The many forms of garlic

(excerpted from *The Healing Power of Garlic* by Paul Bergner, Prima Press, 1995)

Here I'll tell you how to make and use thirty-six different garlic forms at home. We'll see that the most effective products for acute illnesses, such as colds, flu, infections, or asthma, are raw garlic and do-it-yourself forms like garlic soaked overnight in wine, or garlic tea.

You can get a 50 minute lecture recording on this material, with more details of how to apply them and some cases by digital download through the online store at North American Institute of Medical Herbalism (http://naimh.com)

Making your own

The very best products in terms of strength, quality, and expense are those you make yourself. Making your own removes any guesswork about the strength of the medicine, and you can make forms more effective than any available commercially. Before using any of the home-made preparations here, be sure to read Chapter Thirteen on garlic's side effects. Garlic can cause skin burns, and the preparations here that go directly on the skin or in any orifice could cause them.

Allicin in home-made products

As we saw above, cutting garlic sets off a biochemical reaction that produces allicin, which gives cut garlic its sharp biting taste and has strong antibiotic properties. Over the next twenty-four hours at room temperature, the allicin begins to form a number of other compounds, all of which also have medicinal properties. By the end of a day or two, all the allicin is converted to its by-products. This means that by making your own forms, you can:

- Prevent exposure of the product to allicin-destroying heat used in some commercial processes.
- Crush the cloves, mix them with a liquid, and use them immediately for very high allicin content.
- Let crushed or blended cloves sit in water, vinegar, or wine for three to six hours to create a "soup" of many garlic constituents, including much of the original allicin. In many of recipes below, you'll see I recommend waiting from three hours to overnight before using the preparation.
- Let them soak and age for two or three days to eliminate the allicin and many of the irritating effects of garlic, but without the high heat used in commercial oils that yield similar end products. The three-day-old brew is fresher and more potent than anything available in the store.
- Soak crushed cloves in oil to yield constituents not present in raw garlic or in most commercial products.
- Make your own powder with low-temperature drying of garlic slices, ensuring a high allicin content. This home-made powder can be put in gelatin capsules or made into honey-pills

A connoisseur's garlic cocktail

Different solvents extract and promote specific chemical reactions between the constituents of garlic. Water, vinegar, alcohol, and oil each draw specific constituents out. Alcohol and water, for instance, is the best solvent to extract allicin. Soaking crushed garlic in oil promotes the production of ajoenes and dithiins, important blood-thinning constituents of garlic. Note that ajoene does not exist in raw garlic, but is produced from allicin after garlic is cut. My garlic "cocktail," then, is as follows.

Three cloves of garlic

1 Tbls of red wine

1 Tbls of vinegar

1 Tbls of olive oil

Blend well in a blender.

Add 1/4 cup hot water.

Let stand for 3 hours. Do not strain. Add one-third of this to a cup of hot water. Take another dose every 3-6 hours until it is all gone.

On paper this sounds a little like drinking salad dressing, but I find this to be a pleasant stimulating tonic with a sharp taste. Raw garlic cloves upset my intestines, but this does not.

Raw garlic

Raw chopped or crushed garlic is the strongest form available. Some ways to take it, ranging from hot to mild are:

- Chew up a clove and swallow it -- beware, very hot, may cause gag reflex
- Blend a clove in a cup of water or milk and drink it.
- Blend it up in a half cup of carrot juice.
- Blend it in a small amount of aloe vera gel.
- Put the chopped or crushed clove in a cup already-cooked soup or rice, and eat it.
- Try Dr. Subhuti Dharmananda's recipe for raw garlic: Squeeze the juice of one lemon; peel and cut in half three large or five small cloves of garlic, combine this with one cup of water, add a little powdered or fresh ginger and some honey, and blend it until the garlic has been pulverized. Drink the whole thing at once.

Chest rub

Separate the cloves from a bulb of garlic, chop them up in a blender with a whole onion, and wrap the resulting mixture in a piece of cheesecloth. The cheesecloth will get soaked in the garlic oils. With the garlic still inside, massage the chest with the garlic-moist cloth.

Chest plaster

Blend up 5-8 bulbs of garlic. Spread this as a layer on a piece of cheesecloth, and place it, cloth side down, on the chest. Cover with a heavier cloth, and then with blankets. Put a hot water bottle on top of the poultice under the blankets for added effect. This is a traditional remedy for chest colds, bronchitis, or pneumonia. Don't leave this in place for more than twenty minutes, and remember that some skin is very sensitive to garlic.

Cooked garlic

Cooked garlic is quite effective as a circulatory tonic. In fact, garlic's blood-thinning properties were first discovered in residents of India who took it cooked in their food. Some researchers think that cooking or heating forms new beneficial constituents in garlic that reduce the body's allergic reactions and pain response. The most traditional way to take cooked garlic is fried. Chop the garlic finely, and saute in a small amount of oil. After two minutes or so, add vegetables or other ingredients of a stir fry, and cook lightly.

Compress (cold)

Blend three garlic cloves in a quart of cold water. Dip a cloth in this and put on the affected area. Let it stay in place until the heat of the body warms it up, usually about fifteen minutes. Repeat if desired. This is a great treatment for sunburn. You may also make a cold compress from cold garlic vinegar, described below. For a small compress, soak a cotton ball in garlic infusion, oil, or vinegar, and hold it in place with a band-aid or tape.

Compress (hot)

A compress has many of the benefits of a poultice, but is less irritating. The water of a compress can also penetrate into areas that a poultice can't reach, such as between the toes, or into the cracks of a fungal infection. Blend three to six cloves of garlic in a pint of hot water. Add this to a pint of boiling water, turn off the heat, and let it cool for a few minutes to a tolerable temperature. Soak a cloth in this, and apply directly over the area to be treated. Add more hot garlic-water to the cloth from time to time to keep it hot and wet. This may be especially effective for a fungal infection. The antibiotic and antifungal properties of garlic are lost within twenty minutes at high heat, so use it as soon as possible after adding it to the boiling water.

Decoction

Blend or finely chop three cloves of garlic, and simmer in a covered pan on the lowest possible heat for twenty minutes. Keep covered and let sit until room temperature. This heating transforms all the allicin in the garlic into its sulfur-containing byproducts. This reduces irritation. Some researchers say that boiling garlic creates the set of sulfur compounds that can dilate the bronchi in asthmatic individuals, and act as a decongestant, cough medicine and mucus regulator. A garlic decoction is a traditional treatment for asthma.

Douche

Blend three cloves of garlic very well in three pints of warm water. Strain through clean cloth. Add two tablespoons of apple cider vinegar. Retain the douche for twenty minutes if possible.

Enema

Blend up two cloves of garlic in warm water. Administer with a bulb syringe for children. Dr. Chris Deatherage of Missouri says this will clear up pinworms with one or two treatments. It is also useful for influenza and fevers. The garlic constituents are absorbed directly into the bloodstream.

Foot poultice

Place skinned garlic bulbs in a hot wash cloth, and crush well. Lightly oil the bottom of the feet with olive or almond oil. Place the wash-cloth poultices over the bottom of each foot, and cover each with a sock. Add a hot water bottle, hot wet compress, or massage the feet vigorously for stronger action. In ten to fifteen minutes, the feet will feel hot, and the acrid scent of garlic will appear in the throat, as the garlic constituents are absorbed through then skin and excreted through the lungs. Remove within 25 minutes to prevent burning the skin. Be cautious about skin burns from this treatment.

Foot bath

Blend up to six cloves in a pint of hot water, and let it sit for an hour. Put the feet in a small tub large enough to cover the feet up to the ankles, in water as hot as you can stand it. Add the blended garlic cloves and water. Add more hot water as necessary to keep the bath hot. Soak the feet for fifteen minutes. This will treat fungal infections, and also the entire system, much like a foot poultice. This is an excellent tonic treatment for fatigue.

Infusion

Blend or chop three cloves of garlic. Put in the bottom of a quart canning jar, and add a pint of hot (not boiling) water. Cover with an airtight lid, and let sit overnight, or until room temperature. Strain the liquid. Use within twelve hours.

Inhaler

Crush a clove of garlic and wrap inside a small piece of cotton cloth or cheesecloth. Hold it under the nostrils for sinus infections, head colds, or bronchitis. The aromatic sulfurous substances penetrate into all areas of the upper respiratory tract.

Juice

Juice a bulb of garlic in a centrifugal juicer. Chop the cloves well (it's OK to leave the skins in the chopped up mash.) Drink it immediately, either straight or mix with carrot juice. Let the juice age for three days to reduce irritating properties.

Nose drops

Crush some garlic to obtain the juice, or use a centrifugal juicer. Add ten parts water and mix well. Use this as nose drops to prevent colds and flu during epidemics. This is a remedy from rural China.

Oil #1

Blend up three to eight entire garlic bulbs in a blender. Chop them well if you don't have a blender. Put the blended garlic in a quart jar and cover with olive oil. Shake it well. Keep it in a warm place for three days, turning the jar from time to time to mix the oil and the garlic. Strain through a cloth. Store in a cool place. Garlic oil is great for earaches. Be sure to warm the oil before putting it in the ear. The oil can also be used to taste on salads or stir fries (Add after cooking).

Oil #2

As above, blend up three to eight garlic bulbs in a blender. Cover with almond oil. Let it sit as above in a warm place for three days. Strain through cloth and add one-third part of glycerin (available from a pharmacy). Store in a cool place.

Oil spread

In the evening, chop one or two garlic cloves with parsley, then crush the mixture with a fork or the edge of a knife. Add enough olive oil to cover it. The next morning for breakfast spread the resulting paste on bread as if it were butter. Sitting overnight in the oil reduces some of the sharp taste.

Poultice #1 (See also Foot poultice above)

For a small poultice, first put petroleum jelly or oil lightly on the are to be treated, to reduce the likelihood of irritation. Place well-crushed garlic on a piece of gauze and put it directly on the skin. Hold it in place with tape or a band-aid. Cover with a hot wet cloth, keeping it hot as necessary, for stronger action. Remove after 15-25 minutes. Caution: if left in place too long, this can blister the skin. For longer term application, try a cold compress of garlic oil or vinegar (see above).

Poultice #2

For a larger area, chop an appropriate amount of garlic. Place it on half of a wash cloth or dish towel. Fold the other half over it. Crush the garlic thoroughly inside the cloth. Open the cloth and spread the garlic evenly in the center, and place this over the area to be treated, with the garlic against the skin. Hold in place with a bandage or tape. Cover with a hot water bottle or heating pad for stronger action. Never leave in place more than twenty-five minutes.

Poultice #3

Chop the garlic and mix it with dried chamomile flowers. Add a little hot water as necessary to hold the herbs together. Spread this directly on the area to be treated, cover with a cloth, and secure in place. This poultice is not as irritating as straight garlic. Apply heat for stronger action. Remove in 15-25 minutes.

Sitz bath

Blend or finely chop a bulb of garlic and pour a quart of boiling water over it. Let it stand for several hours or until it is at room temperature. Find a tub just big enough to sit in. Fill it with enough hot water to cover you just up to the hips, submerging the anal and genital areas. Add the quart of garlic water, along with the blended garlic. Sit in it for ten minutes. This treatment may be helpful for hemorrhoids, vaginal infections, or other skin problems in the genital area.

Suppository #1

Peel the paper-like skin off a clove of garlic. Be careful not to nick the clove, which can release irritating substances. Coat the clove in olive oil and insert it in the vagina or rectum. Keep in place overnight while sleeping.

Suppository #2

Prepare the garlic clove as above, but wrap it in gauze dipped in olive oil. Secure the gauze with thread, and thread a tail on it, like a tampon. This may be more convenient than suppository #1 for vaginal use.

Suppository #3

Mix powdered garlic with melted cocoa butter until it has a thick mud-like consistency. Let it cool in the refrigerator. Press or roll it into a sheet 1/4 to 1/8th inch thick. Cut into thin strips about an inch long. The final product should be about as big around as a cigarette, and about a third as long. Store in the refrigerator, but let it warm to room temperature before use. Once the suppository is inserted, the cocoa butter melts with the body heat, releasing the garlic.

Syrup #1

Chop, slice, or blend ten to twelve garlic bulbs at a time (use a food processor if you like). Place the garlic in thin layers in a jar, alternating it with layers of sugar. Fill up a half gallon jar with the layers. Let this steep for two days. You'll find that the sugar pulls the fluid right out of the garlic. No added liquid is necessary. Strain the juice through a cloth. This syrup is excellent for coughs, bronchitis, congestion in the lungs, colds, sore throats, laryngitis, hoarseness, etc.

Syrup #2

Chop or slice several bulbs of garlic, and place it in a clean glass jar. Cover with local raw unheated honey. Within a day the juice from the garlic will mix with the honey. Take the resulting runny syrup by the teaspoonful every half hour to hour for coughs, sore throats or congestion in the lungs.

Tincture

Finely chop a bulb of garlic and place it in a pint of grain alcohol, vodka, brandy, gin, or other high-alcohol liquor. Cover and let it steep for two to three weeks, turning and mixing it two or three times a day. Strain and store. The dose is thirty to sixty drops.

Vinegar

Peel, chop and crush a bulb of garlic, and put it in a quart of either red wine or cider vinegar. Let it sit for a week or two, and strain through cloth.

Wine

Blend one to three garlic cloves in three-fourths cup of wine. Let it stand 3 hours. Take tablespoon doses for a cold or flu or other infection every few hours. This was the antibiotic used by the Roman physician Galen to moisten the bandages of wounded gladiators and disinfect their wounds.

Steam

Blend a half bulb of garlic, or chop and crush it as thoroughly as possible. Place in a bowl, and pour a pint of boiling water over it. Cover with a bath towel, and put your head under the towel to inhale the steam. Be careful not to burn yourself!

The bottom line on forms

My recommendation on forms is to take them all! Eat cooked garlic regularly, and raw garlic occasionally. Take fresh or briefly aged garlic at the first sign of a cold and throughout its course. Take garlic foot baths, compresses, and plasters for acute illnesses or infections. Make garlic vinegars, wines, and syrups, and use them in with food or take them as tonics. If you have any disease related to atherosclerosis, or have cancer or are at risk for any of these, take garlic every day, the equivalent of a half to a whole clove minimum. The commercial forms might be easier to tolerate, but continue to take the other forms in your diet!

You can find a 50 minute lecture on this material, and a full-text copy of The Healing Power of Garlic by Paul Bergner, at the school store at http://naimh.com

Garlic forms and their constituents

Forms	Constituents and their properties			
	Allicin and related compounds	Sulfides and related compounds	Ajoenes Dithiins	Other
	All forms have some amount of immune stimulating, anti-cancer detoxifying, cholesterol-lowering, and blood-thinning properties			
	antibiotic	anti-oxidant	antibiotic	anti-oxidant
	blood-thinning	blood-sugar lowering	powerful blood-thinning	
	blood-sugar- lowering			
fresh chopped garlic	X			X
cooked garlic		X		X
fresh garlic juice	X			X
garlic juice (aged 3-24 hours)	X	Х		х
garlic juice (aged more than two days)		X		х
infusion	X	X		X
decoction		X		X
garlic wine (aged 3-18 hrs)	X	X		X
garlic wine (aged long term) or tincture		х		х
fresh garlic vinegar	X	X		X
fresh macerated garlic oil (aged 3-36 hours)	X	X	x	X
macerated garlic oil (some commercial oils)		small amounts	х	x
steam distilled garlic oil (most commercial oils)		X		X
garlic powder	X	small amounts		X
Kyolic				X