

Turmeric as a traditional medicine

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ABSTRACT

Turmeric has carminative, stimulating, and fragrant properties, making it a moderate digestive. One of nature's most potent medicines is turmeric. Curcumin is the active component in turmeric. In India, where it was most likely initially employed as a colour, turmeric has been used for over 2500 years. The prescription Over the ages, this spice's qualities have gradually come to light. Known for a long time Recent studies have demonstrated that turmeric is a natural anti-inflammatory marvel, showing promise in the management of a wide range of illnesses from cancer to Alzheimer's condition. In India, an antibacterial ointment based on the spice is utilized. Ginger Asian cosmetics called "water" are used to give the skin a golden sheen. It has been demonstrated that curcumin is effective against Staphylococcus aureus (infections that cause pus). Poor digestion, food poisoning, gallstones, indigestion, IBS, parasites, anaemia, cancer, diabetes, and wounds, circulation, and Staph infections. Since turmeric reduces Kapha, it is utilized to eliminate watery discharges such as leukorrhea, mucus in the throat, and any pus in the eyes, ears, or in injuries, etc. Turmeric has been utilized in Unani medicine to treat ailments including liver blockage and jaundice, as well as being externally used for inflammation and ulcers. The roasted form of turmeric possesses used as a component of a dysentery preparation. Tooth paste or powder has also included turmeric. In Bangladesh, Pakistan, and India, traditional medicine has utilized turmeric to treat a wide range of ailments. Typically, the plant's rhizome is the portion that is most extensively utilized. It is said to relieve coughs and asthma and may be prepared in a number of ways. Warm water In Ayurvedic medicine, preparations from the dried rhizome have been administered orally to lessen irritation. Additionally, turmeric is recognized as a "rasayana" plant, a subset of Ayurvedic medication.

In this case, turmeric is employed to slow down the aging process.

Key words:(Traditional medicine, Haldi, Ayurveda, and Curcumin)

I. INTRODUCTION

Turmeric is an evergreen plant that have many medicinal properties originating from South East Asia, turmeric has been utilized as a condiment and dye since ancient times. The main places where it is grown are Bengal, China, Taiwan, Sri Lanka, and Java. Peru. Australia as well as the Caribbean. It is still utilized in Hindu religious rites and as an inexpensive, natural dye for sacred garments. Actually, one of the least expensive spices is turmeric. While it is utilized similarly to saffron as a dye, the two spices have different culinary applications. It ought not to take the place of saffron in culinary preparations. It was first used around 4,000 years ago, in the Vedic civilization in India, where it had some religious importance and was used as a spice in food. The word "terra merita," which means "meritorious earth" in Latin, refers to the color of ground turmeric, which is similar to a mineral pigment. For 4,000 years, people have employed turmeric, or Curcuma longa, to treat a wide range of illnesses. Numerous studies have revealed that turmeric may actually aid in the treatment of certain ailments.



Fig no. 1 (Turmeric Plant)

However, there are a few things to keep in mind. Whenever you read in the news about the health benefits of turmeric. First, numerous research projects have been the herb might not function as well in people as it does in animals and test tubes. Second, an injectable version of curcumin—the active ingredient in turmeric—has been employed in certain research. Ultimately, there is contradictory evidence in certain studies. However, turmeric might be beneficial for lowering inflammation, addressing digestive issues, and combating infections and certain malignancies. In addition to being a common culinary pigment, turmeric lends Indian curries their unique flavor. yellow in hue. It's also used to color cheese and butter, and in mustard. In Ayurvedic and Chinese medicine, turmeric has long been used as an anti-inflammatory and to heal wounds, skin conditions, liver and digestive issues, and other ailments. Turmeric's curcumin has been demonstrated to encourage the gallbladder to produce bile. Further more potent as an antioxidant is curcumin; Antioxidants remove harmful substances called free radicals from the body, which cause cell damage. membranes, alter DNA, and perhaps result in cell death. Free radicals can be neutralized by antioxidants, which may also lessen or perhaps assist prevent some of the harm they cause. Furthermore, curcumin lowers the levels of two inflammatory enzymes (referred to as COX-2) to lessen inflammation and LOX) in the body and prevents blood clots from forming by clumping platelets together. It's a useful DIY treatment for bronchial asthma. One teaspoon of powdered turmeric and a glass of milk. It works really well to use twice or three times a day. It works best when the stomach is empty. An effective intestinal antiseptic is turmeric. When combined with buttermilk or simple water, the

rhizome—either its juice or dry powder—is quite helpful for digestive issues, particularly persistent diarrhea. Additionally, it aids in preventing flatulence. Take about 20 drops of raw turmeric juice, along with a small amount of salt. everyday first thing in the morning is said to be a successful treatment for getting rid of worms. Ginger, having a high iron content helps with anemia. A tsp of uncooked turmeric juice combined with one tsp honey is administered on a daily basis to address this illness. Measles can be effectively treated with turmeric. After being sun-dried, turmeric roots are pounded into a fine powder. Those who have the measles can take this in combination with a few drops of honey and the juice of a few bitter gourd leaves with its antibacterial qualities, turmeric is a helpful treatment for persistent coughs and sore throats. For best results, mix half a teaspoon of fresh turmeric powder with thirty milliliters of warm milk.



Fig no.2 (Turmeric Roots)

This milk is made by pouring it into a heated ladle, adding turmeric, and boiling it over a slow-moving flame. Smoke from burning turmeric can be inhaled in the event of a running cold. This raises the nasal discharge and provides comfort more quickly. When combined with ajwain or caraway seeds, turmeric helps babies and kids with colds. Boiling water is cooled down, and then a teaspoon of turmeric powder and a quarter teaspoon of ajwain are added. About thirty milliliters of this for the treatment of such ailments, a decoction sweetened with honey may be taken three times a day. For Turmeric paste combined with lime and salt can be used to treat sprains or the swelling brought on by sprains. utilized with positive outcomes. For eye pain, turmeric powder is helpful. This powder is heated for about 6 grams in half a liter of water, or until it reduces to half. Almost all of the world's turmeric crop is produced and consumed in India. Due to its

natural properties, Indian turmeric is regarded as to surpass all others globally. In the South East, fresh spices are greatly preferred over dried ones. Asia. Grated fresh rhizome is added to curries and can also be used to make a yellow curry. paste found in Thailand. Turmeric has been used into Ethiopian cuisine as a result of Indian influence. Turmeric is most commonly used to treat skin diseases and purify the blood, in addition to flavoring food. Turmeric is a common Middle Eastern spice, although not many people are aware of its therapeutic benefits. Curcuma long known as turmeric, is a member of the Zingiberaceae, or ginger family. The Persian word is the source of the Latin name. "Kirkum, which translates to "saffron," refers to the vivid yellow-orange hue of the rhizome.

7 Amazing Health Benefits of Turmeric



Fig no. 3 (Health Benefits of Turmeric)

It's Although it is native to Southeast Asia, it has been used and grown for a long time in India. Ginger is extremely important because of the impact it has on the liver and digestive system. In both cases It is used as a carminative and bitter digestive in traditional Chinese and Ayurvedic medicine. Unani practitioners utilize it to clear kapha or phlegm, which widens blood vessels and enhances blood flow. It is suitable for use in rice and beandishes. meals, to lessen bloating and gas and to aid with digestion. As a cholagogue, it increases bile flow. generation in the liver and promoting the gallbladder's bile excretion. This gets better the body's capacity for fat digestion. Turmeric is not used directly in Western cuisine; however, it is a component of various sauces and spice blends; it's also used to give mustard paste a vivid yellow hue. According to preliminary research in mice, curcumin may be

useful in halting the progression of multiple sclerosis. Mice engineered to develop experimental autoimmune encephalomyelitis (EAE), a disease similar to multiple sclerosis, showed little to no symptoms of the disease when given curcumin. Mice that were not given curcumin went on to develop severe paralysis.

HISTORY OF TURMERIC

The curcuma genus, which includes curcuma longa, grows wild in the forests of Southern Asia, including India, Indonesia, and Indochina. It also grows in neighboring Asian countries and some Pacific Islands, such as Hawaii. These regions are all used in traditional medicine and cooking. regressing to prehistoric times. Turmeric is regarded as a herbal remedy in the Indian Ayurvedic system. as warming and supporting the entire body. In India, traditional applications include enhancing digestion, to enhance the bacteria in the gut, to get rid of worms, to relieve gas, to clean and bolster the gallbladder and liver, restore regular menstruation, reduce inflammation and arthritis, as a blood purifier, warming agent, and aid in promoting healthy metabolism, balancing out excesses and inadequacies, for topical use on burns, sprains, scrapes, bruises, insect bites, and itches; as an antibiotic and antifungal agent; as a cough and asthma reliever; and in any weakening or debilitated state. Michael Moriarty claims that "the ancient Hawaiians used this herb." for a variety of purposes, such as treating and preventing sinus infections (because of its strong astringency). and seems to draw mucous out), stomach ulcers, and ear infections (swimmers' ear). All around Asia, people eat turmeric both fresh and cooked. As the root of turmeric appears. It is less fibrous and more chewable, crispy, and succulent than ginger root. In addition to its bitter flavor, the raw root (not the powder) has a slightly nutty and sweet taste. It is therefore not disagreeable to consume or challenging to chew. It can occasionally be chewed plain or diced up and added raw to salads. Traditionally, it is ground or mashed in a mortar to create a paste to flavor curries by combining with other spices. Nowadays, the most Dried root powder is frequently used in India and other adjacent countries as the foundation for most curries. nations. (Firsthand observation) Turmeric has also long been used as a culinary coloring and fabric dye, providing less expensive options to saffron in both applications. It frequently symbolizes vitality, purity, and prosperity and was and is used in religious rites and offerings. The

ancient European herbals speak very little, if anything, about turmeric. Turmeric is referred to by Marco Polo as Indian saffron, which is used to dye textiles. Michael In a 1991 article, Castleman states: "The Greeks were well aware of turmeric, but unlike its ginger, a close botanical relative, was never popularized in the West for culinary or medicinal purposes. herb. On the other hand, orange-yellow dyes were made with it. During the 1870s, scientists found the orange-yellow root powder of turmeric turned reddish brown when it came into contact with alkaline substances. Turmeric paper was created as a result of this finding in order to test for alkalinity. Turmeric was not very popular among herbalists in Europe or America until the late 20th century. For instance, the only reference to turmeric that. I believe that the herbalists of Asia and the West were at odds with one another. Michael Castleman remarks: Turmeric paper was utilized by American chemists, but not even the botanically Other than enhancing the color of medical ointments, eclectic physicians did not find much use for turmeric. I do discover a mention of turmeric in one early 20th-century western herbal. This can be found in A Modern Herbal by Maude Grieve.



Fig no. 4 (Turmeric powder)

She describes plants botanically, and the components of the plant as though it were significant, but later under Medicinal Actions "Turmeric is a mild aromatic stimulant that is rarely used in medicine, save as a adding color. It used to be a jaundice cure. Curry powders are the main product that it is used in. It is also one of the constituents and is used as a replacement and adulterant for mustardvarious condiments for cattle. The use of turmeric paper is in western herbalism, contempt for turmeric as a valuable

nutritive and therapeutic herb persisted until the late 20th century protect Additional studies have contributed to proving the impacts of the blood with turmeric. For instance, just like many common curry herbs, curcumin stops significant variations in blood cholesterol levels following meals. Strong anti-inflammatory properties other studies have confirmed the presence of turmeric (in the essential oil and in curcumin). As an example, Curcumin seems to work via an adrenal mechanism, similar to other non-steroidal anti-inflammatory drugs (like licorice root); when the adrenals are removed, turmeric loses its effects. Western herbalists started paying attention to and considering turmeric in the middle of the 20th century. for usage with herbs—first in Germany. However, it is unlikely that it will outperform our indigenous medications. The yellow pigment clearly irritates the stomach. mucosa, hence care should be taken in situations where there is a propensity for hyperacidity or a straightforwardupset stomach India-based observations have revealed the potent and persistent irritation curry's impact on the stomach Clearly, this conversation overlooks the several possible causes of overcooking and using a lot of oils, which are frequently rancid, might cause stomach distress. several hours at extremely hot temperatures—a common practice in Indian curries. Not many modern herbalists advocated turmeric until the 1980s, and even then, only for certain or restricted purposes like menstrual regularity or liver tonic. In the role of Michael in Castleman's words, "Western herbalists, awaken." It is a healer, turmeric.

MORPHOLOGY OF TURMERIC (*Curcuma longa*)

Roots:The subterranean rhizome structure of turmeric plants is characteristic. Thick, meaty, and branching, the rhizomes are the main organ for storage and the source of the spice turmeric.



Fig no.5(TurmericRoots)

Stems:The rhizomes of the plant sprout from a short, underground stem. The tall, herbaceous aerial stems hold up the leaves and flower structures.



Figno.6 (Turmeric Stem)

Leaves:Turmeric leaves have a pronounced midrib and are smooth, big, and lance-shaped. They have a vivid green hue and are distributed sporadically throughout the stalk.



Fig no.7(Turmeric Leaf)

Flowers:Dense spikes of tiny, tubular flowers are produced by the shrub. Encased in a beautiful bract, they are typically pale yellow or white with a tinge of purple.



Figno.8(Turmeric Flower)

Inflorescence:The inflorescence of turmeric is a spike-like cluster of blooms that appears.



Figno.9 (Turmeric Inflorescence)

CHEMISTRY OF TURMERIC

The rhizomes of *Curcuma longa* are the source of turmeric, which is well-known for its unique chemical makeup and range of culinary and health advantages. Below is a brief summary of its main chemical constituents:

1. Curcumin

Principal Active Compound:Curcumin, which gives turmeric its yellow hue, is the most wellresearched and important bioactivecomponent.

Properties:It possesses potent antibacterial, anti-inflammatory, and antioxidant qualities.

Chemical Structure: Curcumin is a polyphenol consisting of two aromatic rings joined by a β -diketone system and a methylene group.

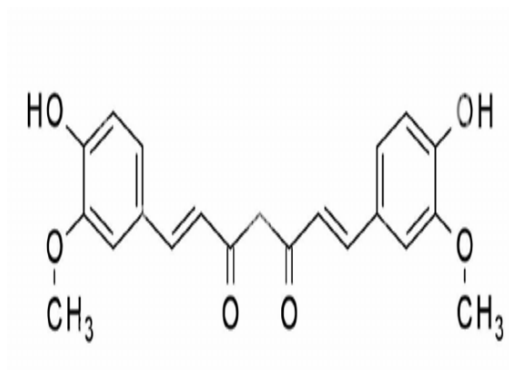
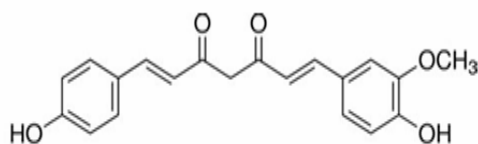


Fig no.10 (Structure of Curcumin)

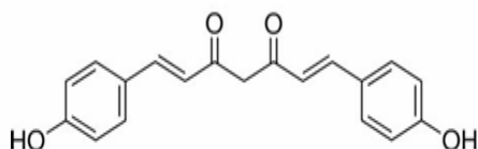
2. Bisdemethoxycurcumin and Demethoxycurcumin:

Related Compound: They differ from curcumin in terms of the quantity of methoxy groups connected, but they share a similar structure.

Properties: They add to the overall medicinal effects of turmeric by having antioxidant and anti-inflammatory qualities.



Demethoxycurcumin (DMC)



Bisdemethoxycurcumin (BDMC)

Figno.11(Structure of Demethoxycurcumin and Bisdemethoxycurcumin)

3. Volatile Oils

Components: Zingiberene, azlactone, and turmerone are among the substances found in turmeric essential oil.

Properties: These oils include anti-inflammatory and antibacterial properties that may have medicinal benefits in addition to adding to the aroma of turmeric.

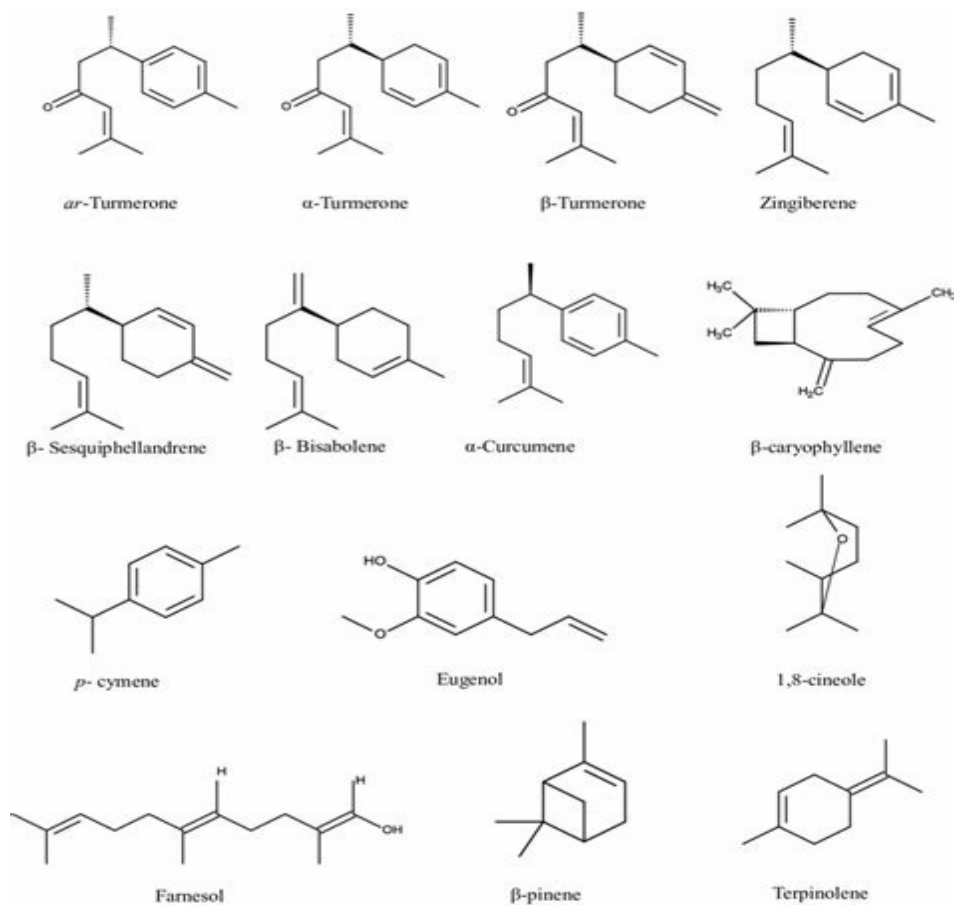


Figure no.12 (Structure of Volatile Oils)

4. Polysaccharides

Types: Polysaccharides including starch and soluble dietary fibers are found in turmeric

Properties: These give it texture and may help with blood sugar control and gastrointestinal health.

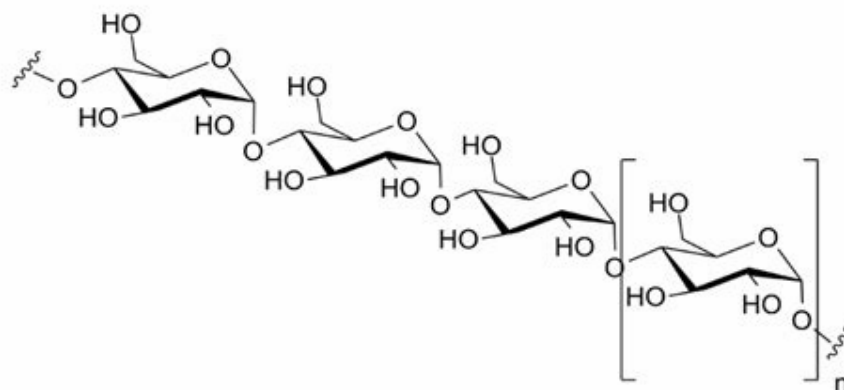


Figure no.13 (Structure of Polysaccharides)

5.

6. Other Phytochemicals

Flavonoids: A variety of flavonoids found in turmeric help to explain its anti-oxidant qualities.

The plant's medicinal potential is further enhanced by the presence of tannins and saponins, which have astringent and antibacterial qualities.

7. Bioavailability Challenges

Absorption: The quick metabolism, rapid excretion from the body, and poor absorption in the gastrointestinal system of curcumin result in low bioavailability.

Enhancers: Curcumin's efficiency and absorption can be increased by mixing it with lipids or black pepper, which includes piperine.

skin disease treatment. Utilized as an anti-inflammatory in medicine for a long time. Curcumin serves as the active component in turmeric, which has numerous medicinal benefits that have been demonstrated.

TURMERIC HEALTH ADVANTAGES IN LIFE

1. It can be used as a natural antiseptic and antibacterial agent to treat burns and cuts.
2. It has been demonstrated to protect prostate cancer and inhibit its growth when mixed with cauliflower of prostate cancer that is now present.
3. Stopped mice with breast cancer from developing lung cancer.
4. May induce existing melanoma cells to self-destruct and prevent melanoma from developing.
5. Lowers the chance of leukemia in children.
6. Is a liver detoxifier that is natural.
7. By eliminating the Amyloid plaque, Alzheimer's disease may be prevented or slowed down in its progression accumulation throughout the brain.
8. May stop metastases from happening in a variety of cancer types.
9. Is an all-natural analgesic and COX-2 inhibitor.
10. May promote weight management and fat metabolism.
11. It is a natural remedy for arthritis and other inflammatory diseases due to its anti-inflammatory quality's arthritic rheumatism.
12. Research on turmeric's potential to prevent pancreatic cancer is encouraging.
13. Psoriasis and other inflammatory skin disorders may benefit from its therapy.

USES OF TURMERIC IN MEDICINES

Over the years, more people have become aware of turmeric's medical benefits. Turmeric, a flowering plant belonging to the ginger family, is frequently used in food coloration and is among curry powder's primary components. To treat a variety of illnesses, like as turmeric has been used for wound healing, liver issues, digestive issues, and



Fig no.14 (Health benefits of Turmeric)

1. Anti-inflammatory Properties

Numerous well-established anti-inflammatory benefits of turmeric, in particular its key ingredient curcumin, have been reported. Here's how it assists:

Inhibition of Inflammatory Enzymes: Curcumin has the ability to inhibit the body's inflammatory-promoting enzymes. These enzymes play a role in the inflammatory process, including cyclooxygenase-2 (COX). Curcumin inhibits these, which helps to lessen inflammation.



Figno.15(Inflammation in body)

Modulation of Inflammatory Pathways:

Curcumin has an impact on a number of inflammatory-related cellular signaling pathways. For instance, it has the ability to suppress the functions of nuclear factor kappa B (NF- κ B), a protein that is essential for controlling inflammation and the immune system.

Cytokines are molecules that aid in the regulation of inflammation; their reduction is the goal. Pro-inflammatory cytokines, such as TNF-alpha and interleukin-6 (IL-6), which are frequently increased in inflammatory conditions, can be inhibited by curcumin.

Antioxidant Activity: Oxidative stress and chronic inflammation are frequently associated. Strong antioxidant characteristics of curcumin aid in the neutralization of free radicals, which are unstable chemicals that can inflict harm and exacerbate inflammation.

Cellular Protection: Curcumin helps shield cells from harm and promotes general cellular health by lowering oxidative stress and inflammation, which is advantageous in the treatment of chronic inflammatory diseases.

2. Arthritis in the bones

Turmeric's pain-relieving properties may help alleviate the symptoms of osteoarthritis and incapacity.



Figno.16(Arthritis)

3. Control Diabetes

Enhancing Insulin Sensitivity: Curcumin has anti-inflammatory properties that may help reduce inflammation, which may improve insulin sensitivity and glucose metabolism. Insulin is a hormone that helps regulate blood sugar levels by allowing glucose to enter cells. Better insulin sensitivity means the body uses insulin more effectively, which helps keep blood sugar levels in check.

Regulating Blood Sugar Levels: Some studies suggest that curcumin can help lower blood sugar levels by improving the function of insulin and enhancing the ability of cells to absorb glucose.



Fig no. 17 (Glucometer)

Beta cells in the pancreas generate insulin; therefore, they need to be protected. Due to its antioxidant qualities, curcumin may be able to

shield these cells from oxidative stress-related damage, which can contribute to the development of diabetes.

Inhibiting Glycogen Breakdown: Curcumin may have a role in controlling the liver's process of breaking down glycogen, a kind of glucose that has been stored. This could lead to more stable blood sugar levels.

Supporting a Healthy Metabolism: Blood sugar regulation depends on a healthy metabolism, which curcumin may help to maintain. It may have an impact on metabolic pathways that regulate how the body breaks down fats and carbohydrates.

4. Liver Conditions

Turmeric's effects on the liver make it advantageous. Increased intake of meals and herbs in the spring can help to strengthen the liver. Turmeric and milk both include chemicals that protect the liver. The leaves of artichokes and thistles contain. Because it is supposed to reduce engorged hepatic ducts, it may be helpful to treat diseases of the liver like cirrhosis, hepatitis, and jaundice



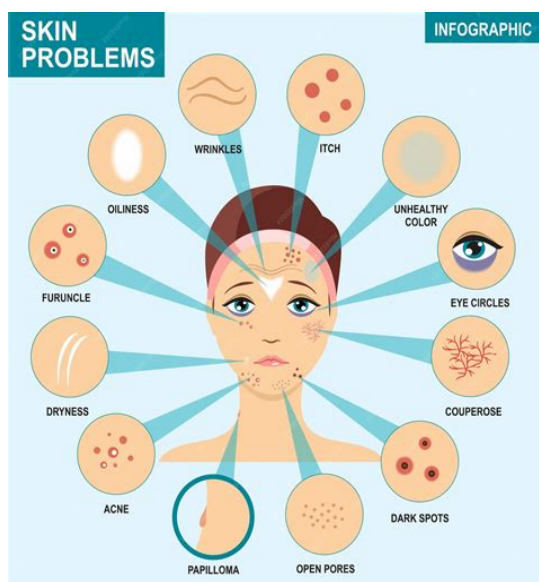
Fig no.18 (Stages of Liver Disease)

5. Skin Health

Pimples

How It Helps: Turmeric's antibacterial and anti-inflammatory qualities can help lessen bacteria that cause acne and ease skin inflammation.

Application: Create a paste by combining turmeric powder and honey, then apply it to the afflicted regions. Rinse with lukewarm water after leaving it on for ten to fifteen minutes.



Figno.19(Skin Problems)

Discolored areas and hyperpigmentation

How It Helps: By preventing the synthesis of melanin, curcumin may help to even out skin tone and lighten dark spots.

Application: To create a brightening mask, mix yogurt or lemon juice with turmeric powder. Apply it to dark spots on your body and let it sit there for ten to fifteen minutes before washing it off.

Psoriasis and Eczema

How It Helps: The anti-inflammatory qualities of turmeric can lessen the swelling, redness, and itching that come with psoriasis and eczema.

Application: Apply a mixture of turmeric and calming ingredients, such as aloe vera or coconut oil, on the afflicted areas. Two to three times a week, use this remedy.

Fine Lines and Wrinkles

How It Helps: Turmeric's antioxidant qualities aid in the fight against oxidative stress, which can impede the aging process and lessen the visibility of wrinkles.

Application: Use honey or yogurt and turmeric to make a face mask. After applying it to your face, rinse it off after ten to fifteen minutes.

Dry Skin

How It Helps: Because of its anti-inflammatory and moisturizing qualities, turmeric can help calm and moisturize dry skin.

Application: To make a hydrating face mask, mix yogurt or honey with turmeric. After applying it to your face and any other dry places, rinse it off after ten to fifteen minutes.

Shadowy Circles

How It Helps: Turmeric's anti-inflammatory qualities can lessen puffiness and brighten the dark circles beneath the eyes.

Application: Gently dab the area under your eyes with a mixture of turmeric and coconut or almond oil. After ten minutes, give it a gentle wipe off.

6. Cancer

Recent studies have demonstrated that turmeric can treat a wide range of illnesses. Turmeric inhibits the growth of certain cancer forms. The skin can be treated with turmeric. Benefits apply to both topical and internal usage up along a blood vessel's damaged walls. Blood clots and artery obstruction are caused by platelets aggregating at the site of a damage blood vessel



Figno.20(Cancer Cell)

7. Gastrointestinal Disorders

Turmeric is used as a carminative and a bitter for the digestive system. To enhance digestion and lessen gas and bloating, it can be added to foods like rice and bean dishes. It's a cholagogue promoting the liver's synthesis of bile and the gallbladder's excretion of it. This enhances the body's capacity for fat digestion. For persistent weakness or congestion in the digestive system. It is advised to use turmeric. It can be consumed as a single extract or as bitters for digestion which blend carminative and bitter herbs with turmeric. Turmeric has advantages for those who have gas and bloating after eating, or who feel exhausted after eating. In any case when taken orally, turmeric helps the liver and digestive system



Fig no.21 (Gastrointestinal diseases)

8. Boost Immune System

Reduced Inflammation

How It Helps: The immune system may be weakened by persistent inflammation. Strong anti-inflammatory characteristics of curcumin aid in reducing inflammation within the body, which may promote a stronger immunological response.

How to Use It: You may include turmeric in meals, teas, and smoothies to add it to your regular diet.



Fig no. 22

Properties of Antioxidants

How It Assists Strong antioxidant curcumin aids in scavenging free radicals. Lowering oxidative stress can strengthen the immune system as a whole and shield cells from harm.

How to Use: Brew tea made from turmeric or prepare golden milk by combining turmeric, milk, or a substitute, and a dash of black pepper.

Support for Immune Cells

How It Helps: Immune cells that are essential to the immune response, such as T cells, B cells, and macrophages, can become more active when curcumin is present.

How to Use: If you'd want a more concentrated dose, you can take supplements or use turmeric as a spice in your food.

Adjusting the Immune Reaction

How It Helps: By regulating the synthesis of immune-related chemicals like cytokines, which are involved in inflammation and immunological responses, curcumin helps control the immune system.

How to Use It: Include turmeric in stews, soups, and curries. Turmeric and black pepper together can improve the absorption of curcumin.

Assistance with Digestive Health

How It Helps: Immune system strength depends on gut health. Because it balances the gut flora and reduces inflammation in the gut, turmeric is beneficial for digestive health.

How to Use It: You can add turmeric to your food or prepare a tea that will aid with digestion. Additionally, supplements containing turmeric that promote intestinal health are available.

Antiviral Characteristics

How It Assists Curcumin may have antiviral properties, which could aid the body's defense against specific viral infections, according to some research.

How to Use: Especially during flu season or when you're feeling under the weather, drink turmeric tea or take supplements containing turmeric.

9. Promote Weight Loss

Enhances Metabolism

How It Helps: By increasing the activity of enzymes involved in fat metabolism, curcumin can increase metabolism. A quicker metabolism facilitates more effective calorie burning in your body.

How to Use: You can increase your metabolic rate by including turmeric in smoothies, soups, and curries.



Figure no.23 (Weight Machine)

Diminishes Inflammation

How It Helps: Obesity and weight gain are associated with chronic inflammation. Strong anti-inflammatory characteristics of curcumin can aid in reducing inflammation, which may aid in weight loss attempts by enhancing metabolic processes generally.

How to Use: To reap the benefits of turmeric's anti-inflammatory properties, include turmeric into your meals or sip turmeric tea on a daily basis.

Enhances Sensitivity to Insulin

How It Helps: Curcumin can improve insulin sensitivity, which lowers fat accumulation and helps control blood sugar levels. Increased insulin sensitivity results in more efficient glucose utilization and less fat storage.

How to Use It: To assist keep your blood sugar levels in check, add turmeric to your food or take supplements

Controls the Storage of Fat

How It Helps: By influencing lipolysis, which is the breakdown of fat, and adipogenesis, which is the creation of fat cells, curcumin may have an impact on the process of fat storage. This aids in decreasing the formation of fat.

How to Use It: Include turmeric regularly in your diet as part of a well-rounded diet.

Promotes Digestive Wellness

How It Helps: Efficient weight management depends on a healthy digestive system. By lowering gut inflammation and enhancing gastrointestinal tract health, which can enhance digestion and nutrition absorption, turmeric aids digestive health.

How to Use: To promote digestive health, drink turmeric tea or incorporate turmeric into your meals.

Aids in Lowering Appetite

How It Helps: Research indicates that curcumin may lessen cravings and regulate hunger, both of which may aid in weight loss.

How to Use It: You may be able to control your appetite by include turmeric in your meals.

10. Wounds and Bacterial Infection

When it comes to stopping bacterial infections in wounds, turmeric works well as an external antibiotic.

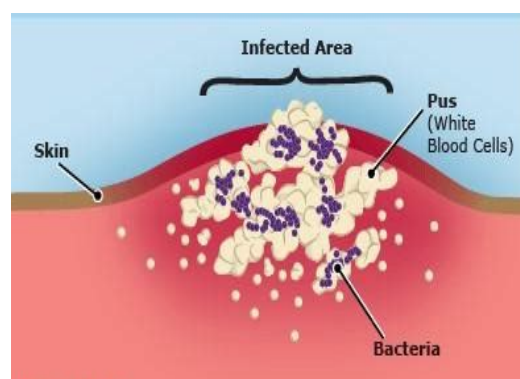


Fig no.24 (Infected Area)

Nutrient Values of Turmeric

Nutrient Values of Turmeric per 100g				
Calories 354 kcal	Energy Value 1481 kj	Total fat 9.88mg	Carbohydrates 65g	Protein 8g
Dietary Fiber 21g	Sugar 3g	Sodium 38mg	Zinc 4.35 mg	Potassium 2525mg
Vitamin C 25.9mg	Magnesium 193 mg	Copper 0.603mg	Calcium 183 mg	Iron 41.42mg
Vitamin E 3.1mg	Vit.B3 (Niacin) 5.14mg	Vitamin B6 1.8mg	Vit. B1 (Thiamine)	Vit. B2 (Riboflavin)

Table 1: Nutrient Value of Turmeric

II.

outcomes. Controlled clinical trials have not assessed the utility of other applications.

III. CONCLUSION

In addition to its historic use as an Ayurvedic medication to treat dyspepsia, gallstones, and other biliary issues, turmeric is also known in India as a tasty and colourful condiment. It is a customary treatment in China, India, and elsewhere. It is used as an ointment, paste, or spray in Southeast Asian nations to treat colds and asthma. poultice for skin problems such as scabies, boils, bruises, and bug bites. Turmeric is taken orally. for several more ailments, such as respiratory tract, pain, menstruation issues, and epilepsy haemorrhage, diarrhoea, jaundice, infections, and rheumatic conditions. Lately, it has acquired a repute as an antioxidant, a hypercholesterolemia therapy, an anti-inflammatory, as well as a cancer preventive; it's also said to stop cardiovascular disease and other aging-related degenerative changes. Its effectiveness in treating allergies, AIDS, cataracts, and other conditions is also touted. Foods like butter and margarine have curcumin added to them to stop oxidation and to enhance the hue. Spicy and highly valued, turmeric has been traditionally used to

enhance digestion and address inflammatory conditions including dyspepsia. Turmeric's primary Curcumin, a component, is also supported as an antioxidant; HIV, cancer, and hypercholesterolemia therapies; as well as measures to avert cardiovascular disease. Nevertheless, controlled clinical studies have either not been conducted for these reasons or have not produced outcomes that are overwhelmingly positive. Peptic ulcer disease has not been shown to have a clinical benefit, and one research was inconclusive for indigestion. Additionally, controlled studies for inflammation and arthritis do not sufficiently show positive

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