Health Benefits of Garlic



WHAT IS GARLIC?

Garlic is an edible bulb from the lily family which has been used for centuries as medicine by ancient cultures to treat asthma, digestive disorders and infections. Today, garlic is known to have anti-inflammatory effects and may lower your risk for disease. It is considered both a vegetable and a spice.

WHAT MAKES GARLIC GREAT?

Garlic is a rich source of phytonutrients, beneficial compounds found in plants, that protect the plant, and us when we consume them, from infection and disease.

One phytonutrient family being studied is responsible for garlic's odor and sharp flavor. *Allicin* is a sulfur compound thought to be one of garlic's most beneficial ingredients (also found in other members of the allium family like onions, leeks, shallots and chives).

But garlic is known to have as many as 40 other compounds that may contribute to our health. Some benefits may include:

Heart Attack and Stroke

- Lower blood pressure
- Help reduce cholesterol by up to 10%
- Slow plaque buildup and hardening of arteries
- May reduce leg pain in those with Peripheral Artery Disease (PAD)

Cancer

- Studies in China saw a 50% reduction of risk for prostate cancer
- Some studies show reduction in symptoms associated with prostate cancer
- May reduce risk of stomach, colon and breast cancers

Diabetes

- May modestly reduce blood sugar levels
- This would be beneficial for diabetes prevention

Metabolic Syndrome

- Researchers found consuming raw, crushed garlic twice weekly for 4 weeks can reduce blood pressure, waist circumference and blood sugar levels in those with metabolic syndrome

Warding off Colds

- A study published in *American Family Physicians* found that garlic may decrease frequency of colds in adults, but has no effect on duration of symptoms

Other Beneficial Ingredients in Garlic

Garlic may show benefits because it also contains additional healthful compounds besides allicin. For example:

- Antioxidants like vitamin C, vitamin A (beta carotene) and selenium which protect against free radicals, aging and chronic disease
- Minerals potassium, phosphorus, magnesium and calcium which protect our heart and bones, and help the body produce energy
- Dietary fiber which has been shown to protect our intestinal microbiome as well as lower cholesterol, regulate blood glucose and prevent colorectal cancers
- Garlic has been shown to be anti-inflammatory, and can aid in reducing pain in joints or muscles
- Some data indicate rubbing garlic on blemishes can kill bacteria that can cause acne
- Garlic can sooth athlete's food by soaking in garlic water or rubbing garlic on itchy feet

Oregon State University

stephanie.polizzi@oregonstate.edu
631 Alder Street, Myrtle Point, OR 97458
541-572-5263 ext 25291
http://extension.oregonstate.edu/coos

PREPARING GARLIC

Garlic season runs from mid summer through early fall but is found year round at local grocers. Select round, firm but not hollow or dehydrated bulbs. Avoid sprouted bulbs as this indicates they may not be as fresh. Store garlic in a cool, dry place, preferably not in the refrigerator since the moisture level is high. Use within 7-10 days. Sprouted garlic is still edible.

When preparing to chop garlic, place the entire bulb on cutting board and set a heavy pot or bowl on top. Apply gentle pressure until the bulbs separate. Press each separated bulb with the flat side of a knife until it gives. The skins can then be easily removed.

Allicin, the active healthful ingredient in garlic, is released when garlic is pressed or crushed. The health benefits of this compound can be deactivated by cooking. One way to retain the benefits of allicin is to let chopped or crushed garlic rest on the cutting board 10 minutes before cooking or heating.

Garlic can be used raw in salads, as topping on pizza, or in recipes like those on this page. Toss into casseroles, soups, gravies or sauces. Add to mashed potatoes or cauliflower, spread on corn on the cobs or mix into dips, hummus or sandwich spreads.

Roasted garlic is a crowd pleaser.

To prepare, preheat oven to 400° F. Cut off the tip of the garlic so heads are exposed. Place, unpeeled, on aluminum foil and drizzle with 2 tsp olive oil. Fold the foil and close the top. Bake about 45 min or until fork tender. Cool 10 minutes. Grab the bottom of the bulb and squeeze to release the cloves.

Roasted garlic can be mashed and spread like butter to make garlic bread or spice up a sandwich. Refrigerate unused roasted garlic and use within 3 days.

You can freeze roasted garlic cloves by spreading in a single layer on baking sheet. Freeze until solid and transfer to airtight bag or container.

You can also mash roasted garlic and freeze in an ice cube tray. Then transfer frozen cubes to your container and keep frozen until ready to use. Frozen cooked garlic is best if used within 3-5 months but will be safe to use for up to a year.

REFERENCES

EatingVibrantly.com
Health.clevelandclinic.org
Health.harvard.edu
Mayoclinic.org
Ncbi.nlm.nih.gov
Nccih.nih.gov
Nutritionfacts.org

CAUTIONS

- Garlic supplements do not show the same healthful benefits as whole, raw garlic
- Side effects can include body odor, heartburn or upset stomach. Some may have allergic reactions to garlic
- Although a great deal of garlic research exists, most studies are small or short-term
- Substituting garlic for your medications is not recommended
- Some people may experience increased risk bleeding when consuming raw garlic
- Garlic can increase risk of bleeding if you are taking an aspirin regime, warfarin or other blood thinners
- Notify your healthcare professional of your garlic intake if you taking these medications or are preparing for surgery or dental work

Garlic Butter

Recipes adapted from *Eatingvibrantly.com*

Ingredients:

1 med avocado, mashed
1 clove garlic, minced
2 tsp fresh parsley, minced (or cilantro, mint, other herbs)
2 tsp melted coconut oil (optional)

Directions:

1. If using coconut oil, melt over bowl of warm water.
2. Mash avocado until smooth.
3. Mince garlic by chopping or using a garlic press.
4. Chop the parsley finely.
5. Add garlic and parsley to avocado and mix thoroughly.
6. Use as spread on bread or wraps, as a veggie dip, topping for baked potatoes or filling for pasta shells.
7. Store unused mix in fridge up to 48 hours.

Garlic Pesto

Ingredients:

1 bunch fresh basil
1 cup spinach
1/3 cup hemp seed hearts (or pine nuts)
2 cloves garlic (no need to chop)
1/4 cup nutritional yeast flakes
1/3 cup fresh lemon juice
6 tsp hemp or olive oil
3/4 tsp salt

Directions:

1. Add everything to the blender and process until smooth.
2. Use immediately or freeze in portions up to 6 months.
3. Mix on pasta, as dip or spread.

Oregon State University Extension Service offers educational programs, activities, and materials without discrimination based on age, color, disability, gender identity or expression, marital status, national origin, race, religion, sex, sexual orientation, or veteran's status. Oregon State University Extension Service is an Equal Opportunity Employer. This publication will be made available in accessible formats upon request by calling 541-572-5263 ext 25292. For information on accessibility, go to http://extension.oregonstate.edu/coos/coos-county-extension-accessibility.