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Formulation And Evalution Of Herbal Chyawanprash By Using Sarata Extracts .

1Mr.siddhant S. Nagare, 2Dr. Rahulkumar D. Rahane, 3Mr. Pravinkumar M. Pawar, 4Mr. Vaibhav N. Kadam, 5Mr. Yogesh Musale

1Student, 2Professor , 3Student , 4Professor , 5Professor

1Matoshri miratai aher college of pharmacy karjule harya,

2Matoshri miratai aher college of pharmacy,

3Matoshri miratai aher college of pharmacy,

4Matoshri miratai aher college of pharmacy,

5Matoshri miratai aher college of pharmacy

Abstract : Chyawanprash is a traditional Ayurvedic substance with several health benefits. This complex herbal jam has been used for millennia in Indian traditional medicine to improve longevity and overall health. Examining and evaluating the Chyawanprash quality elements is the aim of this research piece. The formulation process involves the meticulous selection and processing of many botanical elements, including amla (Emblicaofficinalis), in addition to a blend of herbs, spices, and honey.This study's main goal was to evaluate Chyawanprash's quality using a number of important assessment criteria. The key to Chyawanprash's possible health advantages is its well-balanced combination of natural components and plants. We verified the presence of essential components, such as vitamin C from Amla, in accordance with standards using analytical techniques. Since ancient times, chyawanprash has been used extensively as a medication to increase longevity and immunity as well as a health supplement due to its many health advantages.Since its introduction, Chyawanprash has been a part of every Indian's life, regardless of societal, political, or scientific considerations. Long before the invention of vitamins, minerals, and antioxidant supplements, it was one of the foods most valued for its antiaging properties. The final result tastes sweet, sour, and spicy, and it has a consistency similar to fruit jam. To determine the effectiveness of CP as a treatment, scientific research is necessary. There is a need to bring together the disparate data examining the therapeutic potential of CP. In order to highlight the importance of CP in treatments, an

attempt was made to gather the disparate material from ancient Ayurvedic writings and treatises as well as ethnobotanical, ethnopharmacological, and scientifically confirmed literature. Citations that were pertinent to the subject were filtered.

Keywords : Ayurvedic,Chyawanprash, supplement ,*Emblicaofficinalis*,antioxidant.

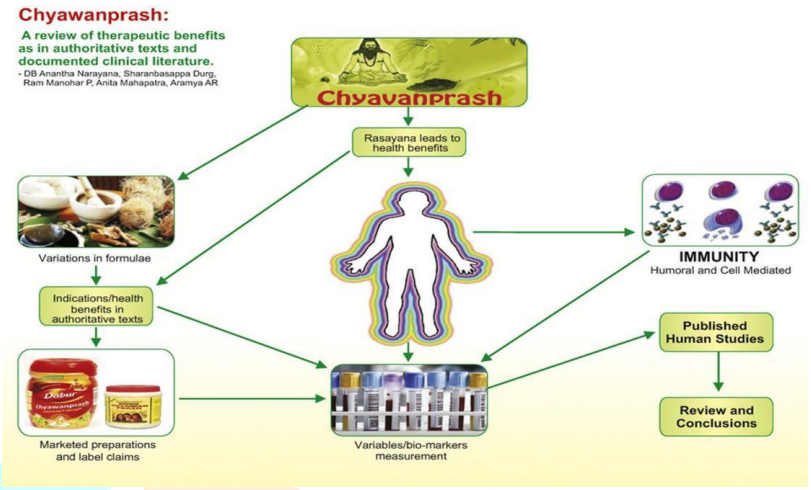

Fig no 1 : Graphical abstract of herbal chyawanprash.

Introduction :

For thousands of years, the ancient Indian traditional medical system known as Ayurveda has offered people a wealth of natural cures and all-encompassing approaches to health and wellbeing. Chyawanprash, one of the most well-known Ayurvedic health supplements, is composed of a highly concentrated mixture of minerals and nutrient- rich herbs1. Chyawanprash falls under the Rasayana group in Ayurveda. There are other spellings of chyawanprash, including chyavanaprash, chyavanaprasha, chyavanaprasam, and chyawanaprash. The terms "Chyawan" and "Prasha" are combined to form the word "Chyawanprash." Prasha denotes a medication or food that is fit for human consumption, whereas Chyawan is the name of a sage and also represents "degenerative change."

A traditional Ayurvedic recipe is used to make chyawanprash, an ancient Indian formulation (a polyherbal jam) enhanced with a variety of herbs and herbal extracts. It is a valued blend of botanicals, minerals, and processed minerals. CP has been used for millennia and is considered by many experts to be a necessary health supplement. Since ancient times, chyawanprash has been used extensively as a medication to increase longevity and immunity as well as a health supplement due to its many health advantages. Chyawanprash has been a part of every Indian's life from the day it was introduced, irrespective of sociocultural, political, and scientific factors.

In the Ayurvedic community, chyawanprash is a term used to describe a natural substance that has been carefully formulated to support holistic health and strength. It was one of the most valued foods for its antiaging effects long before vitamins, minerals, and antioxidant supplements came into existence. Chyawanprash, which has its origins in ancient Indian

traditions, has been used for many generations and is prized for its rejuvenating and regenerative properties. A subset of Ayurveda called Rasayana encompasses a variety of specific techniques meant to increase longevity, prevent aging and illnesses, eradicate degenerative processes, and foster optimal health.

CP is without a doubt the most significant of all the Rasayana formulations listed during the classical and medieval eras. Since its introduction to the consumer market in the 1950s, this composition has advanced significantly as an over-the-counter medication. Because of its many health advantages and ability to address the preventative, promotive, and curative elements of health, it is highly valued.

Amla/Amalaki (Phyllanthus emblica/Indian gooseberry) pulp is used as the foundation for chyawanprash, which is said to be the best Rasayana for maintaining homeostasis. Amla-containing chyawanprash has a complex flavor that combines astringent, pungent, bitter, sour, and sweet notes. When consumed regularly, it revitalizes every bodily system and preserves physiological processes.

The myth of the woodland sage Chyawan Rishi is the source of CP's unusual name. The twin Ashwini Kumar brothers, the royal doctors to the Gods during the Vedic era, created this polyherbal preparation to make the sage Chyawan Rishi younger and increase his vigor and power, according to a number of ancient religious treatises, including the Mahabharata, the Puranas, etc. The recipe, which was named for the old sage, was created in his hermitage on Dhosi Hill, close to the Narnaul region, in the Indian state of Haryana. It was dubbed "Chyawanprash."

About 50 herbs and spices are combined in a synergistic way to create the powerful antioxidant paste known as chyawanprash. Because of its consistency and dose type, chyawanprash belongs to the Awaleha (electuaries/herbal jams) category of Ayurvedic medications. Four classes of herbal drugs are typically included in CP: Ashtavarga (threatened medicinal herbs from the Northwest Himalayas that are not currently commercially available); Dashmula (ten roots); Chaturjata (four aromatic plants); and a general class (materials not belonging to the former classes). The ancient Ayurvedic writings that are devoted to clinical management—Ashtanga Hridayam, Charaka Samhita, and Sangandhara Samhita—describe the Chyawanprash formula. Amla, a citrus fruit that is well-known and powerful, is the main constituent.

Chyawanprash is an ayurvedic health supplement made from herbs. It has the name of Rishi Chyawan, who was the first to prepare it. Amla is the primary component in this combination of over 50 nutrient-dense plants and minerals. This traditional remedy has a somewhat fruit jam-like appearance and tastes sweet, sour, and somewhat peppery. It has a brownish-black color and is sticky. This age-old health supplement has several health advantages and is high in antioxidants.

1. Boosts Immune Health :

A traditional bioactive health supplement from India is called chyawanprash. It is the most effective medication for boosting your body's immunity. Chyawanprash's amla (Indian gooseberry) is high in vitamin C, which strengthens the immune system. Additionally, it has been demonstrated that amla possesses adaptogenic qualities that help the body adjust to stress and control immunity. Additionally, amla juice has a number of noteworthy health advantages that make it a mainstay in the diets of many health-conscious people.
Chyawanprash may help school-age children's immunity, vitality, and physical fitness. Additionally, it was discovered to boost the activity of a number of immune system cells.

2. Prevents Seasonal Infections :

Some people get infections as a result of seasonal changes. The body can combat viral and seasonal diseases by taking chyawanprash. To fully comprehend this specific advantage of chyawanprash, additional investigation is necessary.

3. Enhances The Digestive System :

Chyawanprash's components aid in enhancing the digestive system. They control gastrointestinal processes and aid in the relief of gastritis. This ayurvedic medication's carminative qualities aid in preventing flatulence. By encouraging digestion, chyavanprash also aids in the removal of accumulated excreta, or waste materials. It facilitates digestion and bowel motions.

4. Helps Fight Respiratory Issues :

People with long-term and chronic respiratory conditions might benefit from the herbs in this traditional mixture. It treats respiratory infections, coughs, and asthma. Lung function may also be enhanced by chyawanprash. It promotes healthy respiratory passages and shields the body from illness.

5. Aids In Purifying Blood :

Excess toxins are commonly seen in the bodies of people who have busy lives, sleep less, or overindulge in junk food. These poisons cause a number of problems and illnesses when they build up in the body. They also interfere with your body's natural blood cleansing mechanism. Consuming chyawanprash aids in blood purification and the removal of excess toxins from the body.

6. Sharpens Memory And Aids Brain Function :

Chyawanprash may aid in the treatment of forgetfulness due to its anti-amnesic properties. According to one study, giving mice chyawanprash every day may shield them against memory loss. Those suffering from Alzheimer's disease may potentially benefit from chyawanprash's antioxidant qualities. However, further study is required in this area.
Additionally, it had positive impacts on the cognitive performance of older mice. It enhances learning capacities and increases memory. Chyawanprash consumption may improve focus and alertness, according to a research done on 128 college students.

7. Promotes Healthy Weight Gain :

Calcium and other minerals are better absorbed when chyawanprash is consumed. This promotes healthy weight growth in juveniles by strengthening bones and toning muscles . Additionally, chyawanprash raises the body's blood protein levels and encourages a good nitrogen balance. Additionally, this may promote healthy weight gain . In a different research, 99 recently diagnosed pulmonary TB patients gained a healthy amount of weight after consuming chyawanprash.

8. Improves Heart Health :

Additionally, chyawanprash may lower blood cholesterol levels. Additionally, the amla in Chyawanprash may have a major influence on decreasing cholesterol. Additionally, it is said that the sesame oil in Chyawanprash has hypocholesterolemic (a process that lowers cholesterol levels) and antioxidant qualities that aid in cholesterol reduction. Chyawanprash's ability to decrease cholesterol may have an effect on heart health.

Materials and methods :

Materials : Sarata powder (*Boswellia sarata*),jaggery ,Amla powder(*Phyllanthus embellica*),Cinnamon (*C. zeylanicum*),goghrita ,Ginger(*Zingiber officianilis*) were collected from local ares of Parner Aahilyanagar.

Methods of preparation : After putting five grams of Phyllanthus embellica (amla) powder in a beaker and boiling it in water for an hour, 50 milliliters of water were added to another beaker, and the two extracts were combined. Next, a jaggery solution was added, and finally, goghrita was added to increase the chyawanprash's potency. After that, add powdered cinnamon (Cinnamonum zelyanicum) and ginger (Zingiber officianilis). After that, keep mixing thoroughly until a jelly-like consistency forms. Let the mixture cool before storing it in an airtight container.

Table no 1 : Formula of chyawanprash.

Ingredients	Quantity	Role
Sarata powder	5 gram	Immunity boosting
Jaggery	4 gram	To improve digestive and respiratory health
Amla powder	3 gram	Improve immunity
Cinnamon powder	3 gram	Improve immunity
Goghrita	2 gram	Increase potency level of chyawanprash
Ginger powder	3 gram	It enhance digestion

Profile of ingredients :

1 .Sarata powder (*Boswellia sarata*):

The tree Boswellia serrata is commonly known by the names Salai, Shallaki, and Luban. This tree is indigenous to India and grows over arid highland areas. The tree's gum resin and bark are utilized for therapeutic purposes. The bark is used to cure skin conditions, ulcers, hemorrhoids, asthma, dysentery, and pitta vitiation. It is sweet, acrid, and cooling.

Fig no :2. *Boswellia sarata*.

2. Jaggery :

In the Indian subcontinent, Southeast Asia, North America, Central America, Brazil, and Africa, jaggery is a traditional non-centrifugal cane sugar. It can range in color from golden brown to dark brown and is a concentrated result of cane juice and frequently date or palm sap without the molasses and crystals being separated. Up to 50% sucrose, 20% invert sugars, and 20% moisture are present; the remaining portion is composed of various insoluble materials such wood ash, proteins, and bagasse fibers. Muscovado, a crucial sweetener in Portuguese, British, and French cooking, is remarkably similar to jaggery.

Fig no 3: Jaggery

3. *Phyllanthus embellica* (Amla) :

Phyllanthus emblica, a deciduous tree belonging to the Phyllanthaceae family, is also referred to as Indian gooseberry, emblic, emblic myrobalan, myrobalan, Malacca tree, amloki, or amla. Tropical and southern Asia are its natural habitats. With a height of 1–8 meters (3+1/2–26 feet), the tree is modest to medium in size. It has speckled bark. Typically deciduous, the branchlets are 10–20 centimeters (4–8 inches) long and slightly pubescent (not glabrous).

The light green, simple, subsessile leaflets resemble pinnate leaves and are closely spaced along branchlets. The blooms are yellowish-green. The fruit has six vertical stripes or furrows and is almost spherical, pale greenish-yellow, smooth, and hard to the touch. Cultivated fruits typically weigh between 28.4 g (1 oz) and 56 g (2 oz), but the fruit of wild plants weighs around 5.5 g (0.2 oz). The fruit can reach a diameter of up to 26 millimeters (1 in).

Fig no 4 : *Phyllanthus embellica*

4. Cinnamon plants :

Cinnamon plants feature tiny blooms and lustrous leaves. Oils give the bark and leaves their fragrance. Cinnamon spice is made from the inner bark of many species. Cinnamon plants may be planted in the spring or early fall and typically grow slowly to moderately.

Fig no 5 : Cinnamonum zelyanicum

5 .Ginger :

The flowering plant ginger (Zingiber officinale) is used extensively as a spice and a folk remedy for its rhizome, sometimes known as ginger root. This perennial herbaceous plant produces annual pseudostems, which are artificial stems composed of the coiled bases of leaves, that are around one meter tall and have thin leaf blades. The inflorescences grow straight from the rhizome on distinct branches and contain blooms with pale yellow petals and purple borders.

Ginger belongs to the Zingiberaceae family, which also contains galangal, cardamom (Elettaria cardamomum), and turmeric (Curcuma longa). The Austronesian peoples most likely cultivated ginger earliest, and it originated in Maritime Southeast Asia. It traveled with them all the way to Hawaii during the Austronesian expansion (c. 5,000 BP) across the Indo-Pacific.

Fig no 6 : Zingiber officianilis

6.Goghrita :

Goghrita, or cow ghee, has important Ayurvedic uses in the areas of healing, balancing vata, anti-aging, and improving cognitive function. It serves as a basis for conventional formulations to enhance health results as well as a rejuvenator and aphrodisiac.

Fig no 7 : Goghrita

Results and discussion :

Evalution parameters :

Chyawanprash is evaluated for quality and efficacy using a variety of tests and evaluations to make sure it satisfies safety and quality requirements. The following are some crucial assessments for Chyawanprash:

Table 2: Organoleptic Evaluation of Chyawanprash

Parameters	Characteristics	Evalution Results
Colour	Typical colour	With acceptable range
Odour	Sweet ,sour ,spicy	Characterisics
Taste	Sweet ,sour ,spicy	Characterisics
Texture	Smooth ,homogenous	Characterisics

1. **Organoleptic Assessment**: This entails evaluating Chyawanprash's physical attributes, including its color, texture, taste, and odor. Chyawanprash should be smooth and uniform in texture, with a distinctive sweet, sour, and spicy flavor.

2. **Microbiological Testing:** This test looks for dangerous microbes including yeast, mold, and bacteria. For chyawanprash to be free of contamination, it must adhere to microbiological safety regulations.

3. **Heavy Metal Analysis**: Chyawanprash should be checked for heavy metals such lead, arsenic, mercury, and cadmium since they can be harmful in high doses.

4. **Pesticide Residue Testing**: This determines whether there are any pesticide residues in the Chyawanprash, guaranteeing that it is devoid of dangerous substances.

1. Ellagic test for phenol:Four drops of glacial acetic acid and four drops of NaNO solution were applied to two grams of chyawanprash, and the mixture was shaken.

2. Test for saponins:In a graduated cylinder, 2 grams of chyawanprash were diluted with 10 milliliters of distilled water and shaken rapidly for 20 minutes.

3. **Ferric chloride Test for flavonoids:**

To two grams of chyawanprash, a few drops of ferric chloride solution were added.

4. **Sulphuric acid test for glycosides:**

2.5 gm *chyawanprash*, 2ml glacial acetic acid was added.This was followed by addition of one drop of FeCl3 the was then acidified by drop wise addition of concreted H2S04

5. **Test for steroid:**

2ml acetic anhydride was added to 1gm of chyawanprash. The solution was acidified by dropwise addition of sulphuric acid.

6. **Wagner's test for alkaloids:**

2ml acetic anhydride was added to 1gm of chyawanprash. The solution was acidified by dropwise addition of sulphuric acid.

7. **Braemer's test for tannin:**

Braemers reagent adeed with 2 gm sample and 2 ml FeCl3.

Fig: Test for Phenol

Fig :Breakers test for tannine

Table no 3: Evalution test of herbal chyawanprash .

Test	Observation	Result
Ellagic test for phenol 2gm of chyawanprash + 4 drops of glacial acetic acid +4 drops of NaNO2 ,shake the mixture .	Muddy brown ppt appearance	Phenol was present
Test for saponine : 2 gm of chyawanprash diluted in 10 ml water ,sahke it for 20 miniutes .	1 cm layer of foam appearance	Saponine were present
Ferric chloride test for flavonoids : 5 drops of Fecl3+ 2 gm of chyawanprash.	Green colour turns blue	Phenolic hydroxyl group
Sulphuric acid test for glycoside :2.5 gm chyawanprash +2 ml glacial acetic acid +FeCl3 +H2SO4	Brown ring appears at liquid interfere	Presence of glycosiode
Test for steroid test : 2 gm of sample + 2ml acetic anhydride + H2SO4	Dark green or blue colour appears	Steroid was present
Wagners test for alkaloide : Wagners reagent + 2 gm sample +warm it for 1 min	Reddish brown ppt appears	Alkaloides were present
Braemers test for tannine :2 gm sample +2 ml FeCl3	Dark blue /greenish grey colour appears	Tannins were present

Fig no 8 : Herbal chyawanprash

Fig :Evaluation Parametr Of herbal chyawanprash

Table no :4 : Nutrients parameters of herbal chyawanprash.

Parameter	Analytical method	Acceptable range	Test result
Vitamin C (Amla Content)	High-Performance Liquid Chromatography (HPLC)	NLT 500 mg/100g (Not Less Than)	Meets Requirement
Total Protein Content	Kjeldahl Method	NLT 2% w/w (Not Less Than)	Meets Requirement
Total Carbohydrates	Calculation	NMT 70% w/w (Not More Than)	Meets Requirement
Total Fat Content	Gravimetric Method	NMT 15% w/w	Meets Requirement
Total Ash Content	Gravimetric Method	NMT 10% w/w	Meets Requirement

Future perspective :

A traditional recipe that is created and made popular by businesses is chyawanprash. Perhaps in order to retain control of the knowledge and its connection to their product, each company has kept the material they have created as proprietary and has not published it in scholarly publications. A complex blend of hundreds of potent phytocompounds, this traditional substance has a wide range of biological effects on many targets. Given the complexity of the product, it is quite difficult to fully explain the effectiveness that the mechanism of action supports. Furthermore, it is challenging to manage the chemicals' antagonistic or synergistic effects in this form, and the current research does not support this claim. However, there is still a lot of room for future studies to draw more insightful findings.

Conclusion :

Because they are more affordable and have fewer adverse effects than traditional synthetic nutraceuticals, natural health products with medical potential are becoming more and more significant in clinical research. CP is extremely useful in terms of treatments and international trade among the large library of such items. The numerous historical medicinal claims of CP are highlighted in this article, along with the scientific data that supports them. Its numerous preventative, promotional, and curative health advantages are supported by reported research, demonstrating that it is an old elixir with a contemporary remedy.

Reference :

1. Rohit Sharma [1,*], Natália Martins [2,3,*], Kamil Kuca [4], Ashun Chaudhary [5], Atul Kabra [6], Meda M Rao [1], Pradeep Kumar Prajapati ,Chyawanprash: A Traditional Indian Bioactive Health Supplement,national library of medicine ,National library of medicine ,2019April26,;9(5):161. doi: 10.3390/biom9050161.
2. M. Sharma, C. Martins, R. Kuca et al.,"Chyawanprash: a traditional Indian bioactive health supplement," Biomolecules, vol. 9, no. 5,p. 161, 2019.
3. Rushikesh Krishna Dhale1, Dr. R.Y. Patil2, Siddhant Dhumal2,Formulation of Chyawanprash and Comparative Evaluation with Marketed Chyawanprash,International Journal of Scientific Research in Science and Technology, doi : https://doi.org/10.32628/IJSRST52411189.
4. Firoj A. Tamboli1 *, Harinath N. More1 , Shivani S. Khairmode1 , Dhanashri R. Patil1 , Prajakta D. Tambare1 , Anilkumar J. Shinde1 , Namdeo R. Jadhav1 , Shahikant V. Bhandari,CHYAWANPRASH: A TRADITIONAL INDIAN BIOACTIVE HERBAL MEDICINAL FORMULATION TO BOOST IMMUNITY AND RESTORE YOUTHFULNESS,Tropical journal of Pharmaceutical and Life Sciences,2021, Vol. 8 (1), 21-29.
5. Mayuri Kupkar,Mayuri Kupkar,Priyanka Kusarkar,A Study on Formulation and Evaluation of Herbal Chyawanprash Chocolate,Research Journal of Pharmaceutical Dosage Forms and Technology,April 2022,DOI:10.52711/0975-4377.2022.00019.
6. D.B.Anantha Narayana a, Sharanbasappa Durg a, P. Ram Manohar b, Anita Mahapatra b, A.R. Aramya Chyawanprash: A review of therapeutic benefits as in authoritative texts and documented clinical literature,Journaof Ethnopharmacology Volume 197, 2 February 2017, Pages 52-60.
7. Patwardhan, B., Warude, D., Pushpangadan, P., & Bhatt, N. (2005). Ayurveda and traditional Chinese medicine: a comparative overview. Evidence-Based Complementary and Alternative Medicine, 2(4),465-473.
8. Sharma, R. K. (2005). Bhaisajya Ratnavali (Vol. 1). Chaukhambha Orientalia.
9. Govindarajan, R., Vijayakumar, M., Pushpangadan, P., & Singh, V. (2005). Herbal medicine—a rational approach in health care system. Current Science, 88(11), 1744-1753.
10. Chopra, A., Doiphode, V. V., & Ayurvedic Medicine Core Research Program. (2002). Ayurvedic medicine: core concept, therapeutic principles, and current relevance. Medical Clinics, 86(1), 75-89.
11. Sumanth, M., Mustafa, S. S., Ramesh, B. R., & Shetty, S. (2012). Phytochemicals and Nutritional Significance of Indigenous Medicinal Plants. International Journal of Pharmacy and Pharmaceutical Sciences, 4(Suppl 4), 12-14.
12. Parle M., Bansal N. Traditional medicinal formulation, Chyawanprash—A review. Ind. J. Tradit. Knowl. 2006;5:484–488.
13. Mehta P.M. Realms of Ayurveda by Pandit Shiv Sharma. Arnold-Heinemann Publishers; New Delhi, India: 1979. History of Indian Medicine.66p
14. Jatwa, R., Karwa, A., & Choudhary, P. (2012). Formulation and evaluation of Chyawanprash avaleha. International Journal of Research in Pharmaceutical and Biomedical Sciences, 3(1), 261-268.
15. Kumar, G. S., Jayaveera, K. N., Kumar, C. K., & Sanjay, U. P. (2009). Studies on the

Chyawanprash preparation and its stability. Archives of Applied Science Research, 1(2), 132-144.

16. M. Sharma, C. Martins, R. Kuca et al.,"Chyawanprash: a traditional Indian bioactive health supplement," Biomolecules, vol. 9, no. 5, p. 161, 2019.

17. Suchita Dubey 1,Shivam Agrawal2,Kamlesh Kadam 3, Ankush Bhalerao 4,Dr Hemant H Gangue 5,Bhagyashri Borde 6,"Formulation And Comprehensive Evaluation Of Gokhru Chyawanprash: A Traditional Ayurvedic Health Supplement For Kidney Health And Vitality Enhancement",IJCRT2309101 International Journal of Creative Research Thoughts (IJCRT) www.ijcrt.org.9 September 2023.

18. D.B.Anantha Narayana a, Sharanbasappa Durg a, P. Ram Manohar b, Anita Mahapatra b, A.R. Aramya b,Chyawanprash: A review of therapeutic benefits as in authoritative texts and documented clinical literature,Journal of Ethnopharmacology,Volume 197, 2 February 2017, Pages 52-60.

19. Patwardhan, B., Warude, D., Pushpangadan, P., & Bhatt, N. (2005). Ayurveda and traditional Chinese medicine: a comparative overview. Evidence-Based Complementary and Alternative Medicine, 2(4), 465-473.

20. Kumar, G. S., Jayaveera, K. N., Kumar, C. K., & Sanjay, U. P. (2009). Studies on the Chyawanprash preparation and its stability. Archives of Applied Science Research, 1(2), 132- 144.