

## **Making Herbal Medicine** - Betzy Bancroft

One of the primary ways we take herbal medicines is in liquid form. That necessarily involves extracting the goodness of the plant - flavor, chemistry, essence - into a liquid. Essentially any herb can be extracted into any liquid, but there are several things to consider:

The liquid chosen will also be an important part of the medicine, and lend its characteristics to the extract.

- Teas (water extracts) are easy, appropriate for most everyone, pleasurable to drink if the herbs are tasty, but don't keep very long. Hot tea is also warming to the body and will increase the dispersive nature of aromatic herbs to break up congested phlegm and ease digestion.
- Herbal infused oils (vegetable oils) make excellent massage oils; you can use them on food, or warm the oil and add beeswax to make a salve. Vegetable oils will go rancid, so herbalists often use olive oil since it's more stable.
- Herbal vinegars (apple cider vinegar) have a reasonable shelf life, are non-alcoholic, extract a good range of chemistry, and good vinegar benefits the liver, digestion and overall health.
- Tinctures (alcohol extracts) are great for preserving fresh herbs, are an easier way to take strong-tasting herbs, and the dose can be finely measured. They have a long shelf life, can easily be combined in formulas as needed, and extract a wide range of plant chemistry.

There are other important variables to consider:

- Ground or chopped up herbs have more surface area and so more easily let their goodness out of their woody cell walls.
- The greater the proportion of herbs to liquid, the stronger the extract, to a point.
- Steeping or simmering the herbs for a longer period of time will also make your extract stronger.
- Shaking or stirring frequently will also increase diffusion of the plant to liquid.
- With fresh herbs, the water in the plant needs to be figured in to your recipe.

There are basically two ways to make tea (water extracts)

Infusion - Steeping herbs in water is the typical method for leaves and flowers - hot water will bring out more flavor from aromatic herbs like peppermint; keep the container covered while you are steeping to keep in the flavor. Cold water will bring out more mucilaginous qualities, like from marshmallow root. Generally use 1-2 heaping teaspoons of herbs per cup of water, and steep about 15 min for hot, 30 min for cold.

Decoction - simmering herbs in water brings out the qualities of more woody plant parts like barks and roots; cooking roots and mushrooms

in soup stock brings out the big carbohydrates that benefit the immune system. Generally use 1-2 level teaspoons of herbs per cup and simmer about 10 minutes, then steep 15 minutes. For soup stock, add a small handful of herbs per quart and simmer for at least an hour, preferably longer.

Teas can be kept in the refrigerator for a few days or frozen and decocted herbs can be re-brewed a couple times, till their flavor runs out.

For herbal infused oils, vinegars, glycerine extracts, wines, honeys or other liquids, steep about 1 part dried herbs to 4 or 5 parts (usually by weight, but volume is OK) liquid, or for fresh herbs 1 part herbs to 3 or 4 parts liquid, in a wide-mouth jar for 2-6 weeks. It is key that the liquid covers the herbs. Keep the jar in a warm place but not in direct sun. When it's as strong as you'd like, strain out the herbs through cheesecloth and bottle. Because water and oil don't readily mix, if you infuse fresh herbs into oil, such as plantain leaf, you'll need to separate the murky plant water from the infused oil after you strain it. If you get mold, separation or other funk, time to pitch it out. Infused oils can also be made into salve or cream.

Tinctures can be totally simple, like just covering ground herbs with liquor, or one can get more technical with the proportion of alcohol to water. Basically, if you have herbs with mostly alcohol-soluble chemistry (very aromatic, resinous, oily or many potent herbs with chemicals like alkaloids) or fresh herbs, particularly very juicy ones like cleavers, you'll need a higher percentage of alcohol to get a complete extraction with good shelf life. 20% alcohol is the magic number for stable keeping qualities. Be sure to label the jar and bottle.

Examples:

Non-aromatic or carbohydrate-rich herbs (dandelion, burdock, nettles, red clover, plantain, corn silk, hawthorn, horsetail, raspberry leaf etc.) can be extracted in 80 proof vodka or brandy if they are in dried form. If they're fresh, you may want a little more alcohol to be safe, like 100 proof vodka.

Somewhat aromatic herbs (echinacea, lemon balm, goldenrod, skullcap, st. johnswort, valerian, mugwort, motherwort, yarrow etc.) need a little more alcohol, so best to use 100 proof vodka, or if they are very fresh and juicy use  $\frac{1}{4}$  water to  $\frac{3}{4}$  part grain alcohol (190 proof).

For more highly aromatic, potent or very resinous herbs (bee balm, rosemary, pine needles, poplar bud, ginger, elecampane, angelica, calendula, sage, thyme, peppermint, lavender etc.) use 100 proof vodka or other spirit for dried herbs, and  $\frac{1}{4}$  water- $\frac{3}{4}$  grain alcohol or pure grain for fresh, juicy herbs.

Administration and dose

Teas can be taken regularly or as needed. For an acute illness like cold or flu, drinking tea frequently, like 6-8 cups per day of gentle herbs is most beneficial. For longer term use, 2-3 cups per day is ideal. Tea can also be used as a steam inhaled to loosen sinus congestion, a bath, rinse or soak, or a compress (dip cloth in tea, wring and apply to affected area).

Infused oils can be applied as massage oils, or more locally for injuries. Warm the oil and add about 1:4 proportion of beeswax to oil for a salve; melt the wax into the oil and pour into a wide mouth, shallow jar while still liquid.

Tinctures, vinegars and glycerites are usually taken as drops or percent of teaspoon mixed with water or juice. Vinegars and glycerites don't always need dilution. As with teas, more frequent, small doses are important for resolving acute issues, and steady 2-3 times daily use for chronic problems.

Young, frail, sensitive or elderly folks generally need smaller dosage than bigger, more robust folks. Also use extract concentration to gauge the dose. More concentrated = lower dose.

\*\*The above guidelines are general - for specific uses, doses and administration, please consult a good herbal written by an experienced herbalist.