



Garlic ~

An Ancient Love Story

It may be difficult to keep one's love affair with Garlic a secret! Take comfort in knowing that at least your heart (if not your friends) will thank you!

Whether your interests in **Allium sativum** are merely culinary or if you're one of the increasing numbers who use garlic for its many medicinal properties, don't be put off at first whiff. At least 2,500 credible scientific studies demonstrate the numerous health benefits of this much maligned bulb. The hardy perennial belongs to the Lily family, as do its close relatives - onions, leeks, shallots and chives. And you felt badly about your family.

This Lily is no Rose...

Garlic contains at least four times more smelly sulfur than any other high sulfurous vegetable such as onions, cauliflowers and cabbages. Whew! Crushing a single fresh clove releases an explosion of 33 sulfur-containing compounds into your nostrils. One of these volatile compounds converts into Allicin, which accounts for most of the bulbs' medicinal value and, unfortunately most of its odoriferous reputation.

When garlic is heated during cooking, the Allicin is liberated into the air taking with it many of its medicinal properties if not its smell and taste. To get the most out of your buds, try adding garlic at the end of cooking or eat it raw in salads, cold soups, dressings, or as a garnish. A friend of mine chops up several cloves in little pieces and swallows the handful with a glass of water at bedtime. And he doesn't have to call me in the morning. Which brings me straight to garlic breath. You can sweeten yours by chewing fresh parsley, mint, cardamom seeds, or citrus peel.

For the faint hearted, several supplement producers offer odourless tablet versions. The top selling brand of garlic supplements is the Kyolic line which offers several combinations of deodorized aged garlic extracts.

A little ancient history...

A least three or four millennia ago, the Romans, Greeks, Chinese, and Egyptians were aware of the medicinal value of the odiferous lily. Ancient Egyptian papyrus dating about 3,500 years ago bear witness to no less than 22 different conditions treated with garlic! Likewise there are references to garlic in Chinese texts from over 4,500 years ago stating its use for enhancement of vigour and for the treatment of several ailments.

Over a century and a half ago, scientists began looking in earnest into all of this "folk wisdom". In 1858, Louis Pasteur confirmed that garlic could indeed kill bacteria.

During World War I, British field workers applied garlic juice to wounds in the form of compresses to prevent infections. Modern studies have proven its effectiveness as not only a powerful anti-biotic but a useful anti-viral, anti-inflammatory, and anti-fungal remedy.

Moving forward in time to 1983, a breakthrough study demonstrated that garlic oil was effective in inhibiting skin cancer cells in laboratory mice. More recently, many studies have shown that several of the sulfur compounds found in garlic, diallyl sulfide (DAS), diallyl disulfide (DADS), and diallyl trisulfide (DATS), inhibits tumour cell growth all the while stimulating healthy immune cells.^{1,2}

Garlic, a modern “panacea”...

The bulb of many splendours is loaded with antioxidants and offers cellular protection from heavy metals and pollutants that assault us on a daily basis. In modern Germany garlic is prescribed for reducing LDL cholesterol and triglycerides and for diminishing the risk of blood clotting from platelet aggregation. The clumping together or “aggregation” of sticky substances in the blood known as “platelets” is closely linked to heart disease and strokes. Annual German sales of one brand of garlic supplement exceed \$40 million. In certain parts of China, people eat about 20 grams of garlic a day- that`s about 8 medium cloves! In the U.S., garlic is the second best-selling herbal supplement after Echinacea.

Recent research has shown that it can support the body in dealing with yeast organisms such as *Candida Albicans* making it an important contender in the fight against yeast infections and thrush. Because research backs up garlic`s potential to stand up against a host of heavy hitting bacteria such streptococcus, staphylococcus, and cryptococcal meningitis, it`s also useful in dealing with allergies, sore throats, and infections of the bladder and urinary tract.

Whether you indulge for the delight of your taste buds or for the love of your heart. Whether it`s your paramour or your panacea, this is no unrequited love. Garlic is guaranteed to love you back in spades!

References:

1. Garlic and its significance for the prevention of cancer in humans: a critical view

E. Dorant, P.A.van den Brandt, R.A. Goldbohm, R.J.J. Hermus & F. Stermans

Department of Epidemiology, University of Limburg, PO Box 616, 6200 MD Maastricht; Department of Nutrition, TNO Toxicology and Nutrition Institute, Zeist, The Netherlands. Summary Recently published results of epidemiologic case-control studies in China and Italy 1993
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1968250/pdf/brjcancer00205-0016.pdf>

2. Allyl Sulfides Inhibit Cell Growth of Skin Cancer Cells through Induction of DNA Damage Mediated G₂/M Arrest and Apoptosis

Hsiao-Chi Wang[†], Jen-Hung Yang[‡], Shu-Chen Hsieh[†] and Lee-Yan Sheen^{*†}

[†] Graduate Institute of Food Science and Technology, National Taiwan University, No. 1, Sec. 4, Roosevelt Road, Taipei 106, Taiwan

[‡] Department of Dermatology, Chung Shan Medical University Hospital, and School of Medicine, Chung Shan Medical University, No.110, Sec.1, Jianguo North Road, Taichung 402, Taiwan

Journal of Agricultural and Food Chemistry, 2010, 58 (11), pp 7096–7103

<http://pubs.acs.org/doi/abs/10.1021/jf100613x>