

GARLIC



Allium sativum

[AL-ee-um sa-TEE-vum]

Family: Liliaceae

Names: ail commun (French); Knoblauch (German); knoflook (Dutch); ai, aglio (Italian); alho (Portuguese); ajo común (Spanish); vitlök (Swedish); tshesnok (Russian); suan, da suan (Chinese); Rasona (Sanskrit); Lasan (Hindi); ninniku (Japanese); toum (Arabic); Ail De Cuisine, Bawang Poetih, Bawang Puteh, Cropleek, Cultivated Garlic, Hsiao Suan, Lai, Lasan, Poor Man's Treacle, Rosina, Samersaq, Sarimsak, Sir, Suan, Thum

Description: Grows in grasslike clumps with a height of 1 foot and a width of 6 inches. The flowers are small, rose-white or green-white, clustered in 3-4 inch globes, on tall stems rising from the underground bulb. The leaves are thin, narrow, flat, gray-green, straight, pointed. The fruit are small black seeds, although small

bulbs may also develop and can be planted. The bulbs are globe-like, containing 8-20 individual cloves, surrounded by a white, sometimes pink, paperlike covering. Blooms from June to July

Cultivation: An annual germinating in 1-3 weeks. Space 6-10 inches apart. Prefers rich soil with a pH of 4.5 to 8.5 and full sun. Heat develops the best flavor. Plant seed in the fall. Plant individual cloves with pointed ends up, in early spring or fall in areas where the ground does not freeze. Outer cloves produce the best quality. Planted in March, they will be ready to harvest in July or August. Harvest after the blooms die down, then sun-dry for a day. Garlic brands hanging on the wall are an attractive and handy way to store them. Soak the long stems in water for a few hours, then tightly braid a few bunches together. Flowers that hold their shape when they dry (like statice) can be braided in too for decoration.

History: Garlic's common name describes its leaves and use from the Anglo-Saxon *gar* (lance) and *leac* (leek or pot-herb). Grown in the Mediterranean and central Asia for centuries, garlic was widely used as medicine by the ancients. It was found in King Tut's tomb and was eaten for endurance by the slaves who constructed the great Cheops pyramid. Garlic was placed by the ancient Greeks on the piles of stones at crossroads as a supper for Hecate while garlic and onion were invoked as deities by the Egyptians at the taking of oaths. Among the ancient Greeks, persons who partook of it were not allowed to enter the temples of Cybele. The East Indian herbalist Charaka said in the first century A.D. that garlic would be worth its weight in gold, if it weren't for its smell. Garlic has been used by rich and poor alike through the years to keep away disease, evil spirits, moles and racing competitors. It was a main ingredient in the

“Four Thieves Vinegar” used by 4 Marseilles thieves who confessed that “garlek” protected them while they robbed plague victims’ bodies. There is a superstition in some parts of Europe, that if a morsel of the bulb be chewed by a man running a race it will prevent his competitors from getting ahead of him and Hungarian jockeys will sometimes fasten a clove of garlic to the bits of their horses in the belief that any other racers running close to those baited, will fall back the instant they smell the odor. In the early 18th century, it was used by French priests to protect themselves from a highly contagious fever in London’s poor sections. European doctors in World War I and World War II applied sterilized swabs of sphagnum moss and garlic to dress wounds and prevent gangrene.

Constituents: allyl sulfide, allicin, alliin, enzyme alliinase, Vitamins A, B1, B2 and C, nicotinic acid, thiamin, riboflavin, minerals (magnesium, phosphorus, potassium)

Properties: yang tonic and a stimulant, diuretic, alterative, digestant, carminative, expectorant and parasiticide, antiseptic, anti-microbial, diaphoretic, cholagogue, hypotensive, anti-spasmodic, anthelmintic, anti-catarthal, pectoral, rubefacient, vulnerary

Energetics: spicy, hot

Meridians/Organs affected: lungs, kidney, spleen, stomach, colon

Medicinal Uses: It stimulates metabolism, and is used both for chronic and acute diseases; has both tonic and alterative properties; counteracts lower back and joint pains, arthritis and rheumatism. It also treats weak digestion, genito-urinary diseases, lung and bronchial infections and mucous conditions. In Ayurveda it is considered a rejuvenative for both kapha (water) and vata (air). Garlic cloves may be taken internally both as a preventative and as a treatment for all intestinal worms. Blend with a little sesame or olive oil, it may be used externally. However, its strong odor may repel humans as well as parasites. A single dose is

three to five cloves in infusion or taken raw. This is repeated three to six times a day until the problem is resolved. Garlic is good for amoebic dysentery. Enemas of garlic are also helpful. It is an effective antibiotic for staphylococcus, streptococcus and salmonella bacteria and is effective against bacteria that are resistant to standard antibiotic drugs. It is a good antifungal for the treatment of *candida albicans* yeast infections. For the treatment of pinworms, it should be made into a paste with olive oil or the bruised clove inserted directly into the rectum. For vaginitis and leucorrhoea, one or two bruised cloves wrapped in muslin are inserted into the vagina. As an oil or vinegar, it can be used to treat ear and mouth infections. Researchers noted some success in treating deep fungal infections, whooping cough, lead poisoning, and some carcinomas. Even appendicitis was improved in a number of studies. Studies of factory workers found that garlic not only detoxified harmful levels of lead from the blood, it seemed to prevent its accumulation in the first place. Subjects who ate garlic for six months found that their “bad” LDL cholesterol and triglyceride levels went down, while their “good” HDL cholesterol levels increased. Garlic also helps normalize systolic blood pressure levels and can sustain them up to 24 hours. Many cultures turn to garlic to control mild diabetes. The natural killer cells of the immune system are dramatically activated by garlic. The fresher the garlic, the better it works. Garlic oil capsules work better than dried garlic powder.

Combinations:

Microbial infections: Echinacea

Dosage: a clove should be eaten three times a day or use garlic oil capsules taking 3 once a day as a prophylactic or three times a day when an infection occurs.

Homeopathy: Homeopaths use *Allium sativum* for colitis, tuberculosis, painful constipation, bronchitis, painful breasts, and skin eruptions during the menses. The remedy is more effective for meat eaters than for exclusive vegetarians.

TCM: Expels internal cold and internal dampness.

Indications: hookworm, pinworm; diarrhea and dysentery; tuberculosis; coughing fits; external application to early stages of abscesses and ringworm on the head; internal cold and internal damp symptoms.

Dosage: fresh cloves: 3-5 per day; taken raw in food, or in capsules. External: puree of fresh garlic cloves can be applied to abscesses as an antiseptic and healing agent, also to ringworm on the head; for athlete's foot, apply liberally to infected area and wrap well with a clean, dry cloth for 1-2 hours, then remove and wipe away excess garlic with dry cloth.

Contraindication: excessive use of garlic is said to be harmful to the eyes, cause dizziness, and scatter energy; it is said to cause ascending fire energy

Incompatible: honey

Flower Essences: For those who are fearful, weak or easily influenced, prone to low vitality. Garlic flower restores wholeness for such souls, helping them to consolidate and unify the astral body, and to bring it into greater harmony with the physical and etheric bodies and the spiritual ego.

Aromatherapy:

EXTRACTION: Essential oil by steam distillation from the fresh crushed bulbs.

CHARACTERISTICS: A colorless to pale yellow mobile liquid with a strong, unpleasant, familiar garlic-like odor

USE: Due to its unpleasant and pervasive smell, the oil is not often used externally. However, the capsules may be taken internally for respiratory and gastro-intestinal infections, urinary tract infections such as cystitis, heart and circulatory problems, and to fight infectious diseases in general. The oil is made into capsules and also included in many health food products mainly to help reduce high blood pressure and protect against heart disease. Extensively employed as a flavor ingredient in most major food categories.

Toxicity: Pregnant women should use in small amounts as garlic is a mild emmenagogue. Large doses occasionally cause indigestion and some reports claim they make the eye more sensitive to light.

Ritual Uses: In the home, braids of garlic guard against evil, repel thieves, and turn away the envious. And of course, garlic protects against vampires. It is a very effective blessing for new homes. Garlic cloves were once placed upon cairns, small piles of stones heaped at the intersections of paths and roads, in order to give honor to Hecate. Moslem lore holds that garlic and onion rose from the spots where Satan's feet first touched the earth. Garlic was treated by the Egyptians as divine, and was included in oath-taking. Homer believed that Ulysses used garlic when he and his men escaped from Circe's anger. It may be included in ritual breads eaten in Hecate's honor.

Cosmetic Uses: Rich in alkaline salts and sulphur compounds, garlic is a blood purifier and keeps the skin clear of spots and pimples. The juice added to warm lard or olive oil and applied to a spotty skin or where there is soreness, will bring about rapid healing.

Recipe: Break up a bulb into several cloves and place in a saucepan with 1 lb of lard and heat gently for 30 minutes. Leave for several hours after turning off the heat, then add ½ oz beeswax and slowly reheat. Remove the garlic cloves and pour into screw-top jars to solidify. Use as a nightcream.

Other Uses: Research shows that garlic sprays kill cabbage white and ermine moth, onion fly larvae, mole crickets, pea weevils and field slugs and deter aphids and Japanese beetles.

Bug Formula: 3 oz garlic, chopped, 2 tsp mineral oil, 1 pint water, 1 oz oil-based hand soap, water to dilute

Soak garlic in oil for 1 week. Then dissolve soap into water and mix in the garlic oil. Strain out garlic. When ready to use, dilute 1 part in 20 parts water and spray on plants.

The soap can be replaced with ½ oz of liquid all-purpose, bio-degradable soap.

Culinary Use: One of the most popular flavoring herbs in the world, garlic is incorporated into butters, vinegars, salts, dried seasoning, salad dressings, soups and main dishes. The Chinese even prepare a honeyed garlic. Fresh cloves have the best flavor. Peeling garlic is a simple task. To peel just a few cloves, place the flat side of a heavy knife over a clove and rap your fist smartly down onto the blade. You can then easily slip off the skin. You'll learn quickly just how much force to use—too much and the garlic is mashed; you just want to break the seal of the skin. To ensure ending up with a whole perfect clove, simply nip off the ends of the clove and strip away the peel with the knife edge. To peel several cloves at a time, drop the unpeeled cloves in boiling water for 30 seconds, rinse under cold water, drain, and peel the skins off easily. One clove of garlic will yield approximately one teaspoon minced. To mince garlic peel the clove and then lay it on your working surface. Slice it into pieces and then chop until you have achieved the size mince you wish. When you want to soften cloves so they are easier to crush, sprinkle on a little salt. Avoid powdered garlic, which has rancid undertones. When you cook with garlic, the amount of medicinal properties left corresponds to how strong it tastes.

Fresh garlic may be creamy white or have a purplish-red cast and it should be plump and firm, with its paperlike covering intact, not spongy, soft or shriveled. Fresh garlic keeps best in a cool, dry place with plenty of ventilation. It should not be refrigerated unless you separate the cloves and immerse them in oil, either peeled or unpeeled. If the garlic isn't peeled, the cloves will hold their firmness longer, but peeling will be more difficult. Fresh garlic which is held in open-air storage for any length of time will lose some of its pungency and may even develop sprouts. The garlic is still usable, but will be somewhat milder and more will be needed to achieve the

same strength of flavor in a dish being prepared.

In India it is eaten by everyone except by very puritanical sects who fear its reputation as an aphrodisiac, or by strict vegetarians who believe that in uprooting a garlic bulb from the ground they may accidentally kill an insect.

Recipes:

Rosemary and Garlic Burgundy

4-5 sprigs of rosemary

4 cloves garlic, peeled and halved

1 ½ cups Burgundy

Place rosemary and garlic in a 1 pint jar. Pour wine over and cover. Store in a cool, dark place for at least 2 weeks before testing flavor. Use ½ cup with 3 Tbsp olive oil, 1 Tbsp lemon juice and 1 tsp freshly ground black pepper as a marinade for beef. (Herbed-Wine Cuisine.)

Indonesian Chicken with Garlic and Peanut Butter Sauce

3-4 lb frying chicken

2 Tbsp peanut oil

1 small onion

3 large garlic cloves

1 tbsp soy sauce

juice of ½ lemon

2 tsp sambal oelek

1 cup warm water

½ cup smooth, natural peanut butter

Cut the chicken into serving pieces. Sauté it in a large skillet, in the oil, over moderately high heat for 15 minutes, turning frequently. Remove the skillet from the heat and transfer the chicken to a platter. Finally mince the onion and garlic and sauté them in the chicken skillet, over low heat, for 5 minutes. Add the soy sauce, lemon juice, and sambal to the skillet. Stir well and cook for 55 minutes. Add the water and peanut butter to the skillet and stir well to make a smooth sauce. Return the chicken to the skillet and cook, covered, over moderately low heat for 20-30 minutes. Stir occasionally to prevent the sauce from sticking. Transfer to a heated serving platter and serve immediately. (Cooking with Herbs)

Garlic Rosemary Potato Chips

3 lbs potatoes, scrubbed but do not peel
8 cloves garlic, peeled & put through a press
4 Tbsp fresh rosemary leaves
½ cup olive oil
salt & coarse grind black pepper

Cut the washed and scrubbed potatoes into ¼" thick slices. Into a food processor, put the garlic, rosemary and olive oil. Pulse on & off to chop the rosemary and garlic finely. Line a baking sheet with foil and brush lightly with the rosemary flavored oil. Then lay the potato slices in one layer on top of the foil. Brush again with the rosemary-garlic oil. Sprinkle with salt & pepper. Turn and do the same thing to the other side. Bake in a 350 degree oven for 15 minutes – turn the potatoes and bake until they are lightly browned. Remove from oven and drain potatoes on paper towels. Serve while still warm. (Mad for Garlic)

Earthy Garlic Soup

2 heads garlic
8-10 oz day-old country style white bread
1 Tbsp olive oil
kosher salt and freshly ground pepper
1 Tbsp chopped, fresh flat-leaf parsley

Separate the garlic cloves and smash, peel and coarsely chop them. Remove and discard the bread crusts, and cut the bread into 1-inch pieces. Put it in a saucepan with the garlic and 5 cups water. Cover and bring to a boil. Reduce the heat to a simmer, and cook for 20-30 minutes, until the bread starts to disintegrate. Transfer the mixture to a food processor. Add the olive oil and process until smooth, about 2 minutes. Season to taste with salt and pepper, garnish with parsley and serve hot. (Tonics)

Garlic Ice Cream

3 (750 ml) cups whole milk
½ tsp (2 ml) finely chopped garlic
1 vanilla bean, split in half
1 cup (250 ml) heavy cream
1 ½ cups (375 ml) sugar
9 egg yolks

Put milk, garlic and vanilla in a saucepan. Bring to a boil and remove from

heat. Blend the cream, sugar, and egg yolks in a mixing bowl. Strain the scalded milk into the egg and sugar mixture, stirring constantly. Return the combined mixture to the pan and stir continuously over moderate heat until it coats the back of a spoon, about 10 to 15 minutes. Cool in an ice bath and freeze until firm. Serves 4 to 6.

Brie Baked with Garlic

2 whole heads garlic
¼ cup olive oil
2 lb wheel Brie cheese, or 4 small wheels (4 ½ oz each), chilled
½ cup whole Greek olives, pitted and quartered
4 tsp parsley, finely chopped
apple wedges or warm French or sourdough bread

Place whole garlic heads in a heavy saucepan. Add oil. Cook and stir over medium heat for 5 minutes. Cover and reduce heat to medium-low for 15 minutes, or until garlic is soft. Remove garlic and drain on paper towels. Cool. Preheat oven to 400 degrees. Carefully slice the thin rind off one of the flat sides of the Brie and place on a baking sheet, cut side up. Separate and peel the garlic cloves. Make parallel slices in each clove, being careful not to cut through the root end. Gently press cut cloves into fans. Arrange garlic fans and olive pieces on top of the cheese. Bake, uncovered for 10-12 minutes, until Brie is warm and slightly softened. Sprinkle with parsley and carefully transfer to a plate. Serve with apple wedges or sliced French bread. (The Wild Onion Cookbook)

For cats: Tigger's Tomato & Turkey Jerky

1 lb ground turkey
2 Tbsp tomato paste
½ tsp garlic powder
2 tsp brewer's yeast

Preheat oven to 120F or the lowest setting. Combine all the ingredients and mix well. Line a jelly roll pan with foil and spread the meat mixture in it. Using your hands flatten the mixture to about ¼" thick. Place the meat in the oven and prop the oven door open a crack using a wooden spoon, so the moisture

can escape. Bake for about 2 hours, until the meat is quite dry. Remove the meat from the oven and place another sheet foil over it. Grasping both sheets of foil, flip the meat over and peel the foil from the top. Place the meat back in the oven with the door propped open, and bake for another 1-2 hours. The meat will be red and dry, like jerky. (Cat Nips! Feline cuisine)

Dog Biscuits

2 Tbsp margarine, lard or bacon fat, softened
1 tsp brown sugar
1 egg, slightly beaten
½ cup dry milk powder
½ cup chicken broth
1 cup all-purpose flour
1 cup whole wheat flour
½ cup wheat germ
½ tsp salt
8 large cloves of garlic, crushed

Cream margarine and brown sugar in mixer bowl until light and fluffy. Beat in egg, dry milk and broth. Add flours, wheat germ and salt; knead until soft dough forms. Shape into a ball. Let stand, covered, for 30 minutes. Roll ¼ inch thick on lightly floured surface. Sprinkle with garlic; pat lightly into dough. Cut with 3-inch bone-shaped cookie cutter. Place on lightly greased baking sheet. Bake at 325F for 30 minutes or until browned and crisp. Cool on wire rack. Store in airtight containers. (Along the Garden Path)

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