# Herbal Formulations for Digestive Support: Digestive Churna Mixture (Churna)

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Abstract: Herbal remedies have gained popularity as a natural approach to digestive support. The digestive churna mixture, a blend of nine Ayurvedic herbs, has been used for centuries to alleviate digestive symptoms such as bloating, gas, constipation, and indigestion. This paper provides a comprehensive overview of the constituent herbs in digestive churna, including Cassia angustifolia, Terminalia chebula, Trachyspermum ammi, Terminalia gangetica, Foeniculum vulgare, Ficus religiosa, Terminalia bellirica, Araujia sericifera, Ferula asafoetida, Sulemani Namak, and Potassium Carbonate. The demand for digestive churna has increased in recent years, driven by consumer interest in natural remedies for digestive health. The digestive churna formulation has potential for commercial success in the growing Ayurvedic pharmaceutical market. Further research is needed to fully understand its efficacy and safety, but digestive churna has a promising future as a natural remedy for digestive health.

Keywords: Digestive support, Ayurveda, Herbal remedies, Digestive churna, Cassia angustifolia, Terminalia chebula, Trachyspermum ammi, Terminalia gangetica, Foeniculum vulgare, Ficus religiosa, Terminalia bellirica, Araujia sericifera, Ferula asafoetida, Sulemani Namak, Potassium Carbonate, Natural remedies, Digestive health, Ayurvedic pharmaceutical market.

## 1. Introduction

Digestive disorders are a common concern among individuals worldwide. While pharmaceutical drugs provide temporary relief, many individuals are looking for a more natural and holistic approach to digestive support. Ayurveda, the ancient Indian system of medicine, provides a vast array of herbal remedies for digestive support. One such remedy is the digestive churna mixture, which consists of a combination of herbs known for their digestive-enhancing properties such as bloating, gas, constipation and indigestion.

## 2. Constituent Herbs

The digestive churna mixture contains several herbs including *Terminalia gangetica*, *Trachyspermum ammi*, *Foeniculum vulgare*, *Terminalia bellirica*, *Terminalia chebula*, *Araujia sericifera*, *Sulemani namak*, *potassium Carbonate*, *Cassia angustifolia*, *Ferula asafoetida*, *Ficus riligiosa*.

Each herb has its own unique properties that contribute to the overall effectiveness of the mixture.

Table 1 Each 100gm contains

| Sr. No. | Ingredients          | Quantity |
|---------|----------------------|----------|
| 1       | Terminalia gangetica | 25gm     |
| 2       | Trachyspermum ammi   | 25gm     |
| 3       | Foeniculum vulgare   | 12.5gm   |
| 4       | Terminalia bellirica | 12.5gm   |
| 5       | Terminalia chebula   | 10gm     |
| 6       | Araujia sericifera   | 5gm      |
| 7       | Sulemani namak       | 5gm      |
| 8       | potassium Carbonate  | 2.5gm    |
| 9       | Cassia angustifolia  | 1gm      |
| 10      | Ferula asafoetida    | 1gm      |
| 11      | Ficus riligiosa      | 0.5gm    |

## 1) Terminalia gangetica

Terminalia gangetica is a plant species that belongs to the family Combretaceae. It is also known by its synonym, Hirda.



Fig. 1.

The plant is commonly found in India, particularly in the Gangetic plain and in some regions of Southeast Asia.

The fruit of Terminalia gangetica contains various chemical constituents, including tannins, gallic acid, ellagic acid, chebulinic acid, and chebulagic acid.

In traditional Indian medicine, the fruit of Terminalia gangetica is used in the preparation of various digestive churna

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formulations. The plant is believed to have astringent and antiinflammatory properties, and it is used to treat a variety of digestive disorders, including constipation, diarrhea, and dysentery. It is also used to treat respiratory disorders, such as asthma and bronchitis. Additionally, the plant is used in the treatment of skin disorders, such as eczema and psoriasis.

#### 2) Trachyspermum ammi

Trachyspermum ammi is also known as Carum copticum and commonly referred to as Ajwain in India.



Fig. 2.

It belongs to the Apiaceae family and is native to the Eastern Mediterranean region, but is also cultivated in India, Iran, and Egypt.

The seeds of Trachyspermum ammi contain various chemical constituents, including thymol, p-cymene, gammaterpinene, and alpha-pinene.

In traditional Indian medicine, the seeds of Trachyspermum ammi are used in the preparation of various digestive churna formulations. The plant is believed to have carminative, antispasmodic, and anti-inflammatory properties, and is used to treat a variety of digestive disorders, such as flatulence, indigestion, and abdominal pain. It is also used to relieve respiratory symptoms, such as cough and cold, and to treat menstrual cramps.

## 3) Foeniculum vulgare

Foeniculum vulgare is commonly known as Fennel and belongs to the Apiaceae family.



Fig. 3

It is a perennial plant that is native to the Mediterranean region but is also widely cultivated in various parts of the world, including India, Iran, and Egypt. The seeds of Foeniculum vulgare contain various chemical constituents, including anethole, fenchone, and estragole.

In traditional Indian medicine, the seeds of Foeniculum vulgare are used in the preparation of various digestive churna formulations. The plant is believed to have carminative, antispasmodic, and anti-inflammatory properties, and is used to treat a variety of digestive disorders, such as bloating, flatulence, and indigestion. It is also used to relieve respiratory symptoms, such as cough and asthma, and to treat menstrual cramps.

Additionally, the plant is used in culinary preparations and is often used as a natural breath freshener.

#### 4) Terminalia bellirica

Terminalia bellirica is also known as Bahera or Bibhitaki, and belongs to the Combretaceae family.



Fig. 4.

It is a large deciduous tree that is native to India, Nepal, and Bhutan.

The fruit of Terminalia bellirica contains various chemical constituents, including tannins, gallic acid, ellagic acid, and chebulic acid.

In traditional Indian medicine, the fruit of Terminalia bellirica is used in the preparation of various digestive churna formulations. The plant is believed to have astringent, antifungal, antibacterial, and anti-inflammatory properties, and is used to treat a variety of digestive disorders, such as constipation, diarrhea, and dysentery. It is also used to treat respiratory disorders, such as cough, asthma, and bronchitis, and to improve eyesight.

## 5) Terminalia chebula

Terminalia chebula, commonly known as Haritaki, belongs to the Combretaceae family.

It is a deciduous tree that is native to India, Nepal, and other parts of Southeast Asia.

The fruit of Terminalia chebula contains various chemical constituents, including tannins, chebulinic acid, and chebulagic acid.

In traditional Indian medicine, the fruit of Terminalia chebula is used in the preparation of various digestive churna formulations. The plant is believed to have astringent, laxative, and anti-inflammatory properties, and is used to treat a variety of digestive disorders, such as constipation, diarrhea, and dysentery. It is also used to treat respiratory disorders, such as

asthma and bronchitis, and to improve eyesight.



Fig. 5.

Additionally, Terminalia chebula is used in the formulation of various Ayurvedic medicines, and is also used in the treatment of skin disorders, such as eczema and psoriasis.

## 6) Araujia sericifera

Araujia sericifera is commonly known as moth vine, cruel vine or white bladderflower, and belongs to the Apocynaceae family.



Fig. 6.

It is a perennial vine that is native to South America but has been widely naturalized in many parts of the world, including North America, Australia, and parts of Asia.

The plant contains various chemical constituents, including cardiac glycosides, which can be toxic if ingested in large quantities.

Araujia sericifera is not traditionally used in digestive churna formulations in Indian medicine. In fact, its ingestion is not recommended due to its potential toxicity. Instead, the plant is commonly used as an ornamental plant, as well as for its medicinal properties in traditional medicine in its native South America.

In traditional medicine, the plant has been used to treat skin conditions, such as psoriasis and eczema, and to relieve pain and inflammation. The plant is also believed to have anti-inflammatory and antifungal properties, and has been used to treat respiratory disorders, such as asthma and bronchitis.

## 7) Sulemani namak

Sulemani namak is a commercial name for a type of rock salt

that is mined in the Himalayan region of Pakistan.

It is a type of halite or rock salt that contains various minerals, including iron, magnesium, calcium, and potassium.

In traditional Indian medicine, Sulemani namak is not used as a direct ingredient in digestive churna formulations. However, it is often used as a seasoning in cooking, and is believed to have digestive benefits due to its high mineral content.



Fig. 7.

Sulemani namak is also believed to have various other health benefits, including improving respiratory health, aiding in digestion, and balancing electrolytes in the body. It is often used as an alternative to table salt in cooking due to its perceived health benefits.

## 8) Potassium carbonate

Potassium carbonate is also known as potash or pearl ash. It is a white, water-soluble salt that is derived from the ashes of plants that are rich in potassium, such as wood and certain types of seaweed.



Fig. 8

Potassium carbonate is not derived from a biological source or family, but rather from a chemical process.

In traditional Indian medicine, potassium carbonate is not used as a direct ingredient in digestive churna formulations. However, it has been used in Ayurvedic medicine as a component of some formulations to help neutralize excess acid in the stomach and to help promote digestion.

Potassium carbonate has also been used in traditional Chinese medicine to treat digestive disorders, such as acid reflux and indigestion. It is believed to help balance the body's pH levels and to help regulate the digestive system.

In modern medicine, potassium carbonate is used in the production of various medications, such as antacids and diuretics. It is also used in the food industry as a leavening agent, in the production of glass, and in the manufacture of soap and detergents.

## 9) Cassia angustifolia

Cassia angustifolia is commonly known as Indian senna, Tinnevelly senna, or simply senna. It belongs to the Fabaceae or legume family.



Fig. 9.

The plant is native to Egypt and Sudan but is widely cultivated in many parts of the world, including India and other parts of Asia.

The leaves and pods of the plant are used in traditional medicine and contain various chemical constituents, including sennosides, which are powerful laxatives.

In traditional Indian medicine, Cassia angustifolia is commonly used in digestive churna formulations to help alleviate constipation and to promote bowel movement. It is believed to have a stimulating effect on the muscles of the digestive system, which helps to increase peristalsis and promote the elimination of waste.

Cassia angustifolia is also believed to have various other health benefits, including reducing inflammation, improving liver function, and aiding in weight loss.

#### 10) Ferula asafoetida

Ferula asafoetida is commonly known as asafoetida, hing, or devil's dung. It belongs to the Apiaceae or carrot family.



Fig. 10

The plant is native to Iran and Afghanistan and is also widely cultivated in India, particularly in the Kashmir region.

The resin of the plant is used in traditional medicine and cooking and contains various chemical constituents, including volatile oils such as sesquiterpene and disulfide compounds.

In traditional Indian medicine, Ferula asafoetida is commonly used in digestive churna formulations to help alleviate flatulence, bloating, and other digestive issues. It is believed to have anti-inflammatory and antispasmodic properties, which help to soothe the digestive system and promote healthy digestion.

Ferula asafoetida is also believed to have various other health benefits, including reducing high blood pressure, improving respiratory health, and aiding in the treatment of asthma.

In modern medicine, Ferula asafoetida is sometimes used in the production of medications, such as antispasmodics and antiinflammatory drugs.

## 11) Ficus religiosa

Ficus religiosa is commonly known as the sacred fig or peepal tree. It belongs to the Moraceae or mulberry family.



Fig. 11.

The tree is native to the Indian subcontinent and is considered sacred in Hindu, Buddhist, and Jain traditions.

The bark, leaves, and roots of the tree are used in traditional medicine and contain various chemical constituents, including tannins, flavonoids, and phenolic compounds.

In traditional Indian medicine, Ficus religiosa is sometimes used in digestive churna formulations to help alleviate various digestive issues, including diarrhea, dysentery, and indigestion. It is believed to have astringent and anti-inflammatory properties, which help to soothe and heal the digestive system.

Ficus religiosa is also believed to have various other health benefits, including reducing inflammation, improving respiratory health, and aiding in the treatment of skin disorders.

In modern medicine, Ficus religiosa has been the subject of various scientific studies, which have investigated its potential therapeutic properties for various health conditions, including diabetes, hypertension, and inflammation.

## 3. Market Survey

Digestive Churna is widely available in the Ayurvedic pharmaceutical market and is commonly sold in the form of powder or capsules. The demand for digestive churna has increased in recent years due to the growing interest in natural remedies for digestive health. In recent years, there has been a growing demand for herbal and Ayurvedic products, including digestive supplements. The market for digestive supplements is expected to continue growing in the coming years, driven by increasing consumer interest in natural and holistic approaches to health and wellness. The product is widely available in Ayurvedic stores and online platforms.

## 4. Conclusion

The digestive churna formulation described in this paper is a blend of nine herbs with known digestive properties, and is intended for use as a dietary supplement to support digestive health. The market for digestive supplements is growing, and there is potential for this formulation to find a place in the market and contribute to the growth of the Ayurvedic pharmaceutical industry.

Digestive Churna is a blend of traditional Ayurvedic herbs with a long history of use for improving digestive function and alleviating digestive symptoms. The combination of herbs in digestive churna provides a natural and effective solution for digestive health. Further research is needed to fully understand the efficacy and safety of digestive churna, but it has a promising future as a natural remedy for digestive health.

## 5. Future Scope

The digestive churna formulation described in this paper is just one of many potential Ayurvedic products that can be developed and marketed to consumers. The future of the Ayurvedic pharmaceutical industry looks bright, and there is a lot of potential for the development and commercialization of new and innovative herbal products. Further research and development in this area will likely result in new and improved products that will meet the changing needs and preferences of consumers. In the future, the use of digestive churna may become more widespread as people continue to seek natural remedies for digestive health.

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