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## *Trachyspermum ammi* - Super Nutritious and Healthy

**Geeta Mohan\*, O. P. Sharma, Sanjiv  
Kumar and Manjeet Kaur**

Dept. of Agriculture, Jagan Nath University, Jaipur, Rajasthan  
(303 901), India

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### Corresponding Author

Geeta Mohan

e-mail: [drgeetamohan@gmail.com](mailto:drgeetamohan@gmail.com)

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E-mail: [bioticapublications@gmail.com](mailto:bioticapublications@gmail.com)

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### Abstract

Carom (Ajwain) seed is scientifically known as *Trachyspermum ammi*. In India it is mainly grown in Rajasthan, Gujarat, Andhra Pradesh, Madhya Pradesh, Uttar Pradesh, Maharashtra, Bihar and West Bengal. Ajwain is a small, oval-shaped seed-like fruit similar to the seeds of cumin and fennel exhibiting pungent and bitter taste. Even a small number of fruits tend to dominate the flavor of a dish. It has an aroma close to thyme as it contains thymol. The plant is chiefly cultivated in Iraq, Middle East, and Afghanistan. The wealth of nutrients in Ajwain includes a good source of dietary fibre, essential fatty acids and protein. The aromatic seeds are used in adding flavor to a number of drinks, curries and parathas. It is also loaded with different type of essential oils like thymol, cymene, pinene, terpinene and limonene. The host of plant compound in Ajwain offers numerous health benefits and promotes overall well-being and health.

### Introduction

Carom (Ajwain) Seed is an annual herbaceous and aromatic plant. It is an erect, minutely pubescent, branched annual herb. The leaves of the plant are feathery and the flowers are red and white in colors. Ajwain (*Trachyspermum ammi*) is a well-known spice. The seeds are small, egg shaped and brownish or grayish in color depending upon the varieties. The Ajwain seeds are hot and dry, strong in flavor and leave a slightly bitter after taste. The flavor of Ajwain resembles to that of thyme due to the presence of similar flavoring compounds, mainly thymol. The seeds of Ajwain inherit a great potential to subside the cramping, flatulence, any abdominal discomfort due to the presence of certain bioactive compounds, which exhibit pharmacological health benefits. Ajwain has found its wide applications not only in cookery but also in medicine, cosmetic, food and flavor industry.

The phyto-chemical constituents of Ajwain include iron, calcium, cobalt, phosphorous, copper, magnesium, iodine, riboflavin, nicotinic acid and thiamine. The Ajwain seeds are also famous for their essential oil. The essential oil is mainly constituted of thymol and caracole which are the principle components of its flavor. This aroma compound Ajwain is an Indian spice commonly used as a remedy for gastrointestinal problems like indigestion, flatulence and colic pain. Ajwain seeds possess carminative, antimicrobial and liver protective properties.

### Health Benefits of Carom (Ajwain) Seeds

In Ayurveda, carom seeds have long been used to treat digestive issues such as stomach ache and diarrhea. Studies have shown Ajwain is good for health as it helps in treating

peptic ulcers and also has a protective effect on the liver. Ajwain seeds have incredible health benefits. People roast them to refine their flavor, can chew them raw or add it to water or tea to achieve its maximum benefits. The benefits of Ajwain are numerous.



Figure 1: Carom (Ajwain) Seed Plant.

### 1. Combats Peptic Ulcers and Relieves Indigestion

Carom seeds are commonly used as a household remedy for digestive issues in Ayurvedic medicines. Studies show that carom seed extract is useful in peptic ulcer and indigestion which are source of the esophagus, stomach and small intestine. As two-week rat study observed that treatment with carom seed extract improved stomach ulcers caused by ibuprofen and found that the effect of the extract was comparable to that of a common medication used to treat peptic ulcers. Carom seed extract helps to prevent and treat gas and chronic indigestion. Indigestion is categorized as persistent pain and discomfort in the upper part of the stomach.

### 2. Treats Common Cold-Cough and Improves Airflow

Ajwain relieves the blocked nose by discharging the mucus easily. It has a great power to open up the clogged nasal passages. It also improves the airflow of the lungs hence very useful in asthma and bronchitis. Carom seeds may also improve airflow to the lungs. In a study people with asthma, treated with body weight of carom seed extract increased airflow of the lungs 30–180 minutes after administration.



Figure 2: Carom (Ajwain) Seeds Flower

### 3. Fight against Infection

Ajwain seeds are powerful in anti-bacterial and anti-fungal properties. The active compound of Ajwain – thymol helps to inhibit bacterial growth and fungi.

### 4. Relieve Joint Pains

Ajwain seeds possess two properties: anti-inflammatory and anti-microbial. It reduces the swelling, and pain of joints. Apply Ajwain seed paste on the affected joints or soak in a tub of hot water with a handful of Ajwain seeds.

### 5. Cure Tooth and Ear Pains

Tooth and ear pains are the two severe types of pain among other pains. Ajwain oil acts magically on ear pain and for tooth-ache, simply gargle with lukewarm water with Ajwain seeds and a pinch of salt.



Figure 3: Carom (Ajwain) Seeds

### 6. Enhance Good Cholesterol Level

Ajwain seeds help to lower down the bad cholesterol and regulate the good cholesterol level. These seeds contain a high amount of dietary fibers and fatty acids that contribute to healthy level of cholesterol, as studies indicate that carom seeds are helpful in reducing the cholesterol level. High cholesterol levels are risk factors for heart disease. Carom seed powder only proved effective in treating high cholesterol levels when used in high doses eating the seeds through a normal diet.

The thymol in the seeds helps to manage blood pressure. An animal study suggests that Ajwain seeds also have a calcium channel blocking effect. It prevents calcium from entering heart cells and blood vessel walls that help to lower blood pressure.

### 7. Fights Bacteria and Fungi

Carom seeds have powerful antibacterial and antifungal properties. This is likely attributed to two of its active compounds, thymol and caracole, which have been shown to inhibit the growth of bacteria. One test-tube study observed that carom seeds were more effective against multi drug-resistant strains of bacteria and fungi.

### 8. Have Anti-inflammatory Effects

Inflammation can be good or bad. Short-term inflammation in body is the natural way of protecting against illness or injury. On the other hand, chronic inflammation can have negative effects on body and increase risk of certain diseases. Carom seeds have been shown to have anti-inflammatory effects and may reduce inflammation in the body.

### 9. Arrests Premature Graying of Hair

The active constituents in Ajwain are extremely beneficial in maintaining the natural color of hair and prevent further graying. Owing to its anti-microbial nature, it also treats various scalp, hair infections, itching and dandruff. It also nourishes the hair follicles with essential nutrients, promotes blood circulation and strengthens the hair strands from the roots.

### 10. Enhances Skin Health

Blessed with anti-inflammatory and curative properties, Ajwain is used for treating various signs of aging like wrinkles, fine line, spots, dark circles. It is extremely beneficial for lightening scars due to acne, pimples and bestows a smooth and glowing skin. Ajwain seed paste applied and acts on affected areas to diminish scars and spots. Due to its germicidal and fungicidal qualities, Ajwain seed paste can be used to clean minor wounds and cuts. Ajwain paste is also said to be effective against acne scars when applied topically.

### 11. Relieves Arthritis

The kitchen ingredient has potent analgesic and anti-inflammatory properties, which is extremely beneficial in reducing joint and muscle pain, thereby reducing the chances of chronic auto immune inflammatory diseases like rheumatoid arthritis which stems from the vitiation of Vat Dosh.

## Carom (Ajwain) Seeds Water Benefits

There are several ways of drinking Ajwain water is one of the best strategy. Ajwain water is very beneficial, particularly for women.

### Carom (Ajwain) Seed Water

Ajwain water is an excellent Ayurvedic remedy to treat indigestion problems. It helps in treating indigestion issues and irregular period's problem. Ajwain water is a traditional remedy given to babies to cure indigestion and flatulence. Drinking Ajwain water regularly is well-known to boost metabolism, burns fat and in losing weight. It is also known to improve digestion and relieve stomach aches. It is commonly used to treat flatulence and bloating.

#### 1. Helpful in Weight Loss

Carom (Ajwain) seed water is highly recommended in Ayurveda to manage weight. It helps to cleanse digestive system and promote metabolism that leads

to weight loss. To prepare carom (Ajwain) seed water, roast 2 tablespoons of carom (Ajwain) seeds and add it to boiling water. Stir this mixture till it changes its color to brown. Let it cool and strain it before use. Drink this water daily, while adding a tablespoon of honey for good results.



Figure 4: Carom (Ajwain) Seed Water for Weight Loss

#### 2. Useful for Females

Carom (Ajwain) seed water helps to clean the uterus and stomach to regularize periods. It also helps to cure the indigestion problem in pregnant women.

#### 3. Relive Stomach Discomfort in Babies

Carom (Ajwain) seed water can reduce the gaseous in the abdomen in babies and relieve the discomfort.

## Carom (Ajwain) Seeds and Betel Leaf

Wrap a few carom (Ajwain) seeds in a betel leaf and place it on the back of the mouth. Suck it and swallow the juices as long. Betel leaves too are known to improve digestion as this stimulates the salivary glands to release enzymes that boost metabolism.



Figure 5: Carom (Ajwain) Seed with Betel Leaf

## Carom (Ajwain) Seed Heat Pack

Carom (Ajwain) seed potli is a natural inhaler and works as a soothing home remedy to treat stuffy nose and chest congestion in babies, kids, and adults.

Dry roast a cup of carom (Ajwain) seed till the seeds are roasted and have changed their colour. Transfer the hot seeds in muslin or a cotton cloth and tie a pouch or a potli. Place

this hot potli on the stomach or the area where it is hurting because of gas. Make sure the pouch is not extremely hot.



Figure 6: Carom (Ajwain) Seed Heat Pack

## Carom (Ajwain) Seed Kadha

**F**or making Kadha crush a piece of ginger and some carom (Ajwain) seeds together in a pot. Add a glass of water to it and boil till it is reduced to half and drink. Ginger too is known to help in digestion and relieves gas pains.

Carom (Ajwain) seeds are better known for the aroma and taste they impart to dishes. However, it may be termed as a wonder herb because of its immense medicinal properties. It gives instant relief from stomach-related issues like pain, gas, constipation, diarrhea, belching and improves digestion.



Figure 7: Carom (Ajwain) Seed Kadha

## Carom (Ajwain) Seeds Oil

**T**he Carom (Ajwain) seed essential oil is extracted from the carom (Ajwain) seeds. The color of the carom (Ajwain) seed oil can vary from orange to red, and the oil gives a pungent thyme odor.

The oil contains antioxidant, anti-inflammatory, anti-bacterial, and anti-fungal properties. The oil stops free radical and removes the sign of aging. There are studies that have proven that the Carom (Ajwain) seed oil reduces the secretion of nitric acid in the body and thus act as a great anti-inflammatory agent.

Carom (Ajwain) seed oil relaxes the windpipe, and allows more oxygen to get into the lungs. It can be very helpful in the treatment of respiratory diseases like cold, cough, respiratory infection, sinus and congestion. The oil can kill different bacteria's that are harmful to the body.



Figure 8: Carom (Ajwain) seed oil

## Conclusion

**C**arom (Ajwain) seed possesses stimulant, antispasmodic, carminative properties and is used traditionally as an important remedial agent for flatulence, diarrhea, abdominal tumors, abdominal pains, piles, and bronchial problems, lack of appetite, asthma and amenorrhea. Medicinally, it has been proven to possess various pharmacological activities like antifungal, antibacterial, antioxidant, antimicrobial, antihypertensive and anti spasmotic. Further, studies revealed the presence of various phyto-chemical constituents in carom (Ajwain) seeds mainly carbohydrates, glycosides, saponins, phenolic compounds, volatile oil, protein, fat, fiber and mineral matter containing calcium, phosphorous, iron and nicotinic acid. Carom (Ajwain) seed are one of the important sources of medicinally active compounds and have various pharmacological effects hence, it is being encouraged to find its new therapeutic uses, will be useful for both human beings and animal health.

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