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SAFFRON-A TREASURE OF THE ANCIENT MEDICINE CHEST-AN OVERVIEW

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ABSTRACT

Saffron (Kesar) is the king of super foods. In terms of weight, it is even more expensive than gold and has been in use for thousands of years because of its special medicinal benifits. Saffron is very warm in its post digestive effect and hence, it should only be consumed in winters. It is frequently given to asthma patients in warm milk and is very good for treating recurring sinusitis, upper respiratory infections, weak lungs and low vitality. It is also considered to be an aphrodisiac which is linked to male fertility improvement and is a treasured ingredient in medicines used to treat skin disorders as well as blemish-reducing skin creams. The other benefits of saffron include the treatment of menstrual disorders. Diabetics should drink saffron boiled in milk with a teaspoon of ghee or butter. In case of patients with weak liver, it helps to get rid of toxins.

KEWWORDS: Kesar, Saffron, Zafaran, Medicinal uses.

INTRODUCTION

Our interactions with plants and animals go back to prehistoric days when early man used his wits to survive in a hostile environment. First and foremost, he had to feed himself and his family. He had to distinguish which plants were safe to eat from those that were non-edible and poisonous. The behaviour of animals naturally provided many hints. However, what is edible to an animal is not necessarily safe for humans. Thus early man probably tried the non-edible and the poisonous in his quest for food and also encountered plants that caused strange and wonderful sensations, sometimes accompanied by colourful visions.

By trial and error he learned which plants were palatable and edible. These were eaten either raw or cooked. those that were poisonous or caused undesirable and strange reactions were

avoided. As his familiarity with plants increased, he naturally identified those that could sooth or heal wounds and those that could cure illnesses (Chin, 2005).

Traditional medicines are used by about 60 percent of the world's population. These are not only used for primary health care just in rural areas, in developing countries, but also in developed countries, where modern medicines are predominantly used. While the traditional medicines are derived from medicinal plants, minerals, and organic matter, the herbal drugs are prepared from medicinal plants only. Use of plants as a source of medicines has been inherited and is an important component of the health care system in India. There are about 45,000 plant species in India, with high concentration in the region of Eastern Himalayas, Western Ghats and Andman Nicobar Island. The officially documented plants with medicinal potential are three thousand but traditional practioners use more than six thousand. India is the largest producer of medicinal herbs and is appropriately called the botanical garden of the world. In rural India, seventy percent of the population is dependent on the traditional system of medicine, the Ayurveda, which is the ancient Indian therapeutic measure renowned as one of the major systems of the alternative and complementary medicine (Bhatia, *et al*., 2013).

The available literature reveals that saffron is a multipurpose, nutrimental and ethnomedicinal has a variety of metabolic chemicals which may be used in the form of home remedies and for traditional medicine. Considering the multipurpose importance of the saffron, the present review is an attempt to summarise the information's available on this valuable plant product which is yet not popular among the mass due to one reason or the other despite providing an array of benefits.

Saffron is a small bulbous perinial spice derived from the flower of **Crocus sativus** Linn.**,** a member of family **Lilyaceae** commonly known as the "saffron crocus". Saffron crocus grows to 20–30 cm and bears up to four flowers, each with three vivid crimson stigmas, which are the distal end of a carpel. The styles and stigmas, called threads, are collected and dried to be used mainly as a seasoning and colouring agent in food. Saffron, long among the world's most costly spices by weight is native to Southwest Asia and was probably first cultivated in or near Greece. As a genetically monomorphic clone, it was slowly propagated throughout much of Eurasia and was later brought to parts of North Africa, North America, and Oceania. In India is cultivated in Jammu and Kashmir.

The domesticated saffron crocus, *Crocus sativus* Linn., is an autumn-flowering perennial plant unknown in the wild. Its progenitors are possibly the Eastern Mediterranean autumn-flowering *Crocus cartwrightianus*, which is also known as "wild saffron" and originated in Greece. The saffron crocus probably resulted when *Crocus cartwrightianus* was subjected to extensive artificial selection by growers seeking longer stigmata. *Crocus thomasii* and *Crocus pallasii* are other possible sources.

It is a sterile triploid form, which means that three homologous sets of chromosomes compose each specimen's genetic complement;. *C sativus* bears eight chromosomal bodies per set, making for twenty four in total. Being sterile, the purple flowers of *C. sativus* fail to produce viable seeds; reproduction hinges on human assistance: clusters of corms, underground, bulb-like, starch-storing organs, must be dug up, divided, and replanted. A corm survives for one season, producing via this vegetative division up to ten "cormlets" that can grow into new plants in the next season. The compact corms are small, brown globules that can measure as large as five cm in diameter, have a flat base, and are shrouded in a dense mat of parallel fibres; this coat is referred to as the "corm tunic". Corms also bear vertical fibers, thin and net-like, that grow up to five cm above the plant's neck.

The plant grows to a height of twenty to thirty cm , and sprouts five to eleven white and non-photosynthetic leaves known as cataphylls. These membrane-like structures cover and protect the crocus's five to eleven true leaves as they bud and develop. The latter are thin, straight, and blade-like green foliage leaves, which are one to three mm in diameter, which either expand after the flowers have opened ("hysteranthous") or do so simultaneously with their blooming ("synanthous"). *C. sativus* cataphylls are suspected by some to manifest prior to blooming when the plant is irrigated relatively early in the growing season. Its floral axes, or flower-bearing structures, bear bracteoles, or specialised leaves, that sprout from the flower stems; the latter are known as pedicels. After aestivating in spring, the plant sends up its true leaves, each up to forty cm in length. In autumn, purple buds appear. Only in October, after most other flowering plants have released their seeds, do its brilliantly hued flowers develop; they range from a light pastel shade of lilac to a darker and more striated mauve. The flowers possess a sweet, honey-like fragrance. Upon flowering, plants average less than thirty cm in height. A three-pronged style emerges from each flower. Each prong terminates with a vivid crimson stigma twenty five to thirty mm in length.

The plants grow poorly in shady conditions; they grow best in full sunlight. Fields that slope towards the sunlight are optimal (i.e., south-sloping in the Northern Hemisphere). Planting is mostly done in June in the Northern Hemisphere, where corms are lodged seven to fifteen cm deep; its roots, stems, and leaves can develop between October and February. Planting depth and corm spacing, in concert with climate, are critical factors in determining yields. Mother corms planted deeper yield higher-quality saffron, though form fewer flower buds and daughter corms. Italian growers optimise thread yield by planting fifteen cm deep and in rows two to three cm apart; depths of eight to ten cm optimise flower and corm production. Greek, Moroccan, and Spanish growers employ distinct depths and spacings that suit their locales.

Crocus sativus prefers friable, loose, low-density, well-watered, and well-drained clay-calcareous soils with high organic content. Traditional raised beds promote good drainage. Soil organic content was historically boosted via application of some twenty to thirty tonnes of manure per hectare. Afterwards, and with no further manure application, corms were planted. After a period of dormancy through the summer, the corms send up their narrow leaves and begin to bud in early autumn. Only in mid-autumn do they flower. Harvests are by necessity a speedy affair: after blossoming at dawn, flowers quickly wilt as the day passes. All plants bloom within a window of one or two weeks. *Bacillus subtilis* FZB24 infects *Crocus sativus* and affects the quantity as well as the quality of the flowers saffron.

Roughly one hundred and fifty flowers together yield one g of dry saffron threads; to produce twelve g of dried saffron (or seventy two g moist and freshly harvested), one kg of flowers are needed; four hundred fifty kg yields 5.7 g of dried saffron. One freshly picked flower yields an average thirty mg of fresh saffron or seven mg dried.

Saffron's also known as Zafaran taste and iodole form or hay-like fragrance result from the chemicals **picro -crocin** and **safranal**. It also contains a carotenoid pigment, **crocin**, which imparts a rich golden-yellow_hue to dishes and textiles. Its recorded history is attested in a 7th-century BC Assyrian botanical treatise compiled under Ashurbanipal, and it has been traded and used for over four millennia. Iran now accounts for approximately 90% of the world production of saffron.

Saffron contains more than one hundred fifty volatile and aroma-yielding compounds. It also has many nonvolatile active components, many of which are carotenoids, including

zeaxanthin, lycopene, and various α- and β-carotenes. However, saffron's golden yellow-orange colour is primarily the result of α-crocin. This crocin is trans-crocetin di-(β-D-gentiobiosyl) ester; it bears the systematic (IUPAC) name 8,8-diapo-8,8-carotenoic acid. This means that the crocin underlying saffron's aroma is a digentiobiose ester of the carotenoid crocetin. Crocins themselves are a series of hydrophilic carotenoids that are either monoglycosyl or diglycosyl polyene esters of crocetin Crocetin is a conjugated polyene dicarboxylic_acid that is hydrophobic, and thus oil-soluble. When crocetin is esterified with two water-soluble gentiobioses, which are sugars, a product results that is itself water-soluble. The resultant α-crocin is a carotenoid pigment that may comprise more than ten percent of dry mass of saffron. The two esterified gentiobioses make α-crocin ideal for colouring water-based and non-fatty foods such as rice dishes.

The bitter glucoside picrocrocin is responsible for saffron's flavour. Picrocrocin systematicname:4-(β-D-glucopyranosyloxy)-2,6,6-trimethylcyclohex-1-ene-1-carbox-aldehyde) is a union of an aldehyde sub-element known as safranal (systematic name: 2,6,6-trimethylcyclohexa-1,3-diene-1-carboxaldehyde) and a carbohydrate. It has insecticidal and pesticidal properties, and may comprise up to four percent of dry saffron. Picrocrocin is a truncated version of the carotenoid zeaxanthin that is produced via oxidative cleavage, and is the glycoside of the terpene aldehyde safranal.

When saffron is dried after its harvest, the heat, combined with enzymatic action, splits picrocrocin to yield D–glucose and a free safranal molecule. Safranal, a volatile oil, gives saffron much of its distinctive aroma. Safranal is less bitter than picrocrocin and may comprise up to 70% of dry saffron's volatile fraction in some samples. A second element underlying saffron's aroma is 2-hydroxy-4,4,6-trimethyl-2,5-cyclohexadien-1-one, which produces a scent described as saffron, dried hay-like. Chemists find this is the most powerful contributor to saffron's fragrance, despite its presence in a lesser quantity than safranal. Dry saffron is highly sensitive to fluctuating pH levels, and rapidly breaks down chemically in the presence of light and oxidising agents. It must, therefore, be stored away in air-tight containers to minimise contact with atmospheric oxygen. Saffron is somewhat more resistant to heat.

Saffron is not all of the same quality and strength. Strength is related to several factors including the amount of style picked along with the red stigma. Age of the saffron is also a factor. More style included means the saffron is less strong gram for gram, because the colour

and flavour are concentrated in the red stigmata. Saffron from Iran, Spain and Kashmir is classified into various grades according to the relative amounts of red stigma and yellow styles it contains. Grades of Iranian saffron are: "sargol" (red stigma tips only, strongest grade), "pushal" or "pushali" (red stigmata plus some yellow style, lower strength), "bunch" saffron (red stigmata plus large amount of yellow style, presented in a tiny bundle like a miniature wheat sheaf) and "konge" (yellow style only, claimed to have aroma but with very little, if any, colouring potential). Grades of Spanish saffron are "coupé" (the strongest grade, like Iranian sargol), "mancha" (like Iranian pushal), and in order of further decreasing strength "rio", "standard" and "sierra" saffron. The word "mancha" in the Spanish classification can have two meanings: a general grade of saffron or a very high quality Spanish-grown saffron from a specific geographical origin. Real Spanish-grown La Mancha saffron has PDO protected status and this is displayed on the product packaging. Spanish growers fought hard for Protected Status because they felt that imports of Iranian saffron re-packaged in Spain and sold as "Spanish Mancha saffron" were undermining the genuine La Mancha brand.

Countries producing less saffron do not have specialized words for different grades and may only produce one grade. Artisan producers in Europe and New Zealand have offset their higher labor charges for saffron harvesting by targeting quality, only offering extremely high grade saffron.

In addition to descriptions based on how the saffron is picked, saffron may be categorized under the international standard ISO 3632 after laboratory measurement of **crocin** (responsible for saffron's colour), picrocrocin (taste), and **safranal** (fragrance or aroma) content. However, often there is no clear grading information on the product packaging and little of the saffron readily available in UK is labelled with ISO category. This lack of information makes it hard for customers to make informed choices when comparing prices and buying saffron.

Determination of non-stigma content ("floral waste content") and other extraneous matter such as inorganic material ("ash") are also key. Grading standards are set by the **International Organization for Standardization,** a federation of national standards bodies. ISO 3632 deals exclusively with saffron and establishes three categories: III (poorest quality), II, and I (finest quality). Formerly there was also category IV, which was below category III. Samples are assigned categories by gauging the spice's crocin and picrocrocin content,

revealed by measurements of specific spectrophotometric absorbance. Safranal is treated slightly differently and rather than there being threshold levels for each category, samples must give a reading of twenty to thirty for all categories.

These data are measured through spectrophotometry reports at certified testing laboratories worldwide. Higher absorbances imply greater levels of crocin, picrocrocin and safranal, and thus a greater colouring potential and therefore strength per gram. The absorbance reading of crocin is known as the "colouring strength" of that saffron. Saffron's colouring strength can range from lower than eighty (for all category IV saffron) up to two hundred or greater (for category I). The world's finest samples (the selected, most red-maroon, tips of stigmata picked from the finest flowers) receive colouring strengths in excess of two hundred and fifty, making such saffron over three times more powerful than category IV saffron. Market prices for saffron types follow directly from these ISO categories. Sargol and coupé saffron would typically fall into ISO 3632 category I. Pushal and mancha would probably be assigned to category II. On many saffron packaging labels, neither the ISO 3632 category nor the colouring strength (the measurement of crocin content) is displayed.

However, many growers, traders, and consumers reject such lab test numbers. Some people prefer a more holistic method of sampling batches of threads for taste, aroma, pliability, and other traits in a fashion similar to that practised by experienced wine tasters. However, ISO 3632 grade and colouring strength information allow consumers to make instant comparisons between the quality of different saffron brands, without needing to purchase and sample the saffron. In particular, consumers can work out value for money based on price per unit of colouring strength rather than price per gram, given the wide possible range of colouring strengths that different kinds of saffron can have.

Despite attempts at quality control and standardisation, an extensive history of saffron adulteration, particularly among the cheapest grades, continues into modern times. Adulteration was first documented in Europe's Middle Ages, when those found selling adulterated saffron were executed under the Safranschou code. Typical methods include mixing in extraneous substances like beetroot, pomegranate fibres, red-dyed silk fibres, or the saffron crocus's tasteless and odourless yellow stamens. Other methods included dousing saffron fibres with viscid substances like honey or vegetable oil to increase their weight. However, powdered saffron is more prone to adulteration, with turmeric, paprika, and other powders used as diluting fillers. Adulteration can also consist of selling mislabelled mixes of

different saffron grades. Thus, in India, high-grade Kashmiri saffron is often sold and mixed with cheaper Iranian imports; these mixes are then marketed as pure Kashmiri saffron, a development that has cost Kashmiri growers much of their income.

❖ **Nutritional Potentiality of Saffron: (Source-USDA Nutrition Chart):**

Principle, Nutrient Value and RDA Percentage are given respectably

- **Energy**-310 Kcal,15.5%; **Carbohydrate**-65.37 g, 50%; **Protein**-11.43 g, 21%; **Total Fat**-5.85 g, 29%; **Cholesterol**-0 mg, 0% and **Dietary Fiber**-3.9 g, 10%.
- **Vitamins: Folates**-93 /ug, 23%; **Niacin**-1.46 mg, 9%, **Pyridoxin**-1.010, 77%; **Riboflavin**-0.267 mf, 20%, **Vitamin A**-530 IU, 18% and **Vitamin C**-80.8 mg, 135%.
- **Electrolytes: Sodium**-148 mg, 10% and **Potassium**-1724 mg, 37%.
- **Minerals: Calcium**-111 mg, 11 %, **Copper**-0.328mg, 37%, **Iron**-11.10mg, 139%, **Magnecium**-264 mg, 66%, **Manganese**-28.408 mg,1235%, **Phosphorus**-252 mg, 36%, **Selanium**-5.6 /ug, 10% and **Zinc**-1.09mg, 10%.

➢ **Uses**

- Crushed saffron threads are soaked in hot but not the boiling water for several minutes prior to use in cuisine. This helps release the aromatic components.
- Saffron's aroma is often described by connoisseurs as reminiscent of metallic honey with grassy or hay-like notes, while its taste has also been noted as hay-like and sweet.
- Saffron also contributes a luminous yellow-orange colouring to foods.
- Saffron is widely used in Persian, Indian, European, Arab, and Turkish cuisines. Confectioneries and liquors also often include saffron.
- Saffron has also been used as a fabric dye, particularly in China and India, and in perfumery.
- It is used for religious purposes in India, and is widely used in cooking in many cuisines,
- One of the most esteemed use for saffron is in the preparation of the *Golden Ham*, a precious dry-cured ham made with saffron from San Gimignano.
- For a wonderful marinade for ash, add saffron threads, garlic and hymen of vinegar.
- Saffron threads are used to give cakes, pastries and cookies abutter golden hue and a rich aroma.
- Biryanis are cooked with saffron combined with cloves, cinnamon, Indian bay leaves and nutmeg for a memorable treat.
- Saffron has a long history of use in traditional medicine.

- A piece of saffron is crushed in to a glass of champagne or sparkling apple sider and turn the drink in to a golden elixir.
- Coffee spiced with saffron and cardamom is a soothing and heart healthy drink.
- Add saffron and cardamom to whole milk or yogurt and honey for a simple version of the famous Indian yogurt drink, lassi.
- Saffron as a spice is generally regarded as safe; however it is not recommended during pregnancy and nursing.It also must also be pointed that large doses i.e., one or two table spoons can be toxic, although saffron poisoning is very rare.

❖ **Health Benefits of Saffron**

- Saffron contains several plant derived chemical compounds that are known to have been anti-oxidenat disease preventing and health promoting properties.
- Their flower pistils compose several essential volatile oils, but the most important of them is safranal which gives saffron its pleasant flavor. Other volatile oils in saffron are cineole, phenetheriol, pinene, borneol,geraniol,limonene, beta cymenelibalool, lerpinen-4.oil etc.
- The colorful spice has many non-volatile active components. The most important of them is alfa-crocin, a carotenoid compound, which gives pistils their natural golden yellow color. It also contains other carotenoides, including zeaxanthin, lycopene, alfa and beta carotenes. These are important anti-oxidant which induces stress, cancers, infections and act as immune modulators.
- The active components in saffron have many therapeutic applications in many traditional medicines as antiseptic, antidepressant, anti oxidant, digestive and anticonvulsant.
- The novel spice is an excellent source of minerals like copper, potassium, calcium, manganese, iron, selenium, zinc and magnesium. Potassium is an important component of cell and body fluid that helps to control heart rate and blood pressure. The human body uses manganese and copper as co-factor for the anti oxidant enzymes, superoxide dismutase, iron is essential for red blood cell production and also as a co-factor for cytochrome oxidase enzumes.
- Additionally, it is also rich in many vital vitamins, including vitamin-A, folic acid, riboflavin, niacin and vitamin-C which is essential for optimum health.
- Use of saffron promotes learing and memory retention: Recent studies have also demonstrated that saffron extract specically its crocin, is useful in the treatment of age

related mental impairment. In Japan, is encapsulated and used in the treatment of Parkinsons disease, memoray loss, and inoammation.

- In delayed puberty in underdeveloped girls; saffron has an overall stimulant effect. A pinch of saffron crushed in a table spoon of milk is useful to stimulate harmones and bring about desired effect.
- To increase vitality: In low libido saffron aids as a sexual stimulant and can be consumed in a dose of a pinch in a glass of milk at bed time.
- In patchy baldness: Saffron mixed in liquorice and milkmakes an effective topical application to induce hair growth in al
- Protection against cold: Saffron is a stimulant tonic and very effective to treat cold and fever.Saffron mixed in milk and applied over the forehead quickly relieves cold.

❖ **Medicinal Uses**

- The active components present in saffron have many therapeutic applications in many traditional medicines since a long time as anti-spasmodic, carminative, and diaphoretic.
- Research studies have shown that safranal, a volatile oil found in the spice, has anti oxidant, cytotoxic effect on cancer cells, anticonvulsant and antidepressant properties. The alpha crocin, a carotenoid compound which gives the spice its characteristic golden-yellow hue, have been found to have anti-oxidant, antidepressant anti cancer properties.

❖ **Amazing benefits of Saffron**

➢ **Disease Prevention**

- One of the main saffron benefits, when used in cooking food, is that it contains many plant-derived bio-chemical components which are known to prevent diseases. They are also known to promote the overall well-being of the body.

➢ **Volatile Oils**

- The plant part from which saffron is obtained contains essential but volatile oils which when added to food, imparts its unique flavour and benefits of saffron as a spice. Some of these oils are cineole, pinene, borneol, geraniol, etc.

➢ **Active Components**

- Apart from the volatile oils, there are also non-volatile active components like carotenoid compound that are antioxidants beneficial to the body. These prevent free radical reactions which produce harmful by-compounds and diseases. Some of the carotenoids

like zeaxanthin, lycopene, alpha and beta-carotene are widely appreciated. This is also one of the main uses of saffron.

➢ **Therapeutic Applications**

- In many religions, saffron is not just considered a spice. It is used in various types of therapies like body healing, detoxification and also in the spas.

➢ **Antidepressant**

- The active components in the saffron make our body lose its depressing characteristics making it a dietary necessity sometimes. Zafaran contains safranal and alfa-crocin, a volatile oil compound, elective in controlling depression and acts like as anticonvulsant. Kesar brings cheerfulness and wisdom in the body.

➢ **Digestive Properties**

- Saffron is also a digestive and an anticonvulsant. Saffron is good for digestion due to presence of multiple medicinal compounds and an anti-convulsant which stimulates disgestion. It is suggested that one should make a mix of water (1 litre) and saffron (1g) for strengthening the function of stomach. Saffron is also beneficial when the liver and spleen get enlarged.

➢ **Cell Formation And Repair**

- Potassium, found in saffron, is a necessary source that favors cell formation and repai
- Due to presence of many macro-micro nutrients, especially potassium and mangnesium. it is helpful in the growth of cells and tissues. It is also helpful in repairing of cells in the body.

➢ **Heart Diseases**

- Potassium in saffron is good in controlling heart beat by allowing to slow down thus protect the heart.

➢ **Saffron in Blood Pressure**

- The saffron spice contains many minerals such as copper, potassium, calcium, manganese, iron, mangnesium, zinc and selenium. Some of these are helpful in contr4olling blood pressure as well as in the formation of haemoglobin.

➢ **Blood Cell Production**

- Iron is a very useful component in the body as the blood requires it to form haemoglobin and it is a co-factor in the red blood cell production too.

➢ **Optimum Health**

- The minerals such as copper, potassium, calcium, manganese, iron, magnesium, zinc and selenium present in saffron ensure the maintenance of optimum health.

➢ **Weight Loss and Diet Control**

- It's time to usher in the new diet plan that actually works, and it's as simple as incorporating saffron oil into your food. Proven results show that saffron oil controls the appetite and is working all over the world to help people control obesity and get back into shape. Studies show that saffron intake effectively enhances the serotonin levels in our body.
- High serotonin levels suppress the appetite or the impulse to eat and heightens the mood at the same time whereas low levels of serotonin invariably have an opposite and adverse effect leading to overeating. Dr.Oz, a world famous nutritionist and a regular on the Oprah Winfrey Show, vouches for and promotes saffron extracts as a healthy and viable tool to combat obesity which has taken on frightening proportions as a serious health hazard that just can't be ignored.

➢ **Respiratory Health**

- Saffron is commonly used to treat asthma and other respiratory ailments such as cough, whooping cough, and to loosen phlegm (as an expectorant)

➢ **Mental Health**

- Saffron extract is known to help treat depression, reduce stress, and to be a mood enhancer. It is also widely used as an aphrodisiac. It is widely used to combat Alzheimer's disease and used in the fight against the growing menace of insomnia, common to today's highly stressed lifestyle habits.

➢ **Sexual Health**

- Women use saffron for menstrual cramps and premenstrual syndrome (PMS), and men use it to promote fertility and to deal with premature ejaculation. Overall, saffron has done much to help treat complex sexual health ailments.

➢ **Combating Diabetes**

- Saffron has proven to be a handy tool combating the menace of diabetes and it is for this mean feat that patients and doctors all over the world swear by it

➢ **Saffron Benefits For Skin**

- Apart from imparting its exotic flavor and aroma to several recipes, saffron possesses beauty benefits as well. It has natural skin lightening qualities. Saffron can be beneficial for your skin in the following ways:

➢ **Saffron For Radiant Skin**

- To get radiant and smooth skin, prepare the following face pack is prepared.
- One teaspoon of sandalwood powder is mixed with two to three strands of saffron, and two spoons of milk. The face is washed and wipe with a cloth before applying this face mask. It is applied till the face is still wet. Massage of the skin is done thoroughly in a circular motion. It is allowed to dry for 20 minutes and latter it is rinsed off.
- This mask should be applied once a week for maximum results.

➢ **Saffron For Fairer Skin**

- To get naturally fair skin Soak a few strands of saffron in milk for 2 hours. Smear this milk all over the face and neck. Wash off after few minutes. Using regularly will make the skin naturally fair.
- Here's another mix that you can prepare to get naturally fair skin: Soak sunflower seeds (chironji) and saffron in milk and keep them overnight Grind this mixture in the morning. Apply it on the face to get fair and glowing skin.
- Adding a few strands of saffron to the glass of milk can also give a glowing complexion. Expectant mothers are often given milk and saffron so that the fetus in the womb gets a fair and glowing complexion. There is, however, no medical theory behind this.
- Saffron strands can be sprinkled in your warm bath water. Let it soak in the water for 20 minutes. Use this water for your bath. This will lighten your complexion naturally.

➢ **Treatment of Acne And Blemishes**

- The antifungal content of saffron makes it effective for the treatment of acne, blemishes, and black heads. Mix 5-6 basil leaves with 10-12 strands of saffron to make a fine paste.

Apply this on the face. Wash off with cold water after 10 to 15 minutes. This will help to remove acne and pimples.

- Basil leaves can clean the bacteria that cause acne and pimples. Apply saffron soaked milk on face twice a day to help in clearing blemishes.

➢ **Treatment of Dull Skin**

- Add 2-3 strands of saffron to one teaspoon of water and keep overnight. By next morning the color of the water will turn yellow.
- Add one teaspoon milk, 2-3 drops of olive or coconut oil and a pinch of sugar to this saffron water.Dipping a piece of bread in this mixture, apply it all over face. Allow it to dry for 15 minutes and wash off. This mask will freshen up dull skin as well as help in erasing dark circles under the eyes.It also exfoliates the skin by helping blood circulation, thus making your skin smooth and glowing.

➢ **Saffron For Luminous Complexion**

- Add a few strands of saffron to honey. Massage your face with this face pack.This will stimulate blood circulation by providing oxygen to the skin. Using this face pack regularly will give you a glowing complexion.

➢ **Saffron As A Toner**

- Saffron can help in toning up the skin. All you need to do is soak saffron strands in rose water and apply it on the skin after scrubbing.

➢ **Improves Face Texture**

- Boil ½ cup of water for 10 minutes Add 4 to 5 strands of saffron and 4 tablespoons of milk powder to this water. Apply it on your face for 10 to 15 minutes and then wash with cold water. This face pack will help to improve the texture of your facial skin.

➢ **Treatment of Dry Skin**

- If you have dull and dry skin, you can prepare a mask with lemon and saffron. Lemon cleans your skin from deep within while saffron provides luminosity to it. All you need to do is:
- Mix a few drops of lemon juice with a spoonful of saffron powder. If you have very dry skin, you can add a few drops of milk. Make it into a smooth dough and spread all over your face. Leave for 20 minutes and wash off with lukewarm water.

➢ **Zafaran for fair complexion**

- Bathing with zafaran stands (soaked saffron strands for 20-30 minutes in water), is in improving your complexion.

➢ **Heals Wounds And Scars**

- Warriors in the past have been known to use saffron extracts to treat wounds suffered in battle. Saffron holds amazing healing properties that go a long way in healing wounds and removing scars and spots for a blemish free skin tone.

➢ **Saffron for pain management**

- Since the ancient times, zafaran is used as pain reliever. Periods related pains can be eased by taking tea or milk along with saffron.

➢ **Saffron for toothache**

- Massaging the tooth with saffron and honey, helps to relive to pain from gums. It may be also applied with honey as well as glycerin to relax the toned parts of the mouth.

➢ **Saffron for healthy lips**

- Saffron is among the few plant products, which is the biggest source of vitamin B2 (ribooavin). Taking of saffron on regular basis is helpful in prevention of throat soreness, swelling of tongues, cracking of lips, skin cracking and skin irritation.

➢ **Saffron as analgesic**

- Saffron contains a sedative compound called safranal, which has greater impact on the nervous system and very helpful as analgesic.

➢ **Saffron for colds**

- When saffron (0.5g to 1 g) is mixed with warm water (1 litre) and drinking the same is helpful in curing of cough and cold.

➢ **Saffron develops immunity**

- Saffron is having an appropriate percentage of vitamin C, which acts like as immunity booster and save you from various ailments.

➢ **Refreshment**

- Due to its unique taste. It is used in many food recipes as well as refreshment purposes.

➢ **Saffron for muscular problems**

- Saffron is used in curing of age related muscular degeneration. Saffron not only reduces the degeneration process but also helps in healing the damaged cells.

➢ **Saffron for male vitality**

- Saffron is used to inhance mens vitality. Even this magical herb has the ability to provide vigor to the older people.

➢ **Saffron for neurological problems**

- Since the ancient times, saffron is used on the forehead because of its neurological beneots.

➢ **Saffron for menses**

- Zafaran is used to controlled blood loss during menstrual cycle.

➢ **Saffron for arthritis**

- The auurvedic physicians prescribed saffron for arthritis patients. It is also good in controlling of asthma. Saffron helps to clear breath.

➢ **Saffron for pregnancy**

- Saffron during pregnancy with milk is good for enhancing pelvic blood oow and reduces the occurrence of cramps, which is common during pregnancy. Drinking of saffron milk helps to stimulate the production of serotonin that control mood swings, tension, stress and depression among pregnant mother.

➢ **Saffron Benefits For Hair**

- Saffron is beneficial for the hair and helps in stimulating hair growth.

➢ **Saffron Combats Hair Loss**

- Saffron will combat hair loss and promote hair growth. The application of zafaran over the scalp is good in treating of baldness (Alopecia). The mix of saffron milk and licorice when applied over the scalp is good in prevention of hair loss and hair growth. The application is also helpful in stimulating of hair growth

CONCLUSION

The perusal of the enumerations reveals that the saffron spice, a product of *Crocus sativus* is not being grown every where and it is a prized but world's most expensive condiment spice. It is costly than gold so it is not affordable to every one. But considering its nutritive value, miscellaneous uses, health benefits, use in traditional medicines and therapeutic uses the saffron shows its importance that it should be an important component of spices rack of each home. No doubt the reality in practice is quite different. Most probably those who know it's real value will be using this multipurpose novel spice regularly as a nutritive and prophylactic medicine. In mass it is being used in culinary purposes in ceremonial functions in high and upper middle income groups. It should be made popularize among the mass by one way or the other so that those who can purchase gold either for show or as a property can also use this novel medicinal spice.

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