



### Aloe Vera – A Review

#### Shuddhi Ayurveda

**Abstract:** Aloe Vera is the most established therapeutic plant ever known and the most applied restorative plant around the world. Concentrates of Aloe Vera are demonstrated skin healer. Aloe Vera help to mitigate skin wounds caused by burning, skin aggravations, cuts and creepy crawly nibbles, and its bactericidal properties ease tingling and skin swellings. It is known to help hinder the presence of wrinkles and effectively fix the harmed skin cells that cause the obvious indications of maturing. Aloe is an incredible detoxifier, germ-free and tonic for the sensory system. It likewise has anti-viral properties. As a general wellbeing tonic. Aloe Vera is a great source of nutrients. Aloe Vera Gel contains a huge scope of nutrients - even nutrient B12, Vitamin A, contains B-Group nutrients, Vitamin C, Nutrient E and folic corrosive. Aloe Vera Gel contains significant ingredients including 19 of the 20 amino acids required by the human body and seven of the eight basic ones that just can't be made.

**Keywords:** Aloe Vera, Aloe emodin, Polysaccharide, Detoxifier, Anti-diabetic, wound-healer.

**Introduction:** Therapeutic plant has specific property and specific uses owing to their biological group of compound. These plants are broadly utilized as ethno medicine around the world. Aloe Vera is the oldest medicinal plant ever known and the most applied medicinal plant worldwide. [1] It is an important and traditional medicinal plant. There are more than 300 species of Aloe Vera plants. [2] The variety of aloe has been used under the regular name of aloe viz. Aloe Vera, Aloe barbadensisq, Aloe ferox, Aloe chinensis, Aloe indica, Aloe peyrii, and so on.[3] Among these verities Aloe barbadensis Miller is considered unanimously as the correct botanical source of aloe.[4] It is being utilized since 1750 BC by Mesopotamians and Egyptians.[5] The Arabic word alloeh means shining and bitter substance and Vera in Latin means true.[6] The plant Aloe Vera having miraculous healing powers [7] because it contains multitude of essential vitamins, minerals, amino acid, antiseptic agent and anti-inflammatory agents etc. These all constitutes are the main source for aloe's effectiveness in the various ailments like bacterial infection, viral infection, inflammation and skin related problems etc.

## Taxonomy of Aloe Vera

Kingdom: Plantae

Division: Magnoliophyta

Class: Liliopsida

Order: Liliales

Family: Aloaceae

Genus : Aloe L

Species: *A. barbadensis* Mill. [8]



*Aloe Vera* fig.1

Vernacular Name	
Common Name	Aloe Vera
English Names	Barbados Aloe, Curacao Aloe, Indian Aloe, Jafarabad Aloe
Sanskrit Names	Kumari, Kanya, Ghrita-kumari, Vipulasrava, Sthuladala, Dirgha Patra, Mandala
Hindi Names	Ghee-kunwar, Ghee-kuvar, Gvar patha

**Morphology:** *Aloe Vera* (*Aloe barbadensis* Miller) is an enduring plant of liliacea family with bloated green leaves joined at the stem in a rosette design. It is a stem less or exceptionally short-stemmed plant developing to 80-100 cm tall spreading by counterbalances and root sprouts. *Aloe Vera* leaves are framed by a thick epidermis (skin) covered with water stockpiling tissue (filet). The plant leaves will have fully mature in 3 years. Each plant usually has 12-16 leaves that, when mature may weigh up to more than 2 pounds. The filet contains a transparent adhesive jelly which is also known as *Aloe Vera* gel. Leaves are green to dark green, with a serrated edge. The blossoms are delivered on a shoot up to 90 cm tall, each bloom pendulous, with a yellow rounded corolla 2-3 cm long. The leaf having two parts, the inner part is a clear, thin, tasteless, jelly-like material and the outer pericyclic tubules, occurring just below the cutinized epidermis of the leaves, produce a bitter yellow exudate. The inner gel lies in the centre of leaf which is consist of 96% water while remaining 4% known substance including vitamins, amino acids and enzymes etc. [9,10]

**Some species of Aloe Vera:** Out of 400 species found all over the world these are the main species of *Aloe Vera*.

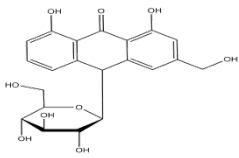
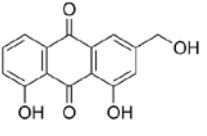
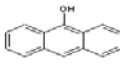
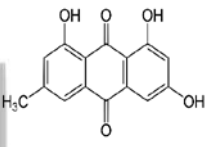
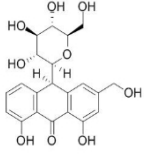
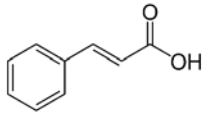
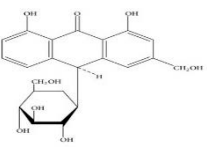
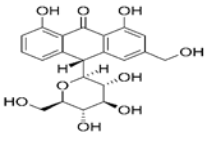
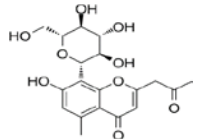
- *Aloe barbadensis* Mill.
- *Aloe barbadensis* var. *chinensis* Haw.
- *Aloe chinensis* (Haw.) Baker.
- *Aloe elongata* Murray.
- *Aloe flava* Pers.
- *Aloe lanzae* Tod.
- *Aloe maculata* Forssk.

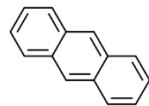
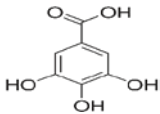
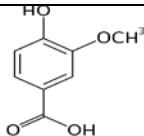
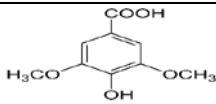
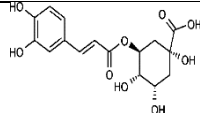
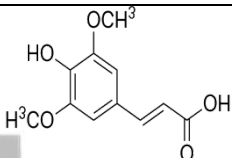
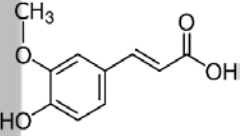
- Aloe perfoliata var. Vera L.
- Aloe rubescens.
- Aloe aageodonta L.E.Newtor
- Aloe abhaica Lavranos & Collenette
- Aloe abyssicola Lavranos & Bilaidi
- Aloe aculeata Pole-Evans
- Aloe acutissima H.Perrier
- Aloe adigratana Reynolds
- Aloe affinis A.Berger
- Aloe africana Miller
- Aloe ahmarensis Favell et al
- Aloe albida (Stapf) Reynolds
- Aloe albiflora Guill
- Aloe albovestida S.Carter & Brandham
- Aloe aldabrensis (Marais) L.E.Newton & G.D.Powley
- Aloe alfredii Rauh
- Aloe alooides (Bolus) van Druten
- Aloe ambigens Chiovenda
- Aloe amicorum L.E.Newton
- Aloe amudatensis Reynolds
- Aloe andongensis Baker
- Aloe andringitrensis H.Perrier
- Aloe angelica Pole-Evans
- Aloe angolensis Baker
- Aloe anivoranoensis (Rauh & GHebding)
- Aloe ankaransensis Rauh & Mangelsdorff
- Aloe ankoberensis M.G.Gilbert & Sebsehe
- Aloe antandroi (Decary) H.Perrier
- Aloe antsingyensis (Léandri) L.E.Newton
- Aloe arborescens Miller
- Aloe archeri Lavranos
- Aloe arenicola Reynolds
- Aloe aristata Haworth
- Aloe armatissima Lavranos & Collenette and many more. [11]

**Distribution:** Aloe is found in southern half the Arabian Peninsula, North Africa (Morocco, Mauritania, and Egypt) also as Sudan and neighbouring countries and Spain, the plant is grown in the hot dry regions of Asia, Europe and America. Aloe plant survives for quite 7 years without water. In the 17th century the species was introduced to China and various parts of southern Europe It takes the water it needs for survival and growth from dew collected on the surface of its leaves. [12]

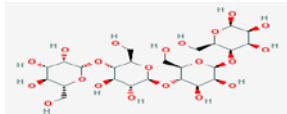
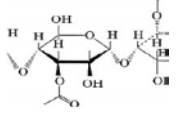
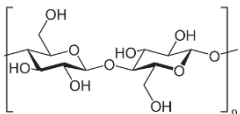
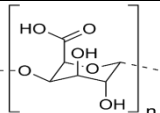
## Phytochemicals of Aloe Vera

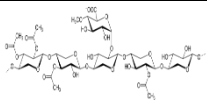
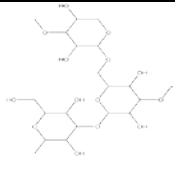
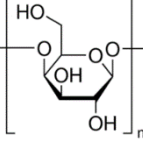
### 1. Anthraquinones\Anthrone:

Component	Biological property	Chemical structure
<ul style="list-style-type: none"> <li>Aloin</li> </ul>	stimulant-laxative, treats constipation by inducing bowel movement, $\alpha$ -Glucosidase inhibitory action antioxidant activity, anti-inflammatory, antiviral, antibacterial	
<ul style="list-style-type: none"> <li>Aloe emodin</li> </ul>	analgesic, antibacterial and antiviral.	
<ul style="list-style-type: none"> <li>Anthranol</li> </ul>	analgesic, antibacterial and antiviral, Antitumor, laxative/ cathartic compound, antiproliferative	
<ul style="list-style-type: none"> <li>Emodin</li> </ul>	analgesics, antibacterials and antivirals, Antitumor, laxative/ cathartic compound, antiproliferative	
<ul style="list-style-type: none"> <li>Isobarbaloin</li> </ul>	analgesics, antibacterials and antivirals, Antitumor, laxative/ cathartic compound, antiproliferative	
<ul style="list-style-type: none"> <li>Ester of cinnamic acid</li> </ul>	analgesic, antibacterial and antiviral, Antitumor, laxative/ cathartic compound, antiproliferative	
<ul style="list-style-type: none"> <li>Aloin A</li> </ul>	analgesic, antibacterial and antiviral, Antitumor, laxative/ cathartic compound, antiproliferative	
<ul style="list-style-type: none"> <li>Aloin B</li> </ul>	analgesic, antibacterial and antiviral, Antitumor, laxative/ cathartic compound, antiproliferative	
<ul style="list-style-type: none"> <li>Aloesin</li> </ul>	Purgative, anticancer, antiviral, antibacterial laxative anti-inflammatory.	

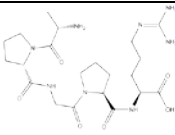
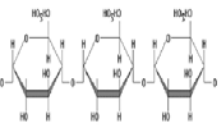
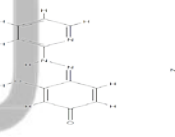
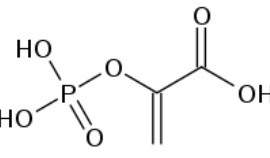
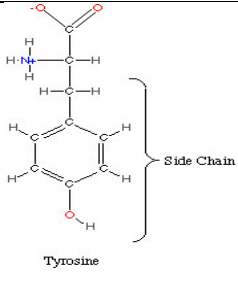
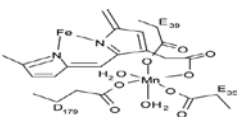
<ul style="list-style-type: none"> <li>• Anthracene</li> </ul>	Analgesic	
<ul style="list-style-type: none"> <li>• Gallic acid (Phenolic compound)</li> </ul>	Analgesic, antibacterial and antiviral	
<ul style="list-style-type: none"> <li>• Vanillic acid (Phenolic compound)</li> </ul>	Analgesic, antibacterial and antiviral	
<ul style="list-style-type: none"> <li>• Syringic acid (Phenolic compound)</li> </ul>	Analgesic, antibacterial and antiviral	
<ul style="list-style-type: none"> <li>• Chlorogenic acid (Phenolic compound)</li> </ul>	Analgesic, antibacterial and antiviral	
<ul style="list-style-type: none"> <li>• Sinapic acid (Phenolic compound)</li> </ul>	Analgesic, antibacterial and antiviral	
<ul style="list-style-type: none"> <li>• Ferulic acid (Phenolic compound)</li> </ul>	Analgesic, antibacterial and antiviral	

## 2. Carbohydrates:

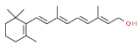
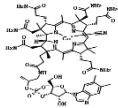
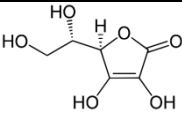
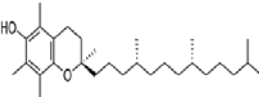
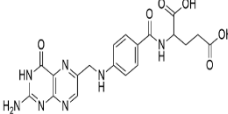
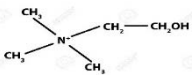
<ul style="list-style-type: none"> <li>• Pure mannan</li> </ul>	Hepatoprotective, antiallergic, antimicrobial, anti-inflammatory, Antitumor	
<ul style="list-style-type: none"> <li>• Acetylated mannan</li> </ul>	Hepatoprotective, antiallergic, antimicrobial, anti-inflammatory, Antitumor	
<ul style="list-style-type: none"> <li>• Cellulose</li> </ul>	Antiallergic properties and novel anti-inflammatory compound.	
<ul style="list-style-type: none"> <li>• Pectic substance</li> </ul>	Antiallergic properties and novel anti-inflammatory compound.	

<ul style="list-style-type: none"> <li>• Xylan</li> </ul>	Antiallergic properties and novel anti-inflammatory compound.	
<ul style="list-style-type: none"> <li>• Arabinogalactan</li> </ul>	Hepatoprotective, antiallergic, antimicrobial, anti-inflammatory Antitumor	
<ul style="list-style-type: none"> <li>• Galactan</li> </ul>	Antiallergic properties and novel anti-inflammatory compound.	

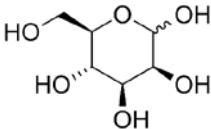
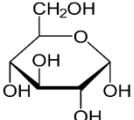
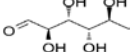
### 3. Enzymes:

<ul style="list-style-type: none"> <li>• Alkaline phosphatase</li> </ul>	Reduce excessive inflammation	
<ul style="list-style-type: none"> <li>• Amylase</li> </ul>	Reduce excessive inflammation, helps in the breakdown of sugars and fats.	
<ul style="list-style-type: none"> <li>• Lipase</li> </ul>	Reduce excessive inflammation, helps in the breakdown of sugars and fats.	
<ul style="list-style-type: none"> <li>• Phosphoenolpyruvate</li> </ul>	Helps in the breakdown of sugars and fats.	
<ul style="list-style-type: none"> <li>• Carboxypeptidase</li> </ul>	Helps in the breakdown of sugars and fats.	
<ul style="list-style-type: none"> <li>• Peroxidase</li> </ul>	Reduce excessive inflammation	

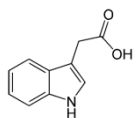
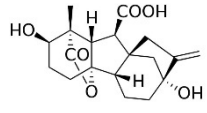
#### 4. Vitamines:

• Vitamin A	Antioxidant, Act as coenzyme, Anticancer	
• Vitamin b12	Antioxidant, Act as coenzyme, Anticancer	
• Vitamin C	Antioxidant, Act as coenzyme, Anticancer	
• Vitamin E	Antioxidant, Act as coenzyme, Anticancer	
• Folic acid	Antioxidant, Act as coenzyme, Anticancer	
• Choline	Antioxidant, Act as coenzyme, Anticancer [13]	

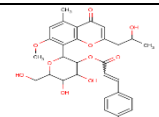
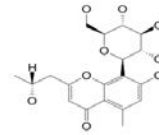
#### 5. Saccharides:

• Mannose	Hepatoprotective, antiallergic, antimicrobial, anti-inflammatory	
• Glucose	Hepatoprotective, antiallergic, antimicrobial, anti-inflammatory	
• L-rhamnose	Hepatoprotective, antiallergic, antimicrobial, anti-inflammatory	

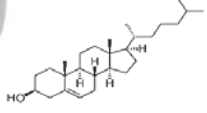
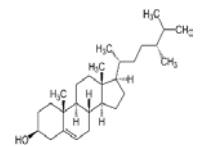
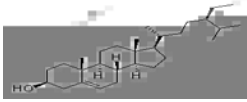
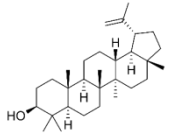
### 6. Hormones:

<ul style="list-style-type: none"> <li>Auxins</li> </ul>	Helps in wound healing ,anti-inflammatory	
<ul style="list-style-type: none"> <li>Gibberellins</li> </ul>	Helps in wound healing ,anti-inflammatory	

### 7. Chromones:

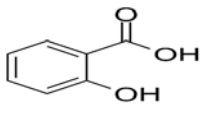
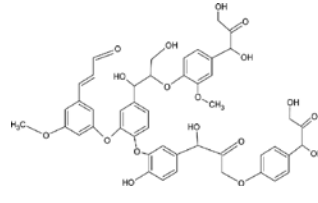
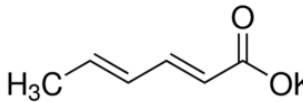
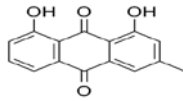
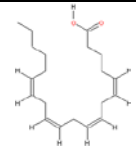
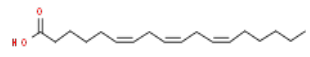
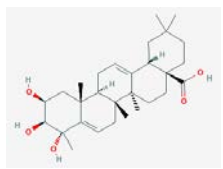
<ul style="list-style-type: none"> <li>Isoaloeserin D</li> </ul>	The novel anti-inflammatory commands	
<ul style="list-style-type: none"> <li>8-C-glucosyl-(S)-aloesol</li> </ul>	The novel anti-inflammatory commands	

### 8. Steroids:

<ul style="list-style-type: none"> <li>Cholesterol</li> </ul>	Inflammatory action and Anticancer	
<ul style="list-style-type: none"> <li>Campesterol</li> </ul>	Inflammatory action and Anticancer	
<ul style="list-style-type: none"> <li><math>\beta</math>-sitosterol</li> </ul>	Inflammatory action and Anticancer	
<ul style="list-style-type: none"> <li>Lupeol</li> </ul>	Inflammatory action and Anticancer	



### 9. Miscellaneous:

<ul style="list-style-type: none"> <li>Salicylic acid</li> </ul>	Anti-inflammatory, antibacterial	
<ul style="list-style-type: none"> <li>Lignin</li> </ul>	Membrane penetrative property	
<ul style="list-style-type: none"> <li>Potassium sorbate</li> </ul>	Potassium sorbate	
<ul style="list-style-type: none"> <li>Chrisophanic acid</li> </ul>	Provides protection against fungal and insect attack including termites	
<ul style="list-style-type: none"> <li>Arachidonic acid</li> </ul>	Helps in healing of wound	
<ul style="list-style-type: none"> <li>Y-linolenic acid</li> </ul>	Helps in maintaining the level of membrane fluidity	
<ul style="list-style-type: none"> <li>Triterpenoid</li> </ul>	Anti-tumor [14]	

### Aloe Vera as a folk remedy:

Aloe Vera is a very ancient remedy that is being used in many countries from past many years. The 1<sup>st</sup> reported use of Aloevera in the history is from Ancient Egypt. They regarded it as a sacred plant and the “Plant of immortality”. They believed that Aloevera is a beauty enhancer, is good for health and to lead a good life. Both Cleopatra and Nofretete used to value the aloe juice and use it in their everyday skin and beauty care routine. The utilization of aloe was viewed as the quest of physical beauty. Even the dead were preserved with aloe vera in view of its anti-bacterial and anti-fungi qualities.

Aloe is also described in the Mesopotamia in 2,200 B.C. People of this era were well aware of the goodness of aloe. [15]

Alexander the great also promoted the use of aloe to treat the war wounds of his warriors. The Greek physician Pedanius Dioscorides described Aloe as one of his favorite healing plants in one of his books. [16] Aloe has also been described in Chinese and Japanese culture. Shi-Shen depicted aloe vera as the "Method for Harmony"- the plant assumed a significant function in the regular day to day existence of the Chinese. During the sixteenth century, the Indian clans likewise got comfortable with the aloe healing plant. Aloe was one of the 16 sacred plants which were adored with a divine resembling status. They used it as an insect repellent. Aloe is being used by folks for in hair treatment, in skin care, in scar removal, in mouth and eyes diseases. It is also used in skin diseases like eczema and psoriasis. [17] Aloe Vera is a great moisturising agent. [18]

### Aloe Vera in Ayurveda:

Ayurveda is the characteristics arrangement of medication. Ayurveda has great significance in blocking and inspiring the maintenance of health through close attention to balance in one's life, right thinking, diet, lifestyle and the use of herbs. The most known content on Ayurveda are the CHARAKA SAMHITA, SUSHRUTA SAMHITA and ASHTANGA HRUDAYA. These contents detail the affect that the five elements found in the global system Earth, Water, Air, Fire and Space. These constitutions are sorted into 3 Dosha:

1. VATA (the energy of movement); where air and space rules
2. PITTA (the energy of metabolism and digestion); where fire rules
3. KAPHA (the energy of lubrication); where earth and water rules

### RASA PANCHAK OF ALOE VERA:

Hindi/ Sanskrit	
Virya	Shita
Vipak	Madhura
Guna	Guru, Picchila, Snigdha
Rasa	Tikta, Madhura

English	
Potency	Cold
Metabolic Property	Sweet
Physical Property	Heavy , Slimy , Oily
Taste	Pungent, Sweet

It tones all the three doshas Vatta, Pitta and kapha. It is used in Vranaropana (wound healing activity), Rasayana (rejuvenative for the skin, intestines, female reproductive system), Artavajanana (promotes menses), Dipana (enkindles the digestive fire), Visphota (removes pustules), Bhedaniya Purgative - powder), Raktapitta (alleviates bleeding), Amapacana (clearing ama), Visahara (destroys poison), Llihayakrdvrdhahara (reduces inflammations of spleen and liver), Granthi (clears tumor). [19]

### **Aloe Vera in Modern medication system:**

From most recent twenty years we have seen the blending of ethnobotanical (utilization of plants by people as prescriptions), phytochemical (plant chemicals) and pharmacological (drug activity) studies. From the cutting edge methods (detachment, structure assurance and screening) people have created most recent medications from the common assets like therapeutic spices and so forth. Until 1930, around 90% of the drugs were of plant origin. At that point started the time of chemotherapy with the blend of sulphonamides and the time of anti-toxins started in the next decade. In present day period individuals are a lot of concerned with respect to their wellbeing, skin care, and they search for the items which are truly helpful.

Aloe Vera is one such spice which have all the integrity which individuals are searching for and furthermore known as supernatural occurrence spice yet when it utilized in corrective items and some medication its quality gets change either because of other inorganic/organic fixings or because of present day manufacturing processes. Aloe Vera is a broadly utilized restorative herb in the advanced medication and have numerous assorted ethno pharmacological and restorative applications. It is a wellspring of 19 out of 20 principal amino acids which is required by our body, and these amino acids help in smooth working of our catalyst framework. [21] The accompanying most significant thing of A. Vera is its wellspring of supplements, which is nutrient A, B, C, E, and folic corrosive. As this plant fills in soil copious in minerals, it transforms into a rich wellspring of calcium, sodium, potassium, magnesium, iron, copper, and zinc. Aloe vera is moreover thought to be a good antiviral, antibacterial, and antifungal, as the inner gel is encompassed by polysaccharides which can defend our body from all of these attacks. [22]

### **Examples of modern products having Aloe Vera as an ingredient:**

1. Beauty b Earth – Aloe vera gel
2. Ashta Berry – Skin healing Gel
3. Calcium lotion
4. Vera soft Lotion
5. Head and shoulder – Aloe vera daily shampoo
6. Ayur – deep pores cleansing milk
7. Kapiva Aloe Garcinia Juice
8. Vestige Aloe Vera capsule
9. Health Aid Aloe Vera 5000 mg Capsule
10. Good vibes – Aloe Vera Gel
11. Skincandy Aloe Vera cucumber gel
12. Glint skin care
13. Lakme 9-5 Naturale Aloe Aqua Gel
14. Olnature's Aloe Vera Gel
15. Aplollo Aloe Vera Skin Care Gel

## Biological Activities of Aloe Vera

<ul style="list-style-type: none"> <li>• <b>Wound Healer</b></li> </ul>	<p>Aloe vera is most popular for its wound healing properties. It is one of the best wound healer ever found. It does as such by quickening the stream of blood towards the injured territory.[23]</p>
<ul style="list-style-type: none"> <li>• <b>Anti- diabetic</b></li> </ul>	<p>Aloe Vera possess' great anti- diabetic properties. It not just brings down the blood glucose level, but in addition decreases hepatic transaminases, plasma and tissue cholesterol, fatty substances, free unsaturated fats and phospholipids.[24]</p>
<ul style="list-style-type: none"> <li>• <b>Immune system restoration</b></li> </ul>	<p>Aloe vera has been described to secure the skin against harm caused by radiation. It is guesstimated that the use of Aloe vera gel promotes the production of protein called metallothionein, which is a scavenger of hydroxy revolutionaries, and therefore ultimately securing the skin from oxidative harm.[25]</p>
<ul style="list-style-type: none"> <li>• <b>Moisturizing and anti-aging effect</b></li> </ul>	<p>It improves the capacity of skin to hydrate itself and help in expulsion of dead skin cells. It does as such, by creating collagen and elastin filaments, making the skin more versatile and less wrinkled, in this way, switching the degenerative skin changes. It relax the skin, by its firm activity on shallow chipping epidermal cells and furthermore by the activity of amino acids.</p>
<ul style="list-style-type: none"> <li>• <b>Anti-inflammatory action</b></li> </ul>	<p>The anti-inflammatory activity of Aloe vera gel not just diminishes the pain uneasiness, but also quickens the healing phenomena. Aloe vera additionally restrains the cyclooxygenase pathway, compressing the production of prostaglandins, subsequently diminishing the inflammation. A. vera additionally indicated anti-inflammatory potential for the treatment of H. Pylori disease.[26]</p>
<ul style="list-style-type: none"> <li>• <b>Anti-oxidant action</b></li> </ul>	<p>Aloe vera possesses enormous antioxidant effects. Phenolic anti-oxidant were found to be present in A. vera gel, which may be responsible for these anti-oxidant effects.</p>
<ul style="list-style-type: none"> <li>• <b>Improves digestive system</b></li> </ul>	<p>Aloe vera juice is helpful to treat gastric intestinal issues like acid reflux, candida, colitis and help from stomach related problems, for example, acid reflux and irritable bowel condition. Constipation, loose bowels, acid reflux, bad gut condition and so forth are relieved by the flushing activity of Aloe vera juice.</p>
<ul style="list-style-type: none"> <li>• <b>Anti-arthritis</b></li> </ul>	<p>Aloe vera juice assumes a significant function in treating joint inflammation patients. Aloe juice is an energizer because of the presence of various enzymes. It is a amazing anti-inflammatory agent, pain relieving, and accelerates cell development, thus it fixes joint pain harmed tissue.[27]</p>
<ul style="list-style-type: none"> <li>• <b>Anti-cancer</b></li> </ul>	<p>Aloe vera juice empowers the body to heal it self</p>

	from cancer and furthermore from the harm brought about by radio and chemotherapy. Aloe vera emodin, an anthraquinone, has the ability to suppress or prevent the development of threatening malignant growth cells making it to have antineoplastic properties. [28]
<ul style="list-style-type: none"> <li>• <b>Anti- HIV</b></li> </ul>	Acemannan present in Aloe Vera juice possess' antiviral and immune modulating properties. A day by day portion of least 1200 mg of active elements of Aloe vera indicated significant improvement in AIDS manifestations. Its healing powers reach out to relieving inner injuries for example, the harm done to the inward organs by high-intensity medications of AIDS.
<ul style="list-style-type: none"> <li>• <b>Anti- Fungal</b></li> </ul>	Aloevera gel possesses some anti-fungal properties and according to some report it inhibits the growth of Candida albicans.[29]
<ul style="list-style-type: none"> <li>• <b>Laxative Effect</b></li> </ul>	The bitter yellow latex to aloevera is known to have some powerful laxative-like action. [30]
<ul style="list-style-type: none"> <li>• <b>Anti- Viral</b></li> </ul>	The aloevera extract known as aloe emodin gives the aloevera an antiviral properties and it enables the viruses to function properly
<ul style="list-style-type: none"> <li>• <b>Hepatoprotective</b></li> </ul>	The aloevera juice acts as great hepato protective. it improves the function of liver and also acts as an antidote in excessive alcohol injection.
<ul style="list-style-type: none"> <li>• <b>Cardiovascular health</b></li> </ul>	Aloevera is good for maintaining the cardiovascular health. Beta-sitosterol is known to have some properties which improves the circulation oxidation of blood and it makes the blood cells sticky. Aloevera juice lowers the risk of heart diseases.
<ul style="list-style-type: none"> <li>• <b>Weight Loss</b></li> </ul>	As aloe Vera improves the digestion that means it helps in eliminating the toxic load from over body and thus ultimately helps in the lighting up the body and makes us feel more energised.
<ul style="list-style-type: none"> <li>• <b>Anti- Ulcer</b></li> </ul>	The topical and oral use of aloe has very significant role in the treatment of patients with chronic venous leg ulcers.
<ul style="list-style-type: none"> <li>• <b>Stone</b></li> </ul>	Aloe inhibits the growth rate of urinary calcium crystals which are responsible for the deposition of kidney stones.
<ul style="list-style-type: none"> <li>• <b>Detoxifier</b></li> </ul>	Aloe vera juice is natural detoxifier. The rate of consuming junk food is increasing day by day and as Aloe Vera is very rich in vitamins and minerals so the oral use of aloevera juice helps in cleansing our systems time to time.
<ul style="list-style-type: none"> <li>• <b>Genital Herpes</b></li> </ul>	The topical use of aloevera is used for genital herpes. Aloe use is also effective in vaginal infections and allergic reaction.[31]

<ul style="list-style-type: none"> <li>• <b>Skin Disorders</b></li> </ul>	The use of Aloe is useful for skin related problems like dry skin, acne, sun burn, wrinkles, sun tan, warts, rosacea, shingles, psoriasis, eczema and also reduce ageing. [32]
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**Conclusion:** Aloe vera, an antiquated Indian herb as a long history as a restorative plant with different remedial application, likewise utilised in various nations. Through human exchange and movement, this plant came to be known and was generally used to heal burns and wounds through old civic establishments. The supplement makes up of Aloe Vera is stand-out and has stunning common recuperating properties. It has many uses and without any doubt, the nature's blessing to mankind.

**References:**

1. Prabhu K, Karar PK, Hemalatha S, Ponnudurai K. Comparative micromorphological and phytochemical studies on the roots of three Viburnum (Caprifoliaceae) species. Turkish Journal of Botany. 2011.
2. Ronald M. Shelton, MAJ, USAF, MC. Aloe Vera: Its chemical and therapeutic properties. International journal of Dermatology. 1991.
3. Chandegara VK, Varshney AK. Aloe vera L. processing and products: A review. International Journal of Medicinal and Aromatic Plants. 2013.
4. Christaki EV, Florou-Paneri PC. Aloe vera: a plant for many uses. J Food Agric Environ. 2010.
5. Nandal U, Bhardwaj RL. Aloe vera: a valuable wonder plant for food, medicine and cosmetic use—a review. International Journal of Pharmaceutical Sciences Review and Research. 2012.
6. Neena IE, Ganesh E, Poornima P, Korishettar R. An ancient herb aloe vera in dentistry: A review. Journal of Oral Research and Review. 2015.
7. Joseph B, Raj SJ. Pharmacognostic and phytochemical properties of Aloe vera linn an overview. Int J Pharm Sci Rev Res. 2010.
8. Sahu PK, Giri DD, Singh R, Pandey P, Gupta S, Shrivastava AK, Kumar A, Pandey KD. Therapeutic and medicinal uses of Aloe vera: a review. Pharmacology & Pharmacy. 2013.
9. Cheesbrough M. Medical Laboratory Manual for Tropical Countries, Butterworth, Oxford, 2000.
10. Grindlay D. and Reynolds T. The Aloe vera phenomenon: A review of the properties and modern uses of the leaf parenchyma gel. J. Ethnopharmacol. 1986.
11. Shelton RM. A. vera, its chemical and therapeutic properties. Int. J. Dermatol. 1991.
12. Akinyele BO, Odiyi AC. "Comparative study of the vegetative morphology and the existing taxonomic status of Aloe vera L.". Journal of Plant Sciences. 2007.
13. Sharrif Moghaddasi M, Res M. Aloe vera their chemicals composition and applications: A review. Int J Biol Med Res. 2011.
14. Upadhyay RK. Nutraceutical, therapeutic, and pharmaceutical potential of Aloe vera: A review. International Journal of Green Pharmacy (IJGP). 2018.
15. Neena IE, Ganesh E, Poornima P, Korishettar R. An ancient herb aloe vera in dentistry: A review. Journal of Oral Research and Review. 2015.

16. Neena IE, Ganesh E, Poornima P, Korishettar R. An ancient herb aloevera in dentistry: A review. *Journal of Oral Research and Review*. 2015.
17. Manvitha K, Bidya B. Aloe vera: a wonder plant its history, cultivation and medicinal uses. *Journal of Pharmacognosy and Phytochemistry*. 2014.
18. V K Vogler, E Ernst. Aloe vera: A systematic review of it clinical effectiveness. *Br J Gen Pract*. 1999.
19. Ghazanfar SA. *Handbook of Arabian medicinal plants*. CRC press; 1994.
20. Pandey A, Singh S. Aloe Vera: A Systematic Review of its Industrial and Ethno-Medicinal Efficacy. *International Journal of Pharmaceutical Research & Allied Sciences*. 2016.
21. Eshun K, He Q. Aloe vera: a valuable ingredient for the food, pharmaceutical and cosmetic industries—a review. *Critical reviews in food science and nutrition*. 2004 Mar 1;44(2):91-6.
22. Reynolds T, Dweck AC: Aloe vera leaf gel: a review update. *J Ethnopharmacol* 68:3-37, 1999
23. Choi S, Son BW, Son YS, et al: The wound-healing effect of a glycoprotein fraction isolated from aloe vera. *Br J Derm* . 2001
24. Rajasekaran S, Ravi K, Sivagnanam K, Subramanian S. Beneficial effects of Aloe vera leaf gel extract on lipid profile status in rats with streptozotocin diabetes. *Clinical and Experimental Pharmacology and Physiology*. 2006 .
25. Mehrabi Z, Firouzbakhsh F, Rahimi-Mianji G, Paknejad H. Immunostimulatory effect of Aloe vera (*Aloe barbadensis*) on non-specific immune response, immune gene expression, and experimental challenge with *Saprolegnia parasitica* in rainbow trout (*Oncorhynchus mykiss*). *Aquaculture*. 2019 Mar
26. Vazquez B, Avila G, Segura D, et al: Anti-inflammatory activity of extracts from Aloe vera gel. *J Ethnopharmacol* 55:69-75, 1996
27. Surjushe A, Vasani R, Saple DG. Aloe vera: a short review. *Indian journal of dermatology*. 2008.
28. Winters WD, Benavides R, Clouse WJ. Effects of aloe extracts on human normal and tumor cells in vitro. *Economic botany*. 1981
29. Ali MI, Shalaby NM, Elgamal MH, Mousa AS. Antifungal effects of different plant extracts and their major components of selected Aloe species. *Phytotherapy Research*. 1999
30. Sharma P, Kharkwal AC, Kharkwal H, Abdin MZ, Varma A. A review on pharmacological properties of Aloe vera. *Int J Pharm Sci Rev Res*. 2014.
31. Rajeswari R , Uma devi M , Rahale CS, Pushpa R , Selvavenkadash S , Kumar KS, Bhowmik D . Aloe vera : the miracle plant its medicinal and traditional uses in india. *Journal of Pharmacognosy and Phytochemistry*. 2012.
32. McAnalley W: Stabilised Aloe vera: Effect on human skin cells. *Drug & Cosmetic Industry*. 1994.