

***“FORMULATION DEVELOPMENT & PHARMACOLOGICAL  
EVALUATION OF VAMAPRASH: AN AYURVEDIC POLYHERBAL  
REMEDY FOR THE MANAGEMENT OF POLYCYSTIC OVARIAN  
DISORDER(PCOD)”***

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**ABSTRACT:**

These days, a significant percentage of the population is moving toward a combination of nutritious meals or nutrition combined with herbal health supplements. We have created a product that incorporates a variety of herbal ingredients in accordance with this trend. Chyawanprash, which is becoming increasingly popular for its health-enhancing qualities, has been developed by us. Furthermore, by creating a product via an extraction procedure utilizing a combination of Shivlingi, Putrajeevak, Shatavari, Lavang (Clove), Dalchini (Cinnamon), Badisau (Fennel), Elayachi (Cardamom), Amla, Madhu (Honey), Ashwagandha, Kalimiri (Black pepper), Kesar (Saffron), and Ghee (Clarified butter), we have concentrated on resolving particular problems related to fertility and PCOD (PolyCystic Ovarian Disease). The flavors in this preparation are well-balanced between sweetness, acidity, and bitterness. To guarantee the formulation's stability and consistency over time, we have carried out evaluations. We hope to emphasize the value of integrating our ancient Ayurvedic ideas into contemporary healthcare practices through this endeavor.

**KEYWORDS:** Chyawanprash, Ayurveda (Indian Traditional Medicine), Health supplement, shivlingi, Putrajeevak.

**INTRODUCTION: -**

One of the best-known Ayurvedic health supplements, Chyawanprash, is composed of a highly concentrated mixture of minerals and nutrient-dense herbs. Chyawanprash is included

in the Rasayana category in Ayurveda. The spelling of chyawanprash varies as chyavanaprash, chyavanaprasam, and chyawanaprash. The name "Chyawanprash" is a combination of two words: "Chyawan" and "Prasha." The term "Chyawan" refers to a wise man and also stands for "degenerative change," while "Prasha" refers to a food item or medication that may be ingested. The conventional usage of chyawanprash is for enhancing vitality, energy, and physical fitness, as well as for slowing down the aging process.

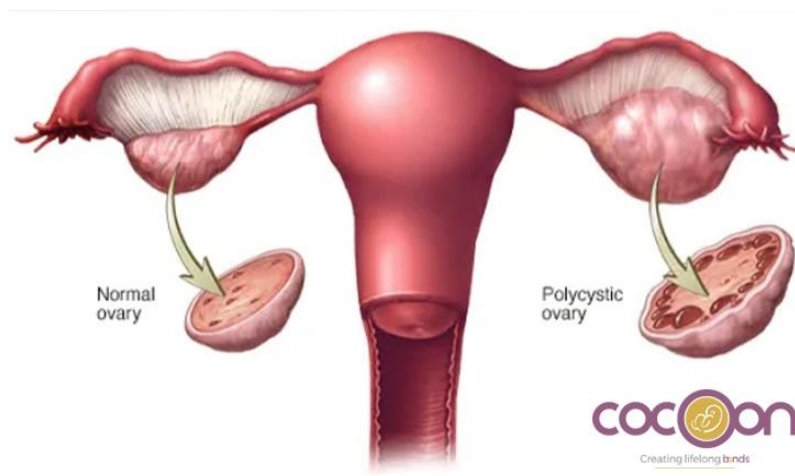


The recipe of Chyawanprash has remained India's one of the most popular and widely used remedies for around the past 2000 years, from the time of the Vedas. Chyawanprash is formulated by using and processing around 50 medicinal herbs, minerals, sugar, honey, ghee, Indian gooseberry jam, etc. Chyawanprash contains many Ayurvedic ingredients which help in boosting immunity, protect against infections, as well as providing nutrition and energy. Chyawanprash holds multiple health benefits. It has been extensively used since ancient times as an Ayurvedic health supplement and as a medicine that increases immunity and longevity. Consumption of Chyawanprash has been a part of every Indian's life from the day it was introduced, irrespective of sociocultural, political, and scientific factors. It is famous for its anti-aging effects long before vitamins, minerals, and antioxidant supplements. Chyawanprash, which consists of Amla/Amalaki pulp as a base, is considered to be the most effective Rasayana for sustaining homeostasis. Regular intake of Chyawanprash helps maintain physiological functions as well as rejuvenates the whole body system. The foremost historically recorded recipe for Chyawanprash is reported in the Charaka Samhita, the ancient Ayurvedic classic, where it is appreciated as being superior to all other herbal rejuvenating tonics. The immune system is a major and vital system of our body that protects our body from outside invaders like bacteria, viruses, fungi, toxins, etc. Every part of our body, including our immune system, functions better when protected from environmental assaults

and is boosted by healthy living strategies such as exercise, eating healthy food, etc.

### **PCOD:-**

**PCOD:** -PCOD is stands for the Polycystic Ovarian Disease, is a medical condition in which a woman's ovaries generate a large number of immature or partially mature eggs, which eventually develop into ovarian cysts. This results in enlargement of the ovaries and increased secretion of androgens, the male hormone responsible for infertility, irregular menstruation periods, hair loss, and abnormal weight gain. Changes in food and lifestyle can help manage PCOD.



The feminine body creates more male hormones than usual when a woman has PCOS. Insulin and LH are two hormones that are overproduced In women with PCOS, giving them androgenic or masculine characteristics. The hormone insulin is in charge of regulating blood sugar levels in humans. Insulin resistance is the state in which cells become resistant to the effects of insulin. Overproduction of insulin leads to an increase in the production of androgens, or male hormones, which are normally present in very little amounts. Additionally, higher levels of androgen are brought on by increased LH production. The body generates more insulin since there is no effect or action on blood sugar levels. PCOD is a diverse syndrome associated with female endocrine reproductive disorders.

Oligogenic disease is caused by a second gene altering the function of a dominant gene. Although the exact genetic cause of PCOD is unknown, it is very prevalent and may have a family history. As far as we are aware, there is no obvious family history of PCOD. Poor eating habits, sedentary lifestyles, and inactivity can exacerbate factors that are primarily linked to PCOD, such as obesity; pollutants may also be a significant factor. Changes like

losing weight and exercising can lower it.

### **INFERTILITY: -**

Failure to conceive after 12 months or more of consistent, unprotected sexual activity is the hallmark of infertility, a disorder of the male or female reproductive system. The most prevalent causes of infertility in the male reproductive system include aberrant sperm shape and motility, low or absent sperm counts, and issues with sperm ejection .

Infertility in the female reproductive system can result from a variety of problems affecting the endocrine system, fallopian tubes, uterus, and ovaries, among other organs. Millions of people of reproductive age worldwide are affected by infertility, which has emerged as a major global health concern. According to available data, 186 million people worldwide and 48 million couples suffer with infertility. The inability to conceive after at least a year of consistent, unprotected sexual activity is known as infertility, a condition of the male or female reproductive system. More details about the many main and secondary causes of infertility in men and women may be found in the WHO's International Classification of Diseases. The inability to conceive at all is known as primary infertility, whereas the inability to conceive after a previous successful conception is known as secondary infertility.



**The World Health Organization Infertility is defined as follows by the World Health Organization:**

“A disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse (and there is no other

reason, such as breastfeeding or postpartum amenorrhoea)” is the definition of infertility. Infertility in a couple who have never had children is known as primary infertility. Failure to conceive after a prior pregnancy is known as secondary infertility. A man or woman’s infection may be the cause of infertility, although there is frequently no clear underlying reason.

## **INTRODUCTION OF VAMAPRASH: -**

### **Vamaprash: -**

Vamaprash is a traditional Ayurvedic tonic similar to Chyawanprash, but specifically formulated for women’s health. It’s made from a blend of herbs, fruits, and spices, known for their rejuvenating and balancing properties. Vamaprash aims to support women’s overall well-being ,including hormonal balance, vitality, and immunity.

Similar to Chyawanprash, Vamaprash is a classic Ayurvedic tonic that has been specially designed for the health of women. It is composed of a mixture of fruits, herbs, and spices that are well-known for their balancing and restorative qualities.

Vamaprash seeks to promote the general health and well-being of women, encompassing immunity, vigor, and hormonal balance.

## **AIM AND OBJECTIVE: -**

Chyawanprash is a traditional Ayurvedic polyherbal formulation that is widely used for its numerous health benefits. The aim and objectives of formulating Chyawanprash using shivlingi (*Bryonia laciniosa*) and putrajeevak (*Putrajivak phytolacca*) as key ingredients would be as follows:

### **AIM: -**

To prepare a potent and effective Chyawanprash formulation by incorporating the therapeutic properties of shivlingi and putrajeevak, along with other herbal ingredients, to promote overall health and well-being.

## **OBJECTIVES / GOALS:-**

1. Revitalization and energy: Chyawanprash has long been recognized as a revitalizing tonic. The inclusion of putrajeevak and shivlingi is thought to improve the formula's capacity to foster vitality, energy, and overall strength.
2. Improvement of immunity: Shivlingi and putrajeevak are thought to possess

immunomodulatory effects. The goal of the Chyawanprash recipe is to increase the body's immune system and its ability to fight against infections and diseases.

3. Anti-inflammatory and analgesic effects: Shivlingi and putrajeevak are thought to have anti-inflammatory and pain-relieving properties. The composition of Chyawanprash may aid in reducing inflammation and alleviating pain of several kinds.

4. Respiratory health: It is believed that some characteristics of shivlingi and putrajeevak are good for the respiratory system. The Chyawanprash could aid in controlling respiratory problems and encouraging lung health.

5. Digestive health: Chyawanprash is traditionally used to promote digestion and a healthy digestive system. The formulation's capacity to encourage digestive health may be further enhanced by the addition of shivlingi and putrajeevak.

6. Antioxidant qualities: Many of the ingredients in Chyawanprash, such as putrajeevak and shivlingi, have potent antioxidant properties. The purpose of the mixture is to fight oxidative stress in the body and offer antioxidant protection.

7. Adaptogenic effects: Chyawanprash is thought to possess adaptogenic qualities that aid the body in coping with stress and maintaining equilibrium. The adaptogenic benefits could be further enhanced by the inclusion of putrajeevak and shivlingi.

Although putrajeevak and shivlingi are essential components of this Chyawanprash recipe, it's important to remember that, in accordance with traditional recipes or particular formulas, additional herbs and ingredients are likely included. The goal is to produce a balanced and synergistic combination that utilizes the possible advantages of these herbs to improve general health and well-being.

## **REVIEW OF THE LITERATURE:**

A review of the literature on the use of Putrajeevak (Putrajivak, Putranjiva roxburghii) and Shivlingi (Bryonia laciniola) in Chyawanprash recipes:

### **BRYONIA LACINIOSA (SHIVLINGI):-**

1. Sharma et al. (2011) investigated the impact of chyawanprash formulations containing shivlingi on the physical and psychological performance of healthy people. The therapy group demonstrated increased physical endurance, mental sharpness, and general wellbeing, according to the study.

2. The traditional uses and pharmacological effects of Shivlingi were examined by Panda and Kar (2007). They discussed its application in Ayurvedic preparations like Chyawanprash for



improving vigor and general health, and emphasized its potential as an adaptogenic, tonic, and rejuvenating herb.

3. Yadav et al. (2010) performed a phytochemical study on Shivlingi and discovered the existence of numerous bioactive components, such as cucurbitacins, flavonoids, and triterpenoids. They hypothesized that these chemicals may be responsible for the herb's therapeutic benefits, including its antioxidant, anti-inflammatory, and immunomodulatory properties.

4. The effects of a Chyawanprash recipe including Shivlingi on oxidative stress and immunological function in healthy people were assessed by Singh et al. (2014). According to the research, the treatment group showed considerable gains in immune response indicators and antioxidant levels.

#### **PUTRAJEEV(PUTRAJIVAK, PUTRANJIVA ROXBURGHII): -**

1. Pande et al. (2012) examined the traditional applications and scientific research on Putrajeevak, focusing on its potential to boost male reproductive health and function as an aphrodisiac. They spoke about how it may be used in Ayurvedic medicines to treat a variety of male reproductive illnesses, such as infertility and sexual dysfunction.

2. A phytochemical analysis of Putrajeevak was performed by Gupta et al. (2011), and flavonoids, saponins, and other bioactive chemicals were found to be present. They hypothesized that these chemicals may be responsible for the herb's purported effects on men's reproductive health and general vitality.

3. In an animal model, Sharma et al. (2013) examined the effects of a Chyawanprash preparation containing Putrajeevak on male reproductive health. In the treatment group, the research indicated improvements in sperm quality, testosterone levels, and general reproductive performance.

4. In a clinical trial involving males with sexual dysfunction, Giri et al. (2015) assessed the effectiveness and safety of a Chyawanprash recipe that included Putrajeevak. The treatment group saw notable gains in sexual function, desire, and general well-being in the trial, along with no major negative side effects.

Although these studies offer insights into the possible benefits and mechanisms of action of Shivlingi and Putrajeevak in Chyawanprash formulations, it is important to remember that more thorough research is needed to completely understand their individual and synergistic effects, as well as to demonstrate their safety and effectiveness through well-conducted

clinical trials.

To guarantee reliable and consistent outcomes, the quality and standardization of these formulations must also be addressed as key considerations.

**WORK PLAN: -**

**1. MEETING WITH EXPERTS: -**

Speak with knowledgeable Ayurvedic professionals and specialists in the industry to address the reasoning behind and possible ramifications of adding shivlingi and putrajeevak to Chyawanprash. Get advice on the proper dosage, preparation techniques, and potential interactions or contraindications.

**2. DEVELOPMENT OF THE FORMULATION: -**

Create a suggested recipe for Chyawanprash that includes shivlingi and putrajeevak, based on an analysis of the literature and professional interviews.

Calculate the proper amounts and proportions of all components, including the traditional ones and the recent additions.

Develop the method of preparation and standardization procedures.

**3. PRELIMINARY ASSESSMENT: -**

Perform preliminary research to determine the stability, shelf life, and physicochemical characteristics of the improved Chyawanprash recipe.

Carry out analytical testing to confirm the formulation's consistency and quality.

**4. PRECLINICAL RESEARCH: -**

To assess the safety, toxicity, and possible therapeutic benefits of the altered Chyawanprash composition, plan and carry out preclinical research, such as in vitro and animal studies.

**5. CLINICAL RESEARCH:**

Design and carry out clinical trials to evaluate the formulation's efficacy, safety, and tolerability in people, using the data from the preclinical investigation.

Secure the required permissions from the relevant ethical committees and regulatory bodies.

**6. DATA ANALYSIS AND REPORTING: -**

Use the right statistical techniques to examine the data from preclinical and clinical trials.

To share the results with the scientific community, create thorough reports and research



articles.

## **7. REGULATORY COMPLIANCE AND COMMERCIALIZATION: -**

Obtain all necessary approvals for the commercialization of the modified Chyawanprash composition and ensure that it complies with all applicable regulatory standards.

Create suitable packaging, labeling, and advertising plans.

It is important to remember that this strategy is just a rough overview, and the precise procedures and timetables may change depending on the resources, knowledge, and regulatory needs at play. Working together with seasoned academics, professionals, and regulatory authorities is crucial throughout the process.

## **COMPOSITION: -**

A powerful antioxidant paste known as chyawanprash is made by combining about fifty different herbs and spices in a harmonious way. Chyawanprash belongs to the class of Awaleha (electuaries/herbal jams), a collection of Ayurvedic formulations, according to its consistency and dosing form <sup>[10]</sup>.

Usually, Four classes of herbal drugs are included in CP: Ashtavarga (threatened medicinal herbs from the Northwest Himalayas that are not commercially available in the modern era) <sup>[11]</sup>, Dashmula class (ten roots), Chaturjata class (four aromatic plants), and a general class (materials not belonging to the former classes). The Ashtanga Hridayam, Charaka Samhita, and Sangandhara Samhita are three ancient Ayurvedic writings that discuss clinical care and provide the formula for Chyawanprash. Amla, a highly famous citrus fruit, is the main ingredient. The main component is Amla, a citrus fruit with great reputation and powerful medicinal properties in Ayurveda. The primary components of CP, together with their botanical names, important biomolecules that are active, and particular therapeutic functions.

## **SHIVLINGI: -**

**BOTANICAL NAME: - *Bryonia laciniosa***

## **SYNONYM: -**

Bryonopsis, Laciniosa, Diplocyclos Palmatus, Lingini, Bahupatra, Ishwari, Shaivamallika, Swayambhu, Lingsasambhuta, Lingi, Chitrphala, Amruta, Pandoli, Lingaja, devi, Gargumara.

**BIOLOGICAL SOURCE: - *Diplocyclos palmatus* is a vine.**

**FAMILY: - *Cucurbitaceae* – groups of squashes.**

**GENUS: - *Bryonia***

**CHEMICAL CONSTITUENT: -**

- Main Constituent: -
- Bryonin,
- punicic acid,
- goniothalamine,
- glucomannan.

**MEDICINAL PROPERTIES: -**

- Uterine tonic
- Fertility booster
- Aphrodisiac Spermatogenic
- Antioxidant Anodyne
- Anti-inflammatory
- Carminative
- Anti-fungal Antimicrobial
- Antihyperlipidemic
- Anti-diabetic
- Dosage Antipyretic <sup>[12]</sup>.



**Figure (I) Shivlingi**

**PUTRAJEEVAK: -**

**BOTANICAL**

**NAME:-***Putranjiva roxburghii* Wall, *Drypetes roxburghii* (Wall) Hurus.

**SYNONYM:-** putraveeji, putranjiva, lucky bean tree, Putrajeevak, Putranjiva, Jiyopota, Jivaputrak, Putranjivah, Putrajivah, Irukolli

**FAMILY: - *Euphorbiaceae***

**GENUS: - *Putranjiva***

**CHEMICAL CONSTITUENT: -**

- $\beta$ -amyrin, amentoflavone
- Putranflavavone
- Putranjivic acid
- Putrol
- Putrone
- Saponins a, b, c, d
- Stigmasterol.

**MEDICINAL PROPERTIES: -**

- Uterine tonic
- Ergogenic
- Aphrodisiac
- Spermatogenic
- Analgesic
- Anti-inflammatory
- Antacid Antidote of snake bites
- Carminative.



**Figure (II) Putrajeevak**

**SHATAVARI: -**

**BOTANICAL NAME: - *Asparagus Racemucus* SYNONYM: - shatavari, asparagus root, indian asparagus FAMILY: - *lilaceace*\asparagaceae**

**CHEMICAL CONSTITUENT : -**

- The major active constituents of asparagus racemosus
- Steroidal saponins
- Isoflavones
- Asparagamine
- Racemosol
- Polysaccharides
- Mucilage,
- Vitamins a, b1, b2, c, e,
- Folic acid present in roots Mg, p, ca, fe.

**MEDICINAL PROPERTIES: -**

- Hypertension
- Hyperlipidemia
- Platelet aggregation inhibition
- Angina adjuvant in cardiac risk factor.



**Figure (III)Shatavari**

**LAVANG: -**

**BIOLOGICAL NAME: -** *Syzygium aromaticum*

**BIOLOGICAL SOURCE: -** Clove consists of the dried flower buds of *Eugenia caryophyllus* Thumb.

**FAMILY: -** *Mirtaceae*

**SYNONYMS: -** *Eugenia caryophyllata* Cloves, *Carophyllus*, *Clovos*, *Caryophyllus*

**CHEMICAL CONSTITUENTS: -**

- Volatile oil
- Eugenol
- Acetyl eugenol,
- Gallotannic acid
- A- and  $\beta$ - caryophyllenes,
- Methyl furfural
- Gum
- Resin
- Fiber.

**Medicinal properties: -**

- Maintain Blood sugar
- Anticancer
- Antioxidants
- Use in Treatment of Liver
- Fighting inflammation
- Digestion and Toothache



**Figure (IV) Lavang**

**DALCHINI: -**

**BOTANICAL NAME: - CINNAMON**

**SYNONYMS : -** Cinnamon bark, Kalmi – Dalchini, Ceylon cinnamon

**BIOLOGICAL SOURCE: -** The biological source of cinnamon is the dried inner bark of the shoots of compiled trees of *Cinnamomum zeylanicum* Nees (*Cinnamomum verum* J.S. Presl).

**FAMILY: - Lauraceae.**

**CHEMICAL CONSTITUENTS: -**

- Cinnamaldehyde
- Cholesterol
- Insulin, methyl hydroxychalcone
- Eugenol
- p-cymene
- Cinnamyl acetate
- Copaene, phellandrene
- $\alpha$ -muurolene
- $\alpha$ -cadinol
- Acetyleneugenol
- Cinnamyl alcohol
- Cinnamic acid
- Curcumene
- Coumarin
- 2-methoxybenzaldehyde
- Ethyl cinnamate
- (E)-cinnamyl acetate

**MEDICINAL PROPERTIES: -**

- Anti-viral
- Anti-bacterial
- Anti-fungal agent
- Antioxidant
- Anti-inflammatory action
- It reduces the blood pressure.
- Decrease the blood sugar.
- It is relieving digestive discomfort.
- It shows prebiotic property that promote growth of beneficial bacteria and suppress growth of pathogenic bacteria.



**Figure (V) Dalchini**

**FENNEL: -**

**BOTANICAL NAME: -** *foeniculum vulgare*

**SYNONYMS: -** Foeniculum fulgare, Finugi, Saunf, Saipha, saumfa, Badishep.

**BIOLOGICAL SOURCE: -** fennel is consist of the dried ripe fruits of *foeniculum vulgare miller*.

**FAMILY: -** *umbiliferae*.

**CHEMICAL CONSTITUENTS: -**

- Fenchone
- Limonene
- fenchyl acetate
- Sabinene
- Anethole
- Anethole
- Estragole
- Phellandrene
- 4-Anisaldehyde
- $\alpha$ -Pinene
- Camphene
- p-Cymene
- Thujene
- Ocimene
- 1-(p-methoxyphenyl)-2-propanone
- Germacrene



- Eucalyptol
- Carvone
- Dillapiole
- Pinene
- Fenchol
- Cuminaldehyde

**MEDICINAL PROPERTIES: -**

- Antimicrobial
- Antiviral Activity
- Anti-inflammatory
- Antiallergic
- HepatoprMedicinalotective
- Antistress
- Memory-Enhancing Power Property
- Antihirsutism Activity



**Figure (VI) Fennel.**

**CARDAMOM: -**

**SYNONYMS: -** Cardamom fruit, Cardamom seed, Cardamomi semina, Malabar cardamums, Capalaga, Gujatatti elachi, Ilachi, Ailum.

**BIOLOGICAL SOURCE: -** Cardamom consists of the dried ripe seeds of *Elettaria car-damomum* Maton.,

**FAMILY: -** *Zingiberaceae*.

**CHEMICAL CONSTITUENTS: -**

- Volatile oil along with fixed oil
- Salts of potassium
- Nitrogenous mucilage
- Acrid resin
- Starch
- Ligneous fibre
- Terpinyl acetate
- Terpeneol
- Borneol
- Terpinene.

**MEDICINAL PROPERTIES: -**

- Aromatic
- Carminative
- Stimulant
- Stomachic
- Expectorant
- Diaphoretic
- Digestive
- Appetizer
- Flavouring agent



**Figure (VII)Cardamom**

**AMLA: -**

**BOTANICAL NAME: -** *Emblica officinalis*

**SYNONYMS: -** Emblica, Indian goose berry, amla.

**BIOLOGICAL SOURCE:** - This consists of dried, as well as fresh fruits of the plant *Emblica officinalis Gaerth (Phyllanthus emblica Linn.)*

**FAMILY:** - *Euphorbiaceae*.

**CHEMICAL CONSTITUENTS:** -

- Apigenin
- Gallic acid
- Ellagic acid
- Chebulinic acid
- Quercetin
- Chebulagic acid
- Corilagin
- Isostrictiniin
- Methyl gallate
- Luteolin
- Emblicanin A
- emblicanin B
- Phyllaemblicn B
- Punigluconin
- Pedunculagin
- Glutamic acid
- Proline
- Aspartic acid
- Alanine
- Lysine.

**MEDICINAL PROPERTIES:** -

- Acrid
- Cooling
- Refrigerant
- Diuretic
- Laxative
- Antipyretic
- Aphrodisiac

- Tonic
- Anti-oxidant
- Anti-bilious remedy



**Figure (VIII) Amla**

**HONEY: -**

**BOTANICAL NAME: -** *Apis mellifera*

**SYNONYMS: -** Honey, Madhu, Madh.

**BIOLOGICAL SOURCES: -** Honey is a natural product formed from nectar of flowers by *honeybees (Apis mellifera)*.

**FAMILY: -** *Apidae*

**CHEMICAL CONSTITUENTS: -**

- Moisture 14–24%
- Dextrose 23–36%
- Levulose (fructose) 30–47%
- Sucrose 0.4–6%
- Dextrin and gums 0–7%
- Ash 0.1–0.8%
- Essential oil
- Beeswax
- Pollen grains
- Formic acid
- Acetic acid
- Succinic acid
- Maltose

- Dextrin
- Colouring pigments
- Vitamins
- Admixture of enzymes (diastase, invertase and inulase).



**Figure (IX) Honey**

**MEDICINAL PROPERTIES: -**

- Antidepressant,
- Anticonvulsant
- Anti-anxiety

**ASHWAGANDHA:**

**BOTANICAL NAME:** - *Withania somnifera Dunal*

**SYNONYMS:** - Withania root, Clustered Wintercherry.

**BIOLOGICAL SOURCE:** - It consists of the dried roots and stem bases of *Withania somnifera Dunal*.

**FAMILY:** - *Solanaceae*.

**CHEMICAL CONSTITUENTS: -**

- Somniferine
- Pseudowithanine
- Tropine
- Pseudotropine
- Hygrine

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- Isopelleterine
- Anaferine
- Anahygrine
- Steroid lactones

#### **MEDICINAL PROPERTIES: -**

- Adaptogen
- Anti-inflammatory
- Anxiolytic
- Immunomodulatory
- Neuroprotective
- Anti-cancer
- Improves endurance
- Muscle strength
- Cardiovascular health
- Improves insulin sensitivity.



**Figure (X) Ashwagandha**

#### **BLACK PEPPER: -**

**BOTANICAL NAME:** - *Piper nigrum L.*

**SYNONYMS:** - Piper aromaticum, Piper capense, Piper crassipes **BIOLOGICAL**

**SOURCE:** - Black pepper is obtained from the dried unripe berries of the perennial climbing *vine Piper nigrum*,

**FAMILY:** - *Piperaceae*.

**CHEMICAL CONSTITUENTS:**

- Piperine (the major alkaloid)
- Essential oils (like  $\beta$ -caryophyllene, limonene, sabinene)
- Flavonoids (like kaempferol, quercetin)
- Vitamins (C, K, and B-complex)
- Minerals (iron, potassium, calcium, manganese)

**MEDICINAL PROPERTIES: -**

- Anti-inflammatory
- Analgesic
- Antioxidant
- Antimicrobial
- Gastroprotective
- Digestive effects
- Potential anti-cancer effects
- Improved metabolism
- Nutrient absorption
- Neuroprotective
- Cognitive-enhancing effects
- Anti-depressant
- Anti-anxiety properties
- Respiratory benefits (expectorant, decongestant)



**Figure (XI) Black Pepper**



**SAFFRON: -**

**BOTANICAL NAMES: -** *Crocus sativus*

**SYNONYMS: -** Saffron Crocus, Hay Saffron, Autumn Crocus, Kesar **BIOLOGICAL**

**SOURCE: -** Saffron consists of the dried, dark red stigmas from the flowers of the *saffron crocus plant*.

**CHEMICAL CONSTITUENTS: -**

- Crocins
- Picrocrocin
- Safranal
- Flavonoids
- Vitamins
- Minerals

**MEDICINAL PROPERTIES: -**

- Antioxidant
- Anti-inflammatory
- Antidepressant
- Antitumor
- Neuroprotective
- Aphrodisiac
- Improves memory
- Cognitive function may help regulate menstrual cycles
- May aid in weight loss



**Figure (XII) Kesar**

**INGRIDIENT: -**

- 500 grams of Indian gooseberries, or Amla
- 200 grams of clarified butter, or Ghee.
- One hundred grams of raw cane sugar or jaggery
- Two teaspoons of honey
- One tsp powdered cinnamon
- One teaspoon powdered cardamom
- One teaspoon powdered long pepper
- One teaspoon of powdered ashwagandha
- One teaspoon of powdered Shatavari
- One teaspoon powdered Brahmi
- One tsp powdered turmeric
- 1/2 teaspoon of strands of saffron
- One-fourth teaspoon ground black pepper

**GUIDELINES: -**

1. Thoroughly rinse the Amla (Indian gooseberries) and take off the seeds. You may use dried amla powder for fresh amla.
2. Add the ghee to a heated pan. Let it dissolve.
3. Add the amla pulp or powder to the pan and simmer, stirring constantly, over low heat for approximately five minutes.
4. When the cane sugar or jaggery is added, thoroughly mix it until it dissolves.
5. Next, add the turmeric, saffron threads, ashwagandha, shatavari, brahmi, cinnamon, cardamom, long pepper, and black pepper powder. Combine all the ingredients and stir well.
6. Cook the mixture for a further 20 to 25 minutes over low heat, stirring often. The mixture ought to get sticky and thicker.
7. Switch off the heat source and allow the mixture to cool.
8. After it cools, stir in the honey well.
9. Keep the Chyawanprash chilled and store it in an airtight glass container.

**METHOD AND REPARATION:****TABLE 1 INGREDIENTS AND THEIR PROPERTIES**

<b>Ingredient</b>	<b>Properties</b>
Shivlingi	Uterine tonic; Fertility booster; Aphrodisiac; Spermatogenic; Antioxidant .
putrajeevak	Traditionally used to support reproductive health.
shatavari	Reputed for its hormone-balancing properties.
Lavang	Has antimicrobial and analgesic properties .
fennel	Aids digestion and may have anti – inflammatory effects .
Cardamom	Supports digestion and adds flavor
Amla	Rich in vitamins C and antioxidants
Honey	Antidepressant , anticonvulsant , antimicrobial agent
ashwagandha	known for its adaptogenic and rejuvenating properties
Black pepper	Supports digestion and may have anti inflammatory effects
Cinnamon	Supports digestion and may have antimicrobial properties
saffron	Known for its antioxidant properties.

**FORMULA:****TABLE 2 FORMULA OF VAMAPRYASH**

<b>Ingredients</b>	<b>Quantity</b>
Amla	500gm
Ghee	200gm
Jaggery	100gm
Honey	2 tablespoons
Cinnamon powder ( <u>dalchini</u> )	1tablespoons
Cardamom powder	1tablespoons
Black pepper	1/4 <sup>th</sup> teaspoon
Shatavari powder	1teaspoons
Ashwagandha powder	1teaspoon
Fennel powder	1teaspoon
Saffron	1/2th teaspoon
Putrajeevak	1tablespoons
<u>Shivalingi</u>	1tablespoons
Lavang( clove)	1tablespoons

**PROCEDURE: -**

Rinse the Amla (Indian gooseberries) thoroughly and remove their seeds. You may use fresh Amla or use dried Amla powder instead.



Heat a pan and add the ghee. Allow it to melt.



Add the Amla pulp or Amla powder to the pan and cook on low heat, stirring continuously for about 5 minutes.



Add the cane sugar or jaggery and mix well until it's completely dissolved.



Now, add the cinnamon, cardamom, lavang, ashwagandha, shatavari, saffron strands, and black pepper powder, fennel, shivalingi, putrajeevak powder Mix all the ingredients together thoroughly.



Continue to cook the mixture on low heat, stirring frequently for about 20-25 minutes. The mixture should thicken and become sticky.



Turn off the heat and let the mixture cool down.



Once it has cooled down, add honey and mix well.



Store the Chyawanprash in an airtight glass jar and keep it refrigerated.

**RESULT & DISCUSSION: -****Formulation Batches: -****Table 3 Batches of Formulation**

Sr. No.	Ingridient	Formulation		
		F1	F2	F3
1	Amla	500gm (Powder)	500gm (Pulp)	500gm (Pulp)
2	Shivlingi	25gm	20gm	25gm
3	Putrajeevak	25gm	20gm	25gm
4	Lavang	25gm	20gm	25gm
5	Dalchini	15gm	10gm	15gm
6	Black Pepper	25gm	20gm	25gm
7	Funnel	25gm	20gm	25gm
8	Jaggery	100gm	200gm	100gm
9	Honey	25gm	20gm	25gm
10	Cardamon	25gm	20gm	25gm
11	Ashwagandha	25gm	20gm	25gm
12	Shatavari	25gm	20gm	25gm
13	Ghee	300gm	200gm	200gm
14	Elaichi	10gm	5gm	10gm

**LABEL:-****Authenticated Laboratory Report****Lab Report A Quality Parameter****Authenticated Laboratory Report**



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## TEST REPORT

Sample ID : AY/04/24/04	Report No. AY/04/24/04N	Report Date	02/05/2024
Name and address of Customer	Mr. Saklen Harun Sayyad MS. Siddhi Sanjay Sharma SND College of Pharmacy, A/p Babhulgaon, Tal. Yeola, Dist. Nashik, Maharashtra		
Sample Drawn by	Customer	Sample Description / Type	Vamapryash (Food - AYUSH Product)
Sample Identification/Brand Name/Batch No./Best before Date	-	Date - Receipt of Sample	26/04/2024
Sample Quantity / Packing	150 g x 1 no. plastic bag	Date - Start of Analysis	26/04/2024
Order Reference	Test Request No. AEC/TR/04/2024/1626 Dated 26.04.2024	Date - Completion of Analysis	02/05/2024

Sr. No.	Parameter	Result	Unit	Method
<b>Chemical Testing; Group: AYUSH Products</b>				
<b>Nutritional Parameters</b>				
1	Energy value	321	kcal/100g	Codex Alimentarius. 3.3.1 : 1985
2	Protein	1.12	g/100g	AEC/C/SAP/F-201
3	Carbohydrate	53.3	g/100g	USFDA Title 21, Food and Drugs, Apr 2012
4	Sugar (Total)	36.2	g/100g	AEC/C/SAP/F-204
8	Added Sugar	14.8	g/100g	AEC/C/SAP/F-204
5	Fat	11.5	g/100g	AEC/C/SAP/F-134
<b>Minerals</b>				
6	Sodium (as Na)	18.2	mg/100g	AEC/C/SAP/INS/3-4
7	Iron (as Fe)	21.3	mg/100g	AEC/C/SAP/INS/3-4

Note: Sample ID AY/04/24/04 bears two Test Reports- AY/04/24/04 and AY/04/24/04N.

  
Ninad Soundankar  
Technical Manager (Chemical)  
Reviewed & Authorised by



End of Report

## Note:

1. The result listed refer only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.
3. In case sampling is not done by laboratory, the results apply to the sample as received.
4. There are no additions to, deviations or exclusions from the method.



AEC/F/REP/1-A  
Page 1 of 1

## Lab Report B Nutritional Parameter &amp; Minerals

## Quality Parameters:-

Table 4 Quality Parameter.

Sr. No.	Parameter	Result	Method
1	Total Ash	0.90%	API [Part I, Vol IX, Ist Edition) Page No.113, (2.15)
2	Moisture Content	33.2%	API [Part I, Vol IX, Ist Edition) Page No.113, (2.14)

## Nutritional Parameters:-

Table 5 Nutritional Parameter.

Sr. No.	Parameter	Result	Method
1	Energy Value	321kcal/100gm	Codexn Alimentarius. 3.3.1.:

			1985
2	<b>Protein</b>	<b>1.12g/100gm</b>	AEC/C/SAP/F-201
3	<b>Carbohydrate</b>	<b>53.3g/100gm</b>	USFDA Title 21. Food and Drugs. Apr 2012
4	<b>Fat</b>	<b>11.5g/100gm</b>	AEC/C/SAP/F-134
5	<b>Sugar(Total)</b>	<b>36.2g/100gm</b>	AEC/C/SAP/F-204
6	<b>Added Sugar</b>	<b>14.8g/100gm</b>	AEC/C/SAP/F-204

#### Minerals:-

**Table 6 Minerals.**

Sr. No.	Parameter	Result	Method
1	<b>Sodium (as Na)</b>	<b>18.2mg/100gm</b>	AEC/C/SAP/INS/3-4
2	<b>Iron(as Fe)</b>	<b>21.3mg/100gm</b>	AEC/C/SAP/INS/3-4

#### CONCLUSION

In conclusion, our formulation, including Chyawanprash or **Vamaprash** our product addressing fertility and PCOD, is a testament to the growing preference for combining healthy foods with herbal supplements. With a blend of carefully selected herbs and nutrients, we offer not only a boost to overall health but also targeted solutions for specific issues. The balanced taste profile and rigorous evaluations underscore our commitment to quality and stability over time. By bridging traditional Ayurvedic principles with modern healthcare, we strive to contribute to holistic well-being in today's society.

#### REFERENCES: -

1. Sharma R, Martins N, Kuca K, Chaudhary A, Kabra A, Rao MM, Prajapati PK. Chyawanprash: a traditional Indian bioactive health supplement. *Biomolecules*. 2019; 9(5):161.
2. Rathi B, Wanjari A, Rajput D, Khan M, Rathi R. Pharmaceutical standardization of Chyawanprash prepared by two different methods. *Journal of Indian System of Medicine*. 2018; 6(4):179.
3. Bansal N, Parle M. Beneficial effect of chyawanprash on cognitive function in aged mice. *Pharmaceutical Biology*. 2011; 49(1):2-8.
4. Kumar A, Rinwa P, Kaur P. Chyawanprash: A wonder Indian Rasayana from Ayurveda to the modern age. *Crit. Rev. Pharm. Sci*. 2012; 1:1-8.
5. Parle, M.; Bansal, N. Traditional medicinal formulation, Chyawanprash—A review. *Ind. J. Tradit. Knowl*. 2006, 5, 484–488.
6. Tamboli FA, More HN, Khairmode SS, Patil DR, Tambare PD, Shinde AJ, Jadhav NR,



- Bhandari SV. Chyawanprash: A traditional Indian bioactive herbal medicinal formulation to boost immunity and restore youthfulness. *Tropical Journal of Pharmaceutical and Life Sciences (TJPLS Journal)*. 2021; 8(1):21-8.
7. Panda, H. Handbook on Ayurvedic Medicines with Formulae, Processes and Their Uses; National Institute of Industrial Research: New Delhi, India, 2002 p. 10
8. .Rao, R.S.K. Encyclopaedia of Indian Medicine-Historical Perspective, Popular Prakashan: Bombay, India, 1985; Volume I, 25p.
9. Bates, D. Knowledge, and the Scholarly Medical Traditions; Cambridge University Press: Cambridge, MA, USA, 1995; 325p.
10. Anonymous. *The Ayurvedic Formulary of India*; Ministry of Health & Family Welfare: New Delhi, India, 2003; p. 37.
11. Balakrishna, A.; Srivastava, A.; Mishra, R.K.; Patel, S.P.; Vashishtha, R.K.; Singh, A.; Jadon, V.; Saxena, P. Astavarga plants—Threatened medicinal herbs of north-west Himalaya. *Int. J. Med. Arom. Plants* **2012**, 2, 661–676
12. Brummitt RK, Harder DK, Lewis GP, Lock JM, Polhill RM, Verdcourt B. Leguminosae subfamily Papilionoideae. *Flora of Zimbabwe*. 2007;3(3):96-98
13. Thakur S, Sharma DR. Review on medicinal plant: *Asparagus adscendens roxb.* *International Journal of Pharmaceutical Sciences and Health Care*. 2015;5(3):82-97
- Rahim AHZ, Khan GSBH, Comparative studies of the effect of crude aqueous (ca) and solvent (cm) extracts of clove on the cariogenic properties of streptococcus mutans, *Journal of oral science*, 48 (3), 2006, 117-123
14. Neveu V, Perez-Jiménez J, Vos F, Crespy V, du Chaffaut L, Mennen L, et al. et al. PhenolExplorer: an online comprehensive database on polyphenol contents in foods. doi: 10.1093/database/bap024.
15. <https://www.slideshare.net/mobile/BipulDeka/cognosy-me>
16. <https://www.yourarticlelibrary.com/biology/plants/cinnamon-sourcescultivation-and-uses/49884>
17. <https://www.google.com/amp/s/www.bbcgoodfood.com/howto/guide/healthbenefits-cinnamon/amp>
18. World Health Organization (WHO). International Classification of Diseases, 11th Revision (ICD-11) Geneva: WHO 2018.
19. Panda S. K., & Kar, A. (2007). *Bryonia laciniosa* Linn: A plant for health care delivery. *Plant Archives*, 7(2), 655-668.
20. Yadav, N. P., Dixit, V. K., & Bhattacharya, S. (2010). Phytochemical and

- pharmacological investigations on *Bryonia laciniosa* Linn. Indian Journal of Traditional Knowledge, 9(4), 731-736.
21. Singh, R. G., Nath, G., & Kundu, S. (2014). Effect of a polyherbal formulation on oxidative stress and immune function in healthy individuals. *Journal of Ayurveda and Integrative Medicine*, 5(4), 226-231.
  22. Pande, M., Pathak, A., & Agarwal, A. (2012). *Putranjiva roxburghii*: A review on its pharmacological properties and therapeutic potential. *International Journal of Pharmaceutical Sciences and Drug Research*, 4(4), 250-255.
  23. Gupta, R. S., Bahu, R., & Chaudhary, S. (2011). Chemical constituents and biological activities of *Putranjiva roxburghii* Linn.: A review. *International Journal of Universal Pharmacy and Life Sciences*, 1(2), 1-14.
  24. Sharma, R. K., Mishra, B. P., & Balaraman, R. (2013). Effect of Chyawanprash on male reproductive function in experimental models. *Ancient Science of Life*, 32(4), 194-200.
  25. Giri, P. R., Khushbu, G., & Shankar, R. (2015). A clinical study to evaluate the efficacy and safety of a polyherbal formulation in males with sexual dysfunction. *Journal of Ayurveda and Integrative Medicine*, 6(4), 259-265.
  26. 27. Prachi R. Telgote , Mr.Amol U Gayke, Mr. P. L Nikam, Tejaswini R.Kande (2023).PCOD A Lifestyle Impacting Fertility. *International journal of creative research thoughts (IJRCT)* , 11(4), 753-761.
  27. Sakshi Gaikwad, Vikram Sarukh, Gauri Paithankar, pooja lasure, Ramdas Darade, A Review of Anti-inflammatory Herbs for wound Healing: Traditional knowledge and insights Applications. *International journal of scientific research and technology (ijsrt)*[Issn:2394-7063]2025 2(8).
  28. Badnale AB, Sarukh VS, Nikam YP, Supekar AV, Khandagale SS. A review on potential medicinal herbs as health promoters. *J. Drug Delivery Ther.* [Internet]. 2022 Jun. 15 [cited 2026 Jan. 18];12(3-S):225-9.