air going into your nose, throat, lungs, diaphragm, and down behind the belly button. At this point, your breath will naturally come to a "stop." Stay there for a fraction of a second; then exhale, following the breath upward from the belly to the diaphragm and lungs, and out through the nostrils until it naturally ends at a point about nine inches in front of your nose. You may also practice this meditation while lying down.

Abhayanga (Massage)

A regular oil massage with warm oil works best for everyone or any skin. Daily massage with the oil made up of specific herbs is beneficial for maintaining good health. This massage can be incorporated as a routine before bath which makes skin supple and restore the balance of dosha and enhances wellbeing and longevity. The massage on the body can be done stepwise by following the direction of hair growth by using medicated oils like Ksheerbala taila, Dashmoola taila and Tila taila by using comfortable pressure.

Vastra Dharana (Dressing)

Proper dressing gives libido, fame and longevity of life. We should wash our clothes after one use as some studies have proved that the viruses could stay on particular surfaces like clothes for a particular time, so they can also become one of the carriers of infection. The person who works at places like Covid hotspot, hospitals, PHC, clinics etc. should wear disposable PPE kit, face shield, face mask etc. This habit of taking care by proper dressing can prevent the spread of infection.

Ahar (Lunch and Dinner)

In Ayurveda, the food is elaborately explained by Acharyas. According to them food should be taken while sitting in a comfortable place without talking. The food must be healthy like cereals, sprouted cereals, puffed rice, buttermilk, green leafy vegetables, whole fruits etc. along with sufficient water (3 to 3.5 lit/day). Food must be taken according to one's constitution as it affects one's metabolism. A full diet must always contain six rasas (Madhura (sweet), Amla (sour), Lavana (salt), Katu (pungent), Tikta (bitter) and Kashaya (astringent)) as it will help to boost your mind and body immunity.

Eating mindful and with concentration means one should be concentrated towards food, there should not be any talking, laughing, or any other distractions. Eating slowly or eating fast and eating before the previous food is digested will disturb the metabolism. Spices such as Haridra (turmeric), Jeera (cumin), Dhaniya (coriander), Lasun (garlic) should be used in the daily diet. All these measures about diet help to maintain the metabolism, increase immunity, strength and complexion.

Nidra (sleep)

Nidra is one of the main pillars of good health and a good life in Ayurveda that endows the body with strength, complexion and healthy growth that continues throughout life. Proper sleep at night leads to happiness, nourishment, strength and virility. Acharyas said that the day sleep should be taken only by Vata prakruti, and Pittaja prakruti but not by Kaphaja prakruti persons because it will increase the Kaphaj guna. Insufficient sleep could disrupt the circadian rhythm and trigger metabolic diseases that result in negative health outcome, including cognitive impairment.

The Ayurveda principles and practices can potentially become relevant for designing an integrated health care strategy. This creates the best regime to follow at the time of COVID-19. These measures or lifestyle are for living a better life and a healthy life.

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Protecting your Child during Pandemic



Fortifying your child's immune systems can not only help them tide over this pandemic but will prove to be highly beneficial in the longer run.

If your child has a weakened immunity and catches cough and cold easily or falls sick easily with the changing seasons, then you need to focus on your child's Immunity. There is a possibility that ama (toxins) are accumulated in the digestive system that can weaken the immunity of the child.

A healthy immune system is vital for children as they are exposed to a plethora of germs. Immunity is the state of having sufficient biological defences to avoid infection, disease, or other unwanted biological invasion. It is the capability of the body to resist harmful microbes from entering it. Ayurveda can certainly play a pivotal role to augment preventive measures. The current understanding of COVID-19 indicates that good immune status is vital to prevent and safeguard the children from disease progression.

In the wake of COVID-19 lurking around, a strong immunity seems to be the only saviour. While adults who understand the grim situation try to manage their food and diet, children are more prone to a diet deficient in nutrition as most of them are fussy eaters and they go more by the look and taste of a dish rather than its nutritional benefits.

Immunity involves both specific and non-specific components. The non-specific components act either as barriers or as eliminators of wide range of pathogens irrespective of antigenic specificity. Other components of the immune system adapt themselves to each new disease encountered and are able to generate pathogen.

Ayurveda's **Proposals** for improving Vyadhikshamatva (Immunization)

The following are proposed as measures to potencify immunization in Ayurveda.

Rasayana

Rasayana is helpful to increase the immunity of the person to keep him away from diseases. Rasayana can be interpreted with nutritive function, immunomodulatory action, antioxidant action, anti-ageing effect, neuroprotective action, haemopoietic effect etc.

Selection of Rasayana: According to need, Rasayana drugs can be administered by considering various factors such as Age, Dhatu, Deha, Prakruti, Kala, Disease. Rasayana act at three levels such as at the level of Poshaka Rasa (improves nutrition), at the level of Agni (increases digestion ability and assimilation strength) and at the level of Srotas (increases absorption of food from GIT to all parts of body).

Lehana (Lickables or Electuaries)

In Ayurvedic texts, various Acharays have described countless useful formulations and mode of conduct for children. Acharya Kashyapa describes a special formulation "Lehana" to improve Bala (immunity) in children.

Purposes of Lehana

- To enhance growth and development by providing required nutrition.
- Promote health, complexion and strength (immunity).
- Protect from various infections along with improving intellect and growth (delayed milestone).

Indication of Lehana

The lehana (electuaries) is indicated for children of a mother who is having no breast milk, deficient milk, or vitiated milk, of parturient women (mother) or of a wet -nurse of similar condition having predominance of Vata and Pitta but not Kapha, who do not get satisfied with the breast milk and cry inspite of repeated sucking, children who do not sleep at night, eat too much, pass scanty urine and feces; children who have increased digestive power, though free from disease, have delicate body part and emaciated, do not pass urine and feces regularely.





Contraindications of Lehana

Conditions such as children having poor digestive power, sleepy, passing excessive amounts of urine and stool, have indigestion, receive guru (heavy) breast milk, where the mother is consuming all Rasas, suffers from disease of head and neck, in Amaroga (disease of metabolism), fever, diarrhea, Shotha (edema), jaundice, anemia, cardiac disease, dyspnea, cough, disease of rectum, urinary bladder and abdomen, flatulence, Ganda (enlarged thyroid), erysipelas, vomiting, anorexia, all Graha disease and Alasaka should not be prescribed lehana.

Various formulations of lehana –mentioned by various Acharyas to increase digestive and metabolic power, strength are summarized below in brief:

According to Acharya Kashyapa

Svarna Prashana -Pure gold (in small quantity) is rubbed on a clean stone and given with honey and Ghrita, be given to child for licking.

Svarn Prashana is an unique Ayurvedic technique to improve immunity in children. It is made of Svarn Bhasam in very minute quantities along with ghee, honey, brahmi, vacha, yastimadhu etc and is given on Pushya nakshtra (the star of nourishment) that comes every month. Its benefits include-improving immunity, strength, memory and intelligence, prolonging life span, toning body etc. Samvardhana ghrita and Brahmi ghrita also recommended.

According to Acharya Charaka

Panchagavya ghrita (Ghrita means clarified butter made from cow's milk), Brahmi ghrita and Kalyanaka ghrita recommended.

According to Acharya Sushruta

Sushruta has mentioned 4 recipes (containing gold) which provide general immunity, body resistance, helpful in growth and development and enhancing the intelligence. These are: Svarna bhasma with Kustha, Vacha, Madhu (Honey) and ghee/ Svarna bhasma with paste of Brahmi, Shankhapuspi, with honey and ghee/ Svarna bhasma, Arkpushpi, Vacha, honey and ghee/ or Svarna bhasma, Khaidarya Sweta Durva and ghee.

According to Acharya Vagbhata

Preparations like Ashtanga ghrita, Sarashvata ghrita Vachadi ghrita are recommended.

Combination of gold with: Vacha, Kushta/Arkapushpi/ Matsyakhyaka and Shankhapushpi/ or Kaidarya and Vacha are recommended.

Concept of Prakara Yoga (age wise immunomodulation in Children)

Prakara Yoga is the 35th chapter of the Ayurvedic pediatric classic textbook named "Arogyakalpadruma" authored by Vaidya Kaikkulangara Rama Varrier. The author, at the end of the chapter points out that the content of Prakara Yoga is advised by Acharya

Bhela. The core contents of the chapter are the indigenous practices for enhancing body's immunity and to prevent diseases in children. Due to vititiation of doshas, children get affected by several diseases due to various reasons. Just like a fort prevents the attack of enemies, Prakara Yogas help to prevent the occurrence of diseases.

In the whole regimen of Prakara Yoga, good number of drugs are used at various developmental stages. Most of the combinations in Prakara Yoga are in the form of powder or ghee. The one special feature regarding Prakara Yoga is that all the drug combinations/ recipes detailed are as per the age of the child. Here, the drug schedule starts with birth and continues to the age of 12 years for the purpose of enhancing non-specific immunity of the body and thereby preventing diseases of childhood.

COVID-19 Ayurvedic Management Guidelines for Childern

General and Physical measures

- Follow physical distancing, respiratory and hand hygiene with soap wash and sanitisers, wear good quality clean mask.
- Gargle with warm water added with a pinch of turmeric and salt. Water boiled with Triphala or with Yashtimadhu or with Guduchi satva.
- Nasal instillation/ application of medicated oil (Anu taila or Shadbindu Taila) once or twice in a day, especially before going out and after coming back home from outside.
- Steam inhalation with Ajwain (Trachyspermum ammi) or Pudina (Mentha spicata) or Eucalyptus oil or any other medicated oil prescribed by Pediatrician once a day
- Adequate sleep of 8 hours.
- Moderate physical exercises and Yoga.

Dietary Measures

- Use warm water or boiled with herbs like ginger or coriander or basil or cumin seeds for drinking purpose.
- Fresh, warm, balanced diet (rice based soft diet preferably

 for rehydration), for young children boild fruits and vegetables can be given.

 Drink diluted milk (mixed with turmeric powder in150 ml hot milk) once after breakfast, avoid in case of indigestion.

Specic Measures / Symptom Management

For prophylactic care (high risk population, primary contacts), asymptomatic care, mild symptoms and post COVID management, following medicines/treatment care is proposed, but should be followed with paediatrician consultation and advice:

- Ashwagandha (aqueous extract of Withania somnifera) or its powder with honey/ jaggery / sugar).
- Guduchi satva or its powder with honey/ Jaggery
 / sugar or Ghana vati. (Samshamani vati or Giloy
 Ghana vati having aqueous extract of *Tinospora*cordifolia or the powder of *Tinospora cordifolia*.
- Kooshmanda Avalehya, Agastya Rasayana, Chyavanprasha (with honey/ warm water).

An effective preventive/ immune measure has to be practiced right from the birth of a child. Even though several formulations which boost the immunity and strength have been explained in various Ayurvedic classics, more detailed investigation of pharmacological activity, toxicity and clinical trials is to be conducted for obtaining a scientific approach towards traditional immunomodulators. This concept can be used in regular clinical practice and during any suitable conditions (pandemic/ endemic or any such situations) with some modifications or suitable interventions as required).

Note: This article is for information purposes only and is not intended to be a substitute for professional medical advice. Always seek the guidance of your doctor or other qualified health professional for any questions you may have regarding your child's health or a medical condition.

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Useful Unani for Covid-19



As per Unani classical wisdom, improving immunity with immune boosters is one of the key approaches for prevention of disease and maintenance of health. Enhancing immunity and providing symptomatic relief especially in upper respiratory tract infections is the main line of treatment advocated for Covid-19 in Unani system of medicine.

Unani system of medicine is based on the humoral theory postulated by Hippocrates, according to him the state of body health and disease are regulated by qualitative and quantitative equilibrium of four humours. **Amraz-e-Waba** is an umbrella term which is used in Unani medicine for all types of epidemics (smallpox, measles, plague, Hameer Saifi, influenza, Nipaha, Ebola, Zika, and 2019 novel coronavirus, etc.) mostly fatal in nature. The coronavirus disease 2019 (COVID-19) is a severe acute respiratory infection, and the pathogenesis and clinical features resemble with those of *Nazla*-

e-Wabaiya (influenza) and Zatul Riya (pneumonia) which were well described many years ago in Unani text such as high-grade fever, headache, nausea and vomiting, running nose, dry cough, respiratory distress, alternate and small pulse, asthenia, foul smell from breath, insomnia, frothy stool, syncope, coldness in both upper and lower extremities, etc.

The World Health Organization declared COVID-19 as a global emergency pandemic. Unani scholars like Hippocrates (370–460 BC), Galen (130–200 AD), Rhazes (865–925 AD), and Avicenna (980–1037 AD) had described four etiological factors for

Amraz-e-Waba viz., change in quality of air, water, earth, and celestial bodies, accordingly mentioned various preventive measures to be adopted during epidemics such as restriction of movement, isolation or "quarantena", and fumigation with loban (Styrax benzoin), sandalwood (Santalum album), Zafran (Crocus sativus), myrtle (Myrtus communis), and roses (Rosa damascena) and use of vinegar (sirka) and antidotes (Tiryaq) as prophylaxis, and avoiding consumption of milk, oil, sweet, meat, and alcohol.

Pathogenesis of COVID-19 as per Unani

According to the Unani concept, infectious diseases develop due to abnormal dominance of Hararat (hot), Ratoobat (moist), and Ajsam-e-Khabisha (microbes). In case of Covid-19, in Wuhan, China, at the time of Corona virus origin, during winter season, the moist environment increased the risk of viral infection. During hot summers, due to precipitation, the spreads of microbes (e.g., viruses, bacteria, fungus) increases, and the peak summer along with rainy season can be one of the most common causes of epidemic diseases. This observation implies that, Unani medicine promotes the elimination of moistness (dampness) from the body during "epidemic situation" with the help of some specific regimes which promotes the lessening of moisture that inhibit the growth of microbes (viruses).

Predisposing factors include dominance of abnormal humours, contact to infected person during epidemic conditions, peak summer along with heavy rains or beginning of rainy season, moist air and direction of air from south to other direction, open orifice, scratch skin and membranes, weak immunity, moist temperament, migration from the place of epidemic, breath infected air, excessive coitus, vulnerable ages are: children and elderly along with obese persons and those partaking excessive alcohol, milk, sweets, meat and oily products.

Unani approach for Treatment

Unani scholars have prescribed several single drugs as well as compound formulations for the prevention and treatment of infectious diseases in general. They have emphasized more on the use of certain drugs which are known to improve host immunity during the outbreak of epidemics, endemics and pandemics. Single and compound Unani drugs mentioned hereunder, may prove to be beneficial and can be used under the supervision of qualified Unani physicians or possible immune-boosting / symptomatic relief in upper respiratory tract infections.

Unani Single Drugs

- **Behi dana** (*Cydonia oblonga*, Quince): Antioxidant, immunomodulator, antiallergic and anti- influenza. (Dose is 3-5 gm).
- Unnab (Zizyphus jujuba, Jujube): Anti-influenza, immunomodulator and antioxidant. (Dose is 5 pcs).
- **Sapistan** (*Cordia myxa*, Indian cherry or Lasoda): Immunomodulator, tracheal smooth muscle relaxant and anti-oxidant. (Dose is 9 pcs).



• **Karanjwa** (*Caesalpinia bonduc*): Antipyretic, antimicrobial, anti-inflammatory and immunomodulator. (Dose is 3 to 5 gm).

Immunity boosting Natural products

- Strawberries Strawberries belong to the family of rose plant and are a rich source of vitamin C and other vitamins, minerals, fiber, antioxidants, etc., which boost the immune system. Daily use of this fruit is beneficial in fighting cancer, reducing joints pain, and also beneficial to the eyes and skin.
- Honey It is considered to be a good immune booster and is a rich source of antioxidants. It is rich in many vitamins and acts as a ready source of energy. In spite of sweet taste, it is comparatively safe for diabetics (safer than direct sugar) owing to its comparative low glycemic index.
- Ginger It is an underground stem which is a
 part of Indian cuisine. The benefits of Ginger
 include maintenance of normal blood circulation
 by improving blood flow. It is helpful in reducing
 joints pain, preventing chills, fever and excessive
 sweating.
- Turmeric Like ginger, this is also an underground stem and a rich source of many vitamins and antioxidants. Use of turmeric in raw form boosts immunity and acts as antioxidant as well as antidiabetic.
- Lemon and other citrus fruits Citrus fruits, particularly lime is considered to be a very good antioxidant, and a rich source of vitamin C and due to these benefits, it enjoys a special place in natural medicine. Its use is recommended for boosting immunity also.
- Amla (*Indian gooseberry*) Gooseberries are a rich source of vitamin C and antioxidants and is being used for its beneficial effects since a long time. It is antioxidant and a very good immune booster.
- **Giloy** (amruthballi, *Tinospora cordifolia*) It is an important medicine according to both Unani and Ayurveda pharmacopeias. It is known for its antipyretic, antibacterial properties and has blood purifying effect. According to modern research it is found to be a potent immunomodulatory, antidiabetic, anti-arthritic and antioxidant. Because of its properties, it is referred to as 'amrita' in ayurvedic literature.

- Rehan (tulasi, Ocimum sanctum), garlic (Allium sativum) and darchini (Cinnamomum spp.). These are the age-old herbs used in the CAM like Unani, Ayurveda, etc. The modern research has indicated that these are potent antioxidants, immune boosters, and possess immense medicinal properties. These can be chewed and swallowed. They are a part of Indian cuisine also.
- A combination of some of the above-mentioned items like ginger, turmeric, lemon (whole fruit) and gooseberries crushed with honey and swallowed at least once daily act as a very good immunity enhancer.



Antivirals

Below mentioned Unani herbs have shown few leads to possess certain antiviral activities. They may be used under the supervision of a qualified Unani physician.

- Kalonji (Nigella sativa, black cumin): 1-2 gm
- Seer (Allium sativum, garlic): 2-3 gm
- Zanjabeel (Zingiber officinale, ginger): 5 gm
- Aslassus (Glycyrrhiza glabra, licorice): 5-10 gm
- Afsanteen (*Artemisia absinthium*, wormwood): 3-5 gm
- Tukhm-e-Kasoos (*Cuscuta reflexa*, Devil's hair): 15 gm (seeds)
- Khayarshamber (*Cassia fistula*, Amaltas): 10-20 gm (pulp) for gargle
- Gilo (*Tinospora cordifolia*, Amruthaballi): 5-10 gm **Note:** Antiviral activity of the above-mentioned drugs against COVID-19 is not being claimed.



Immunity Enhancers

Khameera Marwareed: 3-5 g (Not recommended for diabetics) and Asgandh (Safoof): 5 g

Unani Medicine Concepts in Covid-19 Scenario

Social Distancing

- One is advised to keep distance from a leper (a person suffering from contagious disease) as a safety measure.
- Those with contagious diseases should be kept away from those who are healthy.
- Travel ban is important and it is advised not to enter a land where plague is broken out and similarly a person staying in a place where plague is spread should not travel to the other places.
- It is essential not to violate the lockdown rules during outbreak of the disease either in the name of religion or social gathering as this will promote the spread of infectious diseases.
- Those who are with symptoms of disease should take care to see that others are not harmed.
- The system of medicine advises home stay for the patients.
- Those who are suffering from an illness are advised to offer prayers at home only instead of visiting the place of worship.
- Maintenance of personal hygiene like washing hands, and taking bath regularly forms part of

the preventive steps in case of infectious diseases outbreak.

Concept of Quarantine

The probable Latin or Italian root of the word "quarantine" is "forty". The historical events relating to Judaism and Christianity suggest that a period of forty days means a 'change' to occur. The practice of quarantine, as is recorded began during the 14th century to protect the outbreak of plague in coastal cities of Venice because of the arrival of ships from the plague infested places. The ships were required to be anchored at the port for 40 days before anybody from ships was allowed to enter the land. This is one of the earliest records of quarantine. It is also claimed that the great philosopher and physician Avicenna also practiced quarantine to isolate those who are suffering from contagious diseases. It is evident from these facts that the social distancing and the concept of quarantine is known to ancient physicians and is practiced since centuries. Even today this concept is relevant and important in keeping the spread of covid-19 under control.

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Ayurvedic Perspective on Post Covid Syndrome



Fresh novel coronavirus infections are declining, but the post-Covid-19 complications still remain a major cause of concern across the globe.

After acute COVID-19 illness, recovered patients may continue to report a wide variety of signs and symptoms including cough, low-grade fever, and fatigue, all of which may relapse and remit. Other reported symptoms include shortness of breath, chest pain, headache, neurocognitive difficulties, muscle pains and weakness, gastrointestinal upset, rashes, metabolic disruption (such as poor control of diabetes), thromboembolic conditions, and depression and other mental health conditions. The severity of post-COVID-19 symptoms are correlated to both the severity of the infection and also the comorbidities that people present with, before the infection.

Ayurvedic Perspective

According to Ayurveda, Covid-19 is a disease which is understood to be a type of **Aagantuja jvara**. Jvara (fever) is a condition in the body resulting from inflammation which can affect the body and mind. The type of Jvara which occurs due to different microbial organisms, those caused by toxic gases, by burns, traumas etc. and those arising due to emotional trauma like fear, anger, attachment and lust etc. are included in the Aagantuja jvara. Aagantu conditions originate from external pathological reasons like infection, trauma etc. There, the derangement of 3 doshas occur after the disease process is inflicted in the body, whereas in **Nija** disease the derangement of 3 doshas result in the disease process.

Contagious diseases are also discussed in detail by Acharya Sushruta as Sanchaari roga. He explains that through close physical interaction with individuals who are already affected by Bhuutas (microbes), the disease can spread from one person to another. These diseases are called Janapadodhvamsas which can affect the whole community. Fundamental cause of Janapadodhvamsa is adharma which means the deed/s which destroy the environmentally balanced coexistence of all organisms on this planet. Adharma can have an impact either individually or in the whole society.

In the early days of Covid-19 pandemic, the focus was on the clinical presentations of acute patients and their treatments. But now, data on the symptoms experienced by patients after covid-19 infections are emerging. These symptoms are commonly known as post covid syndrome. This includes a variety of clinical conditions, usually lasting 4 weeks or more after the onset of covid infection.

There are 3 main groups of symptoms:

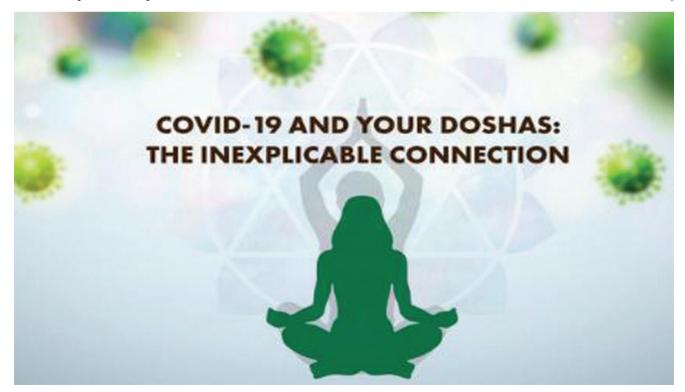
- Secondary to virus specific pathophysiological changes
- Prolonged inflammatory response to acute
- Consequences of post intensive care treatments

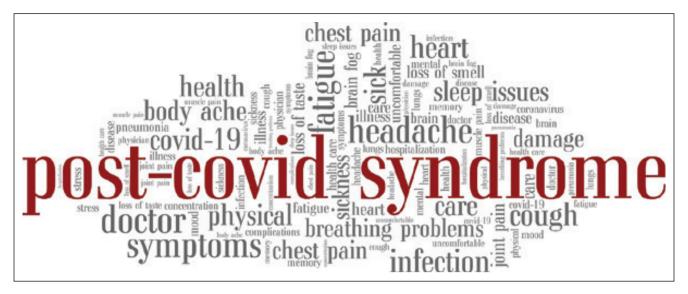
Post-COVID conditions are a wide range of new, returning, or ongoing clinical manifestations which people can experience four or more weeks after first being infected with the virus. According to Avurveda, post covid conditions are to be explained as Nija conditions resulting from an Aagantu pathogenesis.

A large percentage of people recovering from Covid-19 go back to normal health, there are many who do not return to their previous health state. Some people can have symptoms that last for weeks or even months after recovery from acute illness. Persistent or late symptoms may also occur in people who have only mild symptoms during infection. People with history of health conditions such as autoimmune disorders, type-2 diabetes, hypertension, cancer etc. are at much higher risk for post covid complications due to severe and persistent inflammation.

Tri-doshik explanation the manifestation of Symptoms

In Ayurveda, the whole physiology and pathology is explained based on three fundamental energy fields viz. Vata, Pitta and Kapha. Any property or action related to movement is understood as Vata,





anything related to transformation from one stage to another is Pitta and an energy field responsible for maintaining the growth and stability of the body is Kapha. Just as explained in quantum physics, it does not matter whether the doshas are particles or energy, as both depend precisely on our perception. When we visualize fundamental aspects of life they look like energy fields, and when we perceive grosser aspects of metabolism, they resemble particles.

Every inflammatory pathogenesis involves all the three doshas, where the movement of the particles like nutrients, hormones, enzymes, inflammatory byproducts and the movement of the muscle tissues is Vata; the transformations occurring in every stage of this inflammation right from activation of immune response and beginning of inflammation giving rise to different symptoms like fever etc. are from Pitta and blockages of the channels on the negative side and protection of the tissues on the positive side are from the Kapha involvement.

All these three kinds of functions are present in every cell of our body. But when we consider the whole body, the part above the heart has predominance of Kapha, whereas the middle part up to the umbilicus has Pitta predominance and below that has a Vata predominance. Covid-19 affects the whole body, but initially it affects the Kapha areas in the body which later affects the Pitta area and then Vata area as well as Vata predominant systems.

When it (corona virus) affects the Kapha system it causes throat afflictions, sore throat, nasal congestion, generalized blockage of movements in the whole body, heaviness fatigue etc. When it affects the Pitta system, it causes different digestive issues like indigestion, anorexia, diarrhea, gastritis etc. When it affects the respiratory and circulatory systems it causes endothelial inflammation, severe inflammation causing respiratory distress and pneumonia when it affects Vata system it can give rise to different kinds of neurological symptoms like pains in the body and other psychological manifestations like anxiety, depression brain fog etc.

Depending on the stage in which an individual operates his or her life activities at the time of infection of the coronavirus, the pathology manifests. This is the reason why all the individuals who catch the virus do not have similar symptoms. A person who is in Kapha predominant mode will develop respiratory symptoms and the ones with Pitta will develop inflammation of the circulatory system and digestive system and the one who is already in the Vata mode will develop neurological and psychological manifestations.

Clinical variations Post Covid

There are two different conditions in post covid category:

• The symptoms which have returned after a person has been infected by covid-19 virus and later tested negative for Covid.



 Manifestation of new diseases or its symptoms after a person has been infected with Covid-19 virus.

Both these varieties of symptoms can occur after a person has recovered from Covid infection.

Systemic manifestation of post-Covid symptoms

Covid-19 virus has some drastic effects on the human body and it pertains even to the offset of infection. The different systems in the human body that get affected are:

Digestive system: Loss of taste, Constipation or diarrhoea

Respiratory system: Exertional dyspnoea, Loss of smell, Difficulty in breathing or shortness of breath and Cough.

Circulatory system: Tachycardia and palpitations **Neurological:** Brain Fog, Headache, Numbness or tingling, Dysgeusia, Anosmia, Myalgias, Depression or anxiety and symptoms that worsen after physical or mental activities.

Other General symptoms: Severe fatigue, Joint pain, Memory, concentration and sleep problems, Blood clots and blood vessel issues, Hair fall, Hypertension, GIT related conditions like Hemorrhoids, Ulcerative colitis, Gastritis, Diabetes is also seen as one of the post-covid complications which occur mainly because of the usage of steroids and similar conditions observed in some people who are vaccinated.

Post Covid Pneumonia

Pneumonia occurs when a bacterial or viral infection causes significant damage and inflammation in the lungs. The resulting fluid and debris build-up makes it hard for a person to breathe. Regardless of the bacteria or virus causing it, pneumonia can become very serious, even life-threatening. When COVID pneumonia develops, it causes additional symptoms, such as: Shortness of breath, Increased heart rate and Low blood pressure.

Black fungus or Mucormycosis

It is a severe invasive fungal infection typically seen in immunocompromised individuals. The cause of black fungus is mucoromycetes mold (fungus). COVID-19 can affect the pancreas which in turn can disturb the glycemic balance leading to prolonged periods of increased sugar levels in these patients. Thus, Mucormycosis can also be seen among COVID affected patients who were not treated with steroids or other immune-suppressing drugs.

Clinical diagnosis: Headache is the most common presenting feature. Tissue necrosis is the evident clinical sign and looking out for eschar (black scab) in the oral or nasal cavity helps in diagnosing the same. Redness and protrusion of the eye with swelling along with the loss of vision, severe facial pain and focal numbness occur in the disease.

Continued on page 65

Preventing Covid with Ayurveda

G. Shital

The Covid-19 pandemic hit the world really hard last year. It transformed our lives completely by forcing all of us to stay indoors and by bringing drastic changes to our lifestyles. The second wave was more dangerous compared to the first one. All hospitals became overcrowded, and the continuously ringing ambulance siren added to everyone's worries.



Even my family including me came into Covid-19's danger zone; in fact, no one was safe in this pandemic.

Fighting on the home front

My younger brother was shifted to ICU where he received several medications from the modern side that were needed for survival. Thankfully, by God's grace, he came out safe and sound from that situation. We were all very happy but suddenly I started experiencing extreme weakness and body pain. I immediately got the RTPCR test done and isolated myself. Being an Ayurvedic doctor, I decided to follow the Ayurveda treatment and started with some medications as well as diet restrictions. However, the real worry for us started when our sixyear-old daughter was detected positive. It was very surprising that although all four of our family were exposed to the same atmosphere, three of us tested

positive with different symptoms. Our daughter was asymptomatic positive while our son tested negative.

The overall atmosphere was quite stressful and gloomy as we had lost a few our classmates, colleagues as well as relatives to this dreadful disease. To be on the safe side, our physician friends suggested a CT scan. But we refused it because a CT scan is a diagnostic method and Covid-19 affects the lungs. In case of changes in lungs detected, then it would have been a worrisome situation for us. And since we had mild symptoms, we preferred to avoid CT scan centres. Instead, we got done some basic blood investigations like CBC, D-dimer, and CRP to avoid known complications. Luckily, the results of these tests were in the normal and acceptable limits.

Fighting Covid-19 with Ayurveda

Ayurveda's diagnosis tools are totally different from those of modern medicine. Ayurvedic diagnosis is based on the dosha and prakruti of a person and so the medicines prescribed are different as they depend on individual body constituents. Well, everyone laughed at us and even called us crazy. But for us, using the Ayurveda protocol was a test of our faith in our traditional health care system. We informed the Civil Hospital and took the required permission for home isolation. Thus, our journey of 14 days with the Corona virus started. We decided not to give any medication to our daughter till she developed any symptoms. On the third day, our daughter had fever along with running nose. So, we started medicines with proper dosage. Initially, I was quite scared. But then, I remembered my grandma's words, "every creature is Mother Nature's child, everyone has equal rights to live, but how to survive is our own choice". With this guiding principle, my vision towards the virus changed and I started to think of the virus as a living being! I realised that as per nature's rule, any tiny creature with a short lifespan will struggle to sustain its race and produce its progeny in favourable situations within 14 days. And magically my burden was reduced and I felt relaxed. I got ready to start my journey with a

guest called Corona virus living inside in my body. Since it was an unwanted guest, I allowed it to live for 14 days. However, I did not provide it with a favourable atmosphere to prolong its stay in my body by following a healthy life style. Things started brightening up. Our daughters' symptoms vanished within five days with use of Mahasudarshan Kadha as well as Guduchi (Tinospora cordifolia) Kashaya. My husband had very mild symptoms, so he took the Guduchi Ghan vati on a four-hour basis. Being a kapha prakruti person, I had developed weakness, body pain as well as breathlessness and so I started taking the Guduchi Ghana vati along with the Mahasudarshan kadha Shwaskuthar Rasa. Besides these medications, regular Pranayama (breathing exercise), Dhyan (meditation), and a liquid diet helped us regain our strength and vitality.

Relying on our Roots

Having successfully recovered, I once again realised that India is a country where the world's oldest, scientific health care system has originated and it is capable of handling the crisis using its own resources. Ayurveda's first aim is "the restoration of the health of the healthy one" by following Dincharya (daily regime), Ratricharya (night regime), and Rutucharya (seasonal regime).





The second aim of Ayurveda is "the treatment of unhealthy people" with the help of Ahara (suitable diet), Vihara (suitable conduct) and, lastly, Aushadha (suitable medication).

Prevention is Better than Cure, always!

Here are some general measures to prevent not only Covid-19 but also other infectious diseases. These are based on practical principles of life. Just the way we need to protect our valuables from thieves, our strong immunity can protect our health from various illnesses.

What can be done to maintain a healthy immune system?

- Time is an important factor. Wake up at the Brahma Muhurtam (one and half hour before sunrise). Have a fixed time for breakfast, lunch, dinner as well as for sleeping.
- Take bath regularly.
- Eat only when you are hungry and not when you have cravings.
- Drink water as per your thirst, each person is unique so his or her need of water is also different. Moreover, the need of water in body also changes according to the seasons.
- Include local vegetables and seasonal fruits in your diet.
- Regularly practice yogasanas and Suryanamaskar as per your interest. These are better (and economical) options compared to the hefty fee

charged by gyms and the so-called fitness centres.

- egularly practice pranayama and dhyan. It has positive effects on health.
- ive in gratitude; everyone has some good things in life. Try to be useful for society.
- Avoid alcohol, soft drinks, coffee as well as tea.
- A kadha (decoction) made with lemon grass, ginger, cardamom, jaggery, and a pinch of turmeric gives the perfect replacement for tea or coffee.
- Include amla (Indian gooseberries) in your daily diet. It can be taken in any form, churna (dried powder), pickle, candy, etc.
- Include in your diet items like cow milk, ghee made from cow milk, black resins, walnuts, pomegranate and sweet lime. This is called as Pranik diet (pranik means life giving). A pranik diet increases the vitality of lungs.
- Maintain your guts health; poor digestion is a root cause for any disease.

Simple and Effective Ayurvedic measures

Drink Sidhjala (medicated water) throughout the day. Prepare sidhjala with Dhanyka (Coriander), Musta (nut sedge or nut grass) Sunthi (dried ginger powder). These three should be taken in the ratio of 4:2:1. Sidhjala is very effective to maintain proper metabolism of the human body. Boil water and add the above three plant powders. Switch off the gas after three minutes. During the winter season, drink warm. During the summers, drink it cool.

Practice Yogasana, Pranayama and meditation for at least 30 minutes daily.

Avoid sleeping during the day and working late at night.

Eat healthy and easily digestible food as well as seasonal and local fruits.

Boost your Immunity

Consume Chyavanprash 10gm (one teaspoonful) in the morning. Avoid drinking milk till Chyavanprash is digested. Diabetic people can take sugar free Chyavanprash.

Drink herbal tea / decoction (Kadha) made from Tulsi (holy basil), Dalchini (cinnamon), Marich (Black pepper), Sunthi (Dried ginger powder) and Munakka (Raisins) - once or twice a day. Add jaggery (natural sugar) and / or fresh lemon (Citrus limon) juice to your taste, if needed. Avoid or add very little marich and tulsi if you have acidity.

Drink golden milk once or twice a day. This is made by adding half tea spoon Haridra (turmeric) powder in 150 ml hot milk. Note: If you have hyperacidity, then it is better to avoid this.

Nasya, Gandusha and other panchakarma therapies are beneficial.

Note: The above measures are user friendly as well as effective. These will help you maintain your health by boosting your immunity. However, if anyone has high grade fever, cough, loss of smell/ taste. Diarrhoea, body ache etc, then consult your physician immediately.

Remember, do not panic. Let's fight the Pandemic with Patience!

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Post Covid Treatment

There is no single treatment for post covid conditions in general as it is not a single entity, it differs from person to person in accordance with the symptoms and conditions. We are not going to discuss the treatments in detail, because treatment depends on the diseases which are appearing. But the general concept of treatment is based on Aamapaacanam, if there is Aama and subsequently correction of the agni. After getting rid of an existing disease, Rasaayana therapy is advised to avoid recurrence. The treatment may be Shodhana (purificatory detoxification) or Shamana (alleviating within the site of manifestation) depending on the Rogabala (intensity of the disease) and Rogibala (strength and immunity of the subject). Asserting the correction of lifestyle is of utmost importance.

Dinacarya (Daily regimen), rtucarya (seasonal regimen), Ayurveda dietetics and nutrition, exercise and restorative sleep, langhana (fasting), sexual discipline etc. are to be explained to the whole family. Psychological health is very important and it has to be preserved.

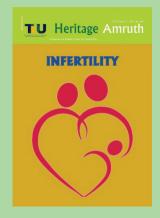
Guidelines for Home Practice

- Drink boiled, warm water
- Practice yoga and meditation regularly
- Breathing exercises must be carried out regularly
- Balanced and nutritious diet
- Adequate sleep and rest are mandatory
- Gargling with warm water added with pepper, turmeric and salt
- Nasya could be done with Anutailam

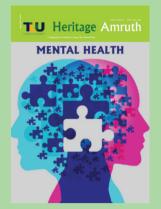
Individuals who have recovered from COVID-19 infection should undergo long-term monitoring for evaluation and treatment of symptoms and conditions that might be precipitated after its recovery. Ayurveda offers complete and permanent recovery for such post covid conditions when approached in the early stage of the disease.

Dr. P.M.S Raveendranath and Dr Mridul P.M; are Senior Physicians, from Poonthottam Ayurvedasram, Palakkad, Kerala, India, email: vaidyaravi@poonthottam.info

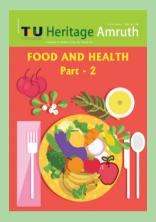
The Nectar of Life

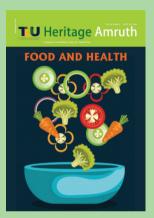


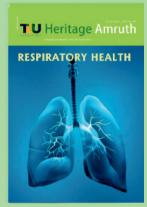


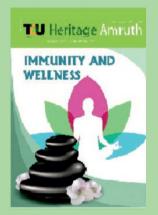


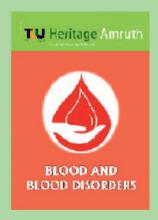




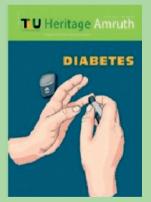


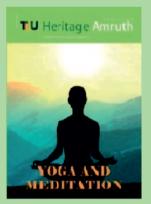












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