CDA Acupuncture and Holistic Healing

Dr. Toby Hallowitz, ND, MSOM, LAc
225 East Locust Ave
P: 208.665.2293

www.cdahealing.com

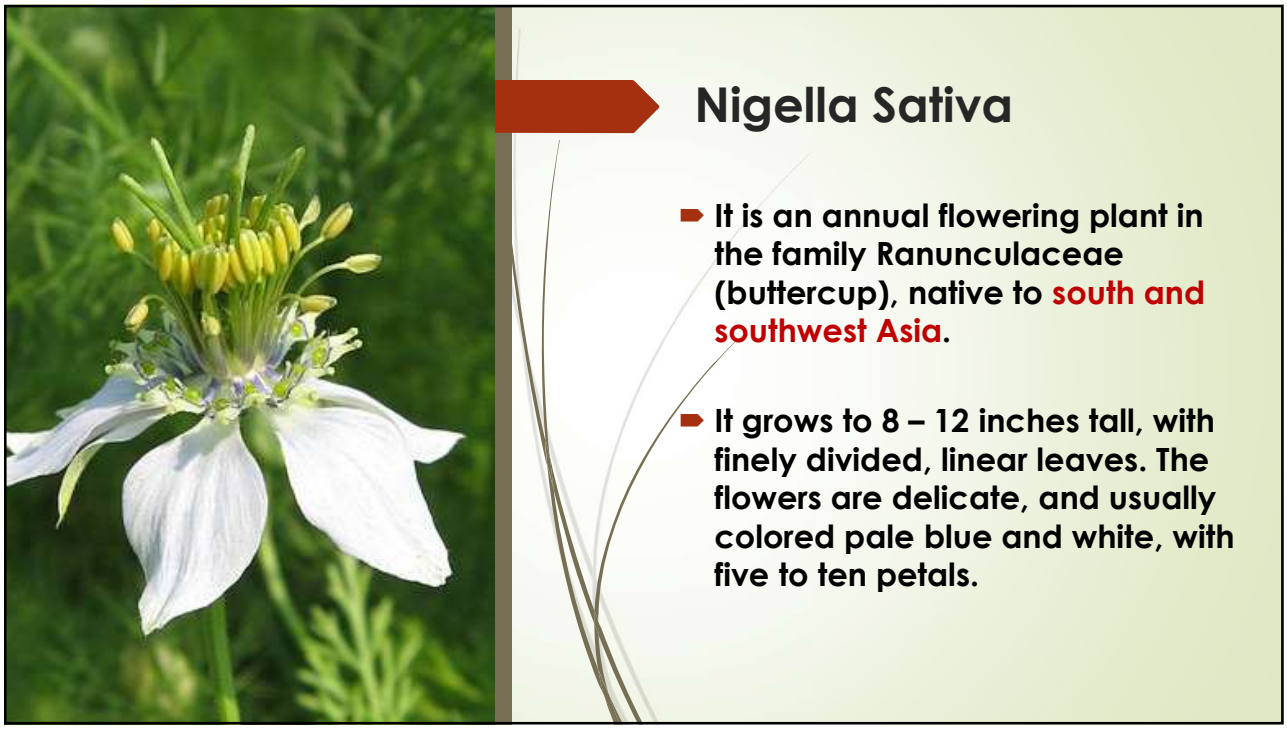
Black Seed Oil

Inflammation and Autoimmunity

Nigella Sativa

Also known aS:

BLACK SEED
and
black cumin
and
black caraway


Nigella Sativa
It is an annual flowering plant in the family Ranunculaceae (buttercup), native to south and southwest Asia.
It grows to 8 – 12 inches tall, with finely divided, linear leaves. The flowers are delicate, and usually colored pale blue and white, with five to ten petals.

Nigella Sativa has been used extensively as an herbal remedy and as a food condiment for at least 3,000 years.

Nigella Sativa: Fruit

Nigella Sativa: Fruit

- The fruit is a large and inflated capsule composed of three to seven united follicles, each containing numerous seeds which are used as a spice, **sometimes as a replacement for black cumin**.

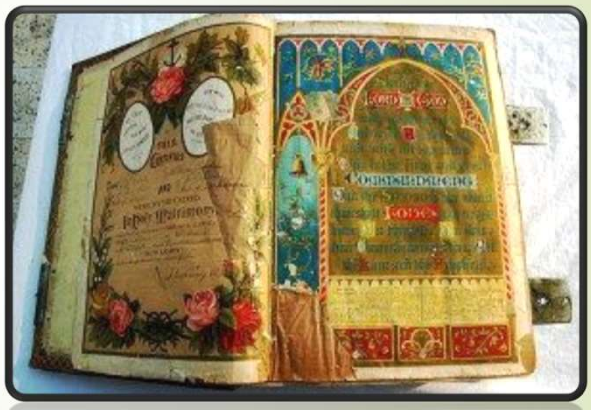
Culinary Uses:

- The seeds of N. sativa are used as a spice in Indian and Middle Eastern cuisines. The black seeds taste like a combination of onions, black pepper, and oregano. They have a pungent, bitter taste and smell.
- The dry-roasted seeds flavor curries, vegetables, and pulses. They can be used as a "pepper" in recipes with vegetables, salads, and poultry.
- In some cultures, the black seeds are used to flavor bread products, and are used as part of the spice mixture **panch phoron** (meaning a mixture of five spices) and alone in many recipes in Bengali cuisine and most recognizably in **naan**.

"The Complete Book of Black Seed Oil"

Mentioned in the Bible

- **"For the black cumin is not threshed with a threshing sledge, nor is a cart wheel rolled over the cumin, but the black cumin is beaten out with a stick, and the wheat with a rod."**
  (Isiah 28:25,27 NKJV)



Recommended by the Prophet Muhammad

- **"Hold on to the use of the black seed for indeed it has a remedy for every disease except death."**

"Hold on," indicates a long-term use and should be well observed. A long term use means to take regularly.

Hadith (Sayings of the Prophet Muhammad (SWS) narrated by his companions.)

Ancient Egypt

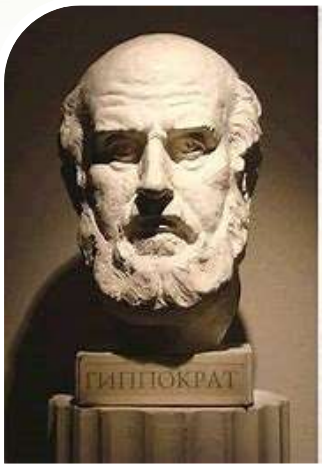
- used by Cleopatra for its health and beauty giving qualities.
- Queen Nefertiti, praised for her exquisite complexion, was an avid user of black cumin seed oil.
- Physicians in Pharaohs' times used black seed as a remedy for colds, headaches, digestive disorders, toothaches, infections, inflammatory disorders and allergies.

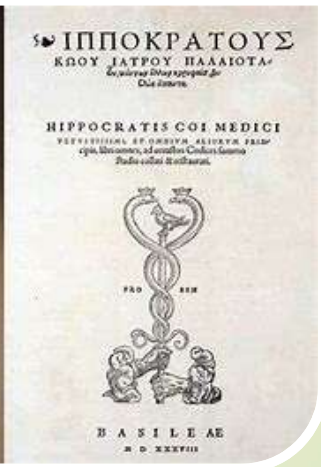
Tutankhamen

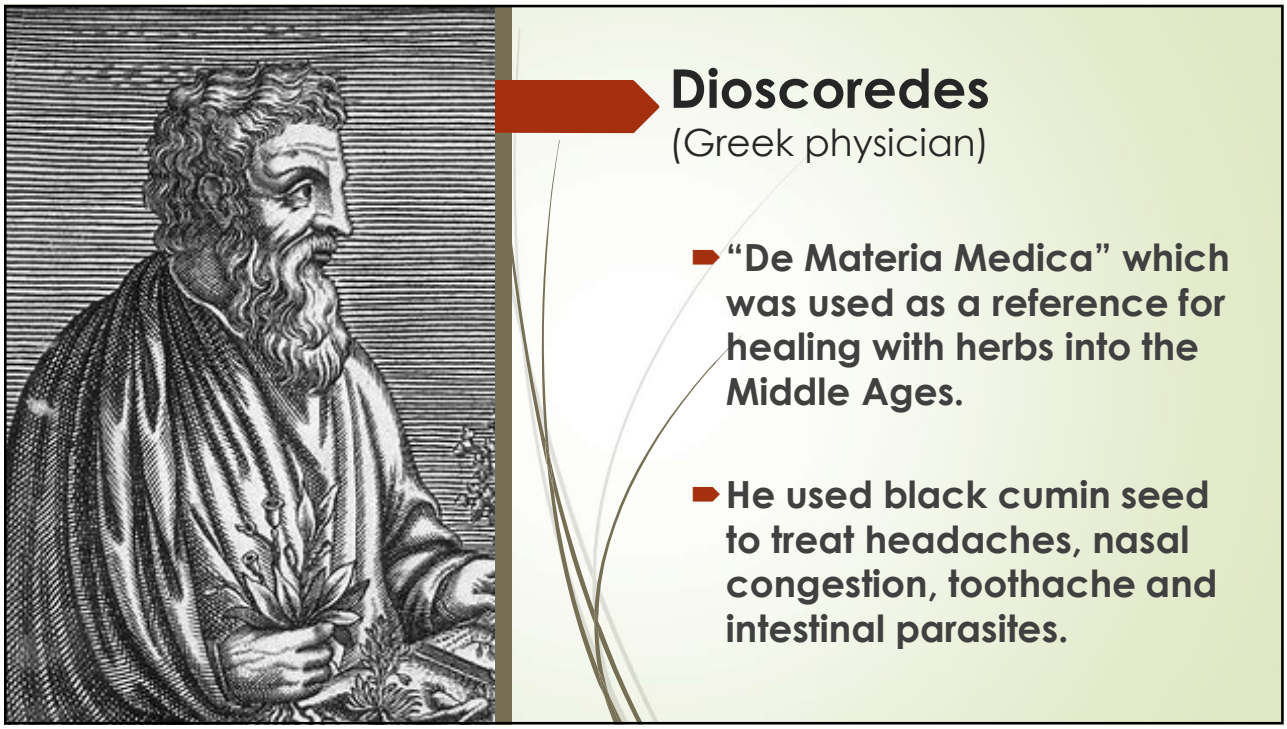
- The oil of black cumin was found in Tutankhamen's tomb, which indicates that it formed part of the carefully entombed items to assist the king in the afterlife.
- The seeds with honey were also found in the tomb which are still usable.

Hippocrates (5th century B.C.)

- regarded nigella sativa as a valuable remedy in hepatic and digestive disorders.
- His list of remedies include the treatment of snakebites and scorpion stings, old tumors, abscesses, and skin rashes.
- A series of remedies against colds and inflammations in the area of the head were recommended (this appeared almost unchanged in the large German medicinal plant encyclopedias of the 16th to 18th centuries)






Dioscoredes
(Greek physician)
"De Materia Medica" which was used as a reference for healing with herbs into the Middle Ages.
He used black cumin seed to treat headaches, nasal congestion, toothache and intestinal parasites.

Researched Properties:

- Painkiller
- Antioxidant
- Anti-inflammatory
- Anti-microbial
- Immunomodulator
- Bronchodilator
- Anti-hypertensive
- Renal protective
- Anti-histamine
- Anti-tumor
- Anti-diabetic
- Hepatoprotective
- Gastroprotective
- Anti-cancer
- Spasmolytic

Constituents:

- Thymoquinone (TQ, 30 to 48%)

- Thymohydroquinone
- Dithymoquinone
- P-cymene
- Carvacrol
- 4-Terpineol
- T-Anethol
- Sesquiterpene longifolene
- Alpha-pinene
- Thymol

Black Seed Unsaturated Fatty Acid Profile:

- Linoleic acid (50 to 60 percent)
- Oleic acid (20 percent)
- Eicosadienoic acid (3 percent)
- Dihomolinoleic acid (10 percent)

Thymoquinone :

- An active ingredient in black seeds, researchers have been investigating it since the 1960s. It is well known for its antioxidant, anti-inflammatory and anti-cancer properties.
- Current Research: Diabetes, cardiovascular disease, liver damage, Alzheimer's, neuroprotection and cancer.

Thymohydroquinone :

- One of the most potent natural acetylcholinesterase (AChE) inhibitors on the planet. AChE inhibitors are chemicals that stop enzyme activity, which increases the amount of time and the amount of the neurotransmitter acetylecholine remains active in the brain.
- Pharmaceutical-grade acetylcholinesterase inhibitors are used medicinally to treat a wide range of conditions including: **Alzheimers, Autism, Parkinson's Disease, Glaucoma, Schizophrenia.**

Thymol:

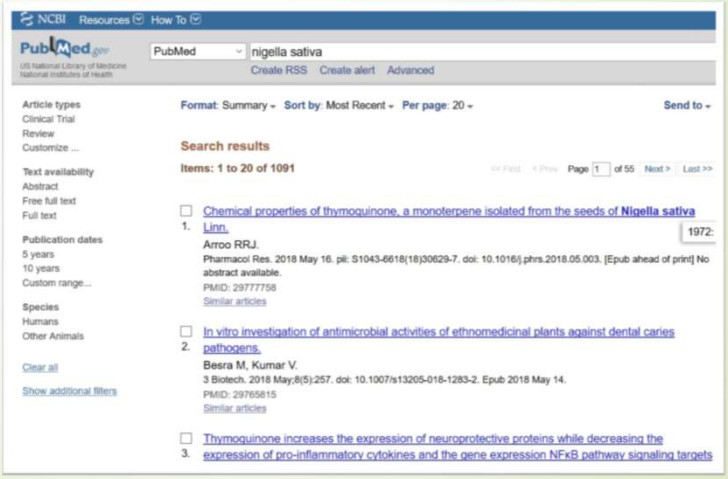
- The active ingredient that gives thyme essential oil its medicinal properties.
- It is commonly used as a tuberculocide and virucide to kill TB and various viruses.
- It is used as a medical and general-purpose disinfectant.
- It is a rapidly degrading, non-persisting pesticide.

Black Seed Oil Benefits:

- Cancer
- Diabetes
- Obesity
- Liver Protection
- Hair loss
- Skin disorders
- Infections
- Inflammation

How To Search Research:

www.pubmed.com



Cancer:

- Thymoquinone is known to have anti-cancer effects.
- Thymoquinone extract from black cumin appears to be effective against cancers in the **blood, lung, kidney, liver, prostate, breast, cervix, colon and skin**.
- Research published in *Drug Discovery Today* concluded thymoquinone has a long history of battling cancer in vitro and in vivo (in "test tube" experiments and animal studies), and modulates 9 of the 10 hallmarks of cancer.

Thymoquinone: fifty years of success in the battle against cancer models
Drug Discovery Today January 2014, Volume 19, Issue 1, Pages 18-30

Cancer:

- Croatian scientists evaluated the antitumor activity of thymoquinone and thymohydroquinone in mice and discovered that the two phytochemicals in black seed oil resulted in 52 percent decrease in tumor cells.

The antitumor activity of thymoquinone and thymohydroquinone in vitro and in vivo
Exp Oncol. 2006 Sep;28(3):220-4.

Anti-Cancer Properties:

- Anti-proliferation
- Apoptosis induction
- Cell cycle arrest
- Reactive oxygen species generation
- Anti-metastasis
- Anti-angiogenesis

Supports Chemotherapeutic Drugs:

- The anti-tumor effects of thymoquinone have also been investigated in tumor xenograft mice models for colon, prostate, pancreatic and lung cancer.
- The combination of thymoquinone and conventional chemotherapeutic drugs could **produce greater therapeutic effect as well as reduce the toxicity** of chemotherapy.

Thymoquinone: potential cure for inflammatory disorders and cancer. Pharmacol. 2012 Feb 15;83(4):443-513-51

Diabetes:

- Nigella sativa is one of the few substances that is suggested to help prevent both type 1 and type 2 diabetes.
- black seed oil "causes gradual partial regeneration of pancreatic beta-cells, increases the lowered serum insulin concentrations and decreases the elevated serum glucose."

Diabetes:

- "*N. sativa* may be beneficial in diabetic individuals and those with glucose intolerance as it reduces appetite, glucose absorption in intestine, hepatic gluconeogenesis, blood glucose level, cholesterol, triglycerides, body weight and simulates glucose induced secretion of insulin from beta-cells in pancreas; improves glucose tolerance as efficiently as metformin; yet it has not shown significant adverse effects and has very low toxicity."

Antidiabetic Properties of a Spice Plant *Nigella sativa*
Journal of Endocrinology and Metabolism, Volume 1, Number 1, April 2011, pages 1-8

Diabetes:

- When people with diabetes consumed two grams of black cumin per day for three months, it led to reductions in fasting **blood sugar and HbA1c** and increased the functionality of pancreatic β cells, which suggests black cumin may be a "**beneficial adjuvant therapy in type 2 diabetes.**"

Cardio-protective and anti-cancer therapeutic potential of *Nigella sativa*
Iran J Basic Med Sci. 2014 Dec; 17(12): 967–979.

Weight Loss:

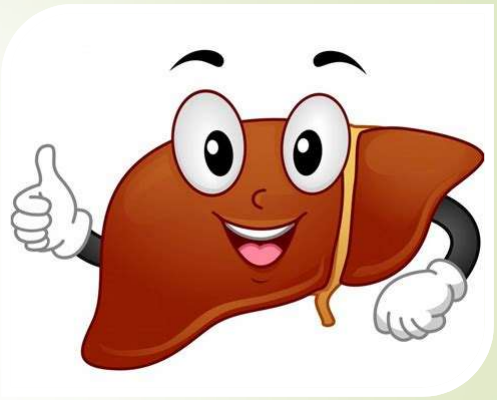
Black cumin is associated with anti-obesity effects, including reductions in body weight and waist and hip circumference, with researchers noting:

"Nigella Sativa showed a significant weight loss"

A systematic review of anti-obesity medicinal plants - an update
J Diabetes Metab Disord. 2013; 12: 28.

Liver Protection:

- "The mechanisms by which N. sativa impede progression in chronic liver diseases should be used as a preventive medicine in patients with hepatic disorders."



Nigella sativa L. and its bioactive constituents as hepatoprotectant: a review. Curr Pharm Biotechnol. 2018 Apr 26

Hair Loss:

Skin Disorders:

- Nigella sativa has been used topically for centuries for the treatment of many skin conditions.
- For example, it has been used for acne vulgaris, burns, wounds, and as an anti-inflammatory for different kinds of skin inflammation including infection, eczema, acne and psoriasis. It has also been shown to be helpful for hypopigmentation, including vitiligo.

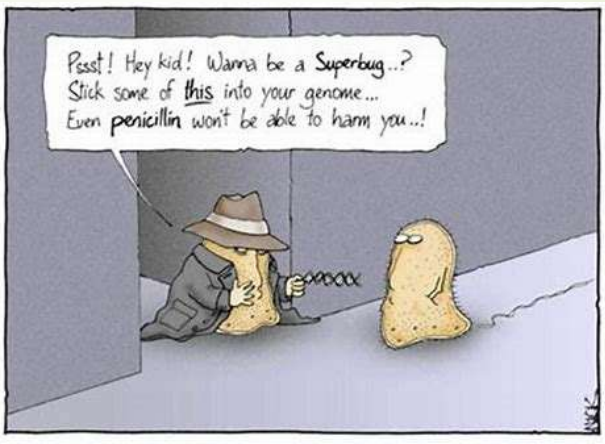
Wound Healing:

- Studies have shown Black seed oil to be very effective for healing wounds. It has been shown to superior to healing wounds when compared to silver sulfadiazine, likely due to its anti-inflammatory and immunomodulatory effects.
- It increases collagen formation, increases the rate of epithelialization and has a strong moisturizing effect.
- When an extract of *N. sativa* seed was applied on skin, it improved the healing process by decreasing the total and absolute white blood cells count, reduced tissue damage and decreased bacterial expansion.

A Review on the Cosmeceutical and External Applications of *Nigella sativa*
J Trop Med. 2017; 2017: 7092514

"...now apply pressure and hold it there. It's highly absorbant and will speed healing..."

Infections and Antibiotic Resistance:



It was on a short-cut through the hospital kitchens that Albert was first approached by a member of the Antibiotic Resistance.

Infections:

- Antibacterial activity of *N. sativa* against clinical isolates of methicillin resistant *Staphylococcus aureus* was investigated in 2008 by Hannan *et al*. **All tested strains of methicillin resistant *Staphylococcus aureus* were sensitive** to ethanolic extract of *N. sativa* at a concentration of 4 mg/disc with an MIC range of 0.2-0.5 mg/ml.
- Antibacterial activity of *N. sativa* against triple therapy in eradication of Helicobacter Pylori in patients with non-ulcer dyspepsia was carried out. It was showed that *N. sativa* seeds possess clinically useful **anti *H. pylori* activity, comparable to triple therapy**.
- Thymoquinone was found to inhibit **biofilm formation**.

A review on therapeutic potential of *Nigella sativa*: A miracle herb
Asian Pac J Trop Biomed. 2013 May; 3(5): 337–352

Inflammation:

- The components of black cumin seed oil have unique properties that restore a youthful and optimal inflammatory balance to the immune system's components.
- Through this mechanism, black cumin seed oil has the potential to mitigate—and even reverse—chronic diseases such as **arthritis, allergies, asthma, colitis, and cardiovascular disease**.
- Studies show that it is possible to achieve a better overall immunological balance, one that promotes health and defeats inflammation, by supplementing with black cumin seed oil.

Inflammation:

- Suppress activity of the "master inflammatory regulator" complex **NF-kappaB**.
- Inhibits important enzyme systems such as **5-LOX** and **COX1** that produce inflammatory mediators called leukotrienes and prostaglandins.
- Reduces production of a compound called **5-HETE**, a precursor of inflammatory molecules.
- Inhibits production and activity of interleukins, cytokines with complex immune modulating properties. **Black cumin seed oil** constituents reduce production of inflammatory interleukins, and may boost production of anti-inflammatory ones.

Inflammatory Conditions Treated:

- Arthritis
- Allergies
- Asthma
- Auto-immune diseases
- Colitis
- Cardiovascular disease

How to Use Black Seed Oil:

- You can add the seeds to casseroles, stir fries, salad dressings (try them mixed with lemon, cilantro and tahini) and baked goods, sprinkle them on salads, or even add them to your coffee or tea.
- You can also make black seed tea by pouring hot water over the seeds (about one tablespoon) and letting it steep for 10 minutes.
- Aside from their culinary uses, a mixture of black seed, honey and garlic makes a powerful tonic for soothing coughs and boosting immunity, especially during cold and flu season or if you feel like you're coming down with an infection.

How to Use Black Seed Oil:

- Black seed oil can even be used topically to treat hair loss, psoriasis and eczema or mixed with facial cream to moisturize and soothe your skin.
- For oral use: build up to 1 tsp three times a day;
- some people can tolerate 1 TBS 1 x day.
  Store the oil in the refrigerator.

Potential Side Effects:

- **Pregnancy:** Black cumin seed oil may stimulate smooth muscle contraction in the uterus. This effect may be dangerous to pregnant women as it can induce premature labor or increase the risk of miscarriage. Thus, this oil should be avoided during pregnancy.
- **Blood pressure:** If you're currently taking medications for hypertension, adding black cumin seed oil into your regimen may amplify the effects of the drugs further. Speak with your doctor first before using black cumin seed oil.
- **Allergies:** Black cumin seed oil may cause potential allergic reactions, such as itchiness, redness or swelling in the lips, tongue, gums, throat and face. Discontinue use if you experience any of these negative reactions.
- **Stomach:** Ingesting black cumin seed oil can irritate your digestive tract, causing nausea, vomiting, bloating and cramping. If these problems appear, stop using black cumin seed oil immediately.