

# Functional Foods

## CLOVE

### "The Nail Spice"

Angeline Jeyakumar<sup>1</sup>, Norincia Osei-Boateng<sup>2</sup>,

<sup>1</sup>Nutrition Specialist; Extension; Department of Nutrition; University of Nevada, Reno.

<sup>2</sup>MS Nutrition; Department of Nutrition; University of Nevada, Reno.

1. Clove trees are native to the Maluku Islands and were so popular in Europe, they brought extreme wealth to the Venetians.
2. The name itself is derived from the French word "clou" and the English word "clout", both meaning "nail" because the dried buds resemble nails <sup>1</sup>.

### What is in cloves?

Among spice plants, cloves showed the highest content of natural compounds (**polyphenols and antioxidants**).

These give cloves their unique smell and flavor which have properties to fight infections and **inflammation** <sup>2</sup>.

The term antioxidant means that they protect our body cells and reduce the risk of cancer and other chronic diseases. **Anti-inflammatory** means any agent that can reduce pain or similar responses to injury, infection and chronic diseases.

The oil is obtained from leaves, flowers and clove buds <sup>3</sup>.

### What do studies say about the health benefits?

- **Ease dental pain and prevent gum disease:** *Herbal mouthwash* made with cloves, basil and tea tree oil can reduce bacteria in the mouth.



A *clove gel* demonstrated numbing effects on the gums similar to those of dental medicines.

However, applying *clove oil* directly to the gums can cause burning and irritation <sup>4</sup>.\*\*

- **Maintains blood sugar:** Clove extract (250 mg once daily) supplemented for 12 days helped control blood sugar in people with prediabetes <sup>5</sup>.\*\*
- **Maintains blood cholesterol:** Supplementation with clove powder in the form of capsules reduced blood cholesterol in people with high blood cholesterol levels <sup>6</sup>.\*\*
- **Helps wound healing:** The anti-inflammatory function helps in easy closure of wounds and formation of new tissues that improve wound healing <sup>7</sup>.\*\*  
Research is ongoing to further support this evidence.

#### Strength of evidence

\*\*\* Strong \*\* Moderate \* Basic

### How are cloves traditionally used?

There are many ways to consume small amounts of clove and obtain potential health

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benefits. Clove has found its way into almost every country, apart from Japan <sup>3</sup>.

- Add ¼ - ½ tsp of ground cloves to salads, pies or chicken preparations.
- Use whole cloves for mulled cider by toasting with other spices and mixing with apple cider and then straining out the solids.

## How many cloves are safe to consume?

2-3 cloves/day is known to be beneficial to health <sup>8</sup>.

- Culinary dosages (a few pinches in powdered form or one to two whole cloves) are safe.
- Consult your physician about the usage of supplements or concentrated extracts.
- Functional foods, including cloves, should not replace a healthy diet or prescribed medication.
- Effects can differ from person to person.

## Ways to use clove essential oil

- Most pharmacies and grocery stores carry clove essential oil. Mixing approximately 10 drops of clove oil per ounce of water may be used as a mild disinfectant <sup>3</sup>.
- Topical use can aid with pain relief, but be sure to dilute with coconut oil or an unscented lotion <sup>1</sup>.

## Resources

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Contact: [ajeyakumar@unr.edu](mailto:ajeyakumar@unr.edu)

Phone: 775-336-0275

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