WATER EXTRACTS

Infusions and Decoctions (Tea)
When making infusions and decoctions, the ratio of herb to water used is determined using the weight to volume method. When using fresh herbs, double the amount of herb used. Shelf life of herbal teas is 24 hours or less.

- **Infusion**: 1 part herb to 16 parts water (1:16) or 1 part herb to 32 parts water (1:32). Infuse herbs in freshly boiled water for 20 to 30 minutes, or as recommended. Keep covered while steeping. A cold infusion is also made using 1 part dried herb to 16 or 32 parts water; cover herb with cold water and steep for 6 to 8 hours or longer.
  Make an infusion when using delicate parts of plants such as leaves and flowers (especially aromatic plants).

- **Decoction**: 1 part herb to 16 parts water. Cover herb with cold water, bring to a low boil, reduce heat, cover and simmer for 15 minutes or as recommended.
  Make a decoction when using woody or leathery parts of plants such as roots, barks, seeds, resinous flowers and some types of leaves.

Methods for using water extracts include: tea; baths or foot soaks; vaginal douche; skin wash; fomentation/compress; soup stock; syrup.

Syrup
An herbal syrup is a decoction thickened with honey (or sugar). Make a standard decoction, strain out the herb(s) and discard. Continue to simmer the decoction until reduced by half. Combine the warm decoction with honey at a ratio of 2 parts decoction to 1 part honey, stir well and cool. Pour into a sterile glass jar in the refrigerator. Shelf life is 1 year or less. Discard if mold appears.

OIL EXTRACTS

**Herb Infused Oil**
Infused herbal oils are made with fresh or dried herbs steeped in high quality vegetable oil. Heat is needed to extract the herbs into the oil. Use a constant source of heat at 170 to 200°F such as an oven (2 to 4 hours), a double boiler (1 hour), in the hot sun (1 week), in a yogurt maker (5 days), in your car, on your water heater, etc. Fresh herbs should be allowed to wilt for several hours or overnight before processing. Dried herbs should be ground to fine powder.

After the herbal oils is done cooking, strain out the herbs by pouring infused oil through a muslin-lined colander, and pressing out as much oil as possible. Discard the herbs. Pour the oil into a sterile jar and allow it to sit, undisturbed, for 12 to 24 hours. Any water or herbal debris that remains in the oil will settle to the bottom. Carefully pour the oil into a sterile jar, leaving any water or debris behind. Store the oil in the refrigerator or a cool dark place. Try to store oils in a jar sized to leave as little air space above possible; this will reduce the chances of bacterial growth.

**Herbal Salves**
Salves are infused herbal oils, thickened and preserved with beeswax, and used topically to heal wounds, burns and skin abrasions, moisten dry skin or soothe a rash. The combination of oil and beeswax promotes healing by holding the medicinal properties of the herbs on the surface of the skin. Beeswax also acts as a preservative to extend the shelf life of the oil.
**Herbal Salves, Continued:**
Measure several ounces of herbal oil into a non-aluminum pan and warm it over low heat for several minutes. Do not leave the pan unattended or let it overheat. Add one teaspoon of grated beeswax for each ounce of oil used. Stir until the wax dissolves completely and then remove from heat. Test consistency of the salve by scooping up a spoonful of the mixture and allowing it to cool completely. To speed up the cooling, place the spoon on saucer in the freezer for a few minutes. When the cooled salve is firm, but not too hard to remove from the spoon, pour the mixture into small, sterile wide-mouth jars and cool completely. Shelf life is one to two years.

**Oil to Beeswax Ratio:** One teaspoon grated beeswax per ounce of oil (1:4)

**ALCOHOL EXTRACTS (TINCTURE)**

Alcohol based tinctures are made from an herb, fresh or dried, macerated (steeped) in a menstruum (solvent). Menstruums are usually a mixture of water and alcohol. In some cases vegetable glycerin or vinegar are used.

The menstruum is composed of a specific ratio of alcohol and water. The amount of each may vary according the type of plant used and the method preferred. Grain alcohol (95 proof) or other hard liquors (80 or 100 proof) may be used.

**Weight to Volume Method:**

Prepare and weigh dry or fresh herb; place in a jar. Calculate the amount of menstruum needed. Add menstruum to the jar of herbs. Shake well. Add more menstruum as needed to completely cover the herbs.

Fresh herbs are tinctured at a ratio of 1 part fresh herbs to 2 parts menstruum [1:2]
Multiply the weight of fresh herbs by 2 to determine the ounces of menstruum needed.
Example: I have 3 ounces (by weight) of fresh dandelion root. 3 oz. x 2 = 6 oz. I will need 6 oz. (by volume) of menstruum.

Dried herbs are tinctured at a ratio of 1 dried herb to 5 parts menstruum [1:5]
Multiply the weight of dried herbs by 5 to determine the ounces of menstruum needed.
Example: I have 2 oz. of dried elderberries. 2 oz. x 5 = 10. I will need 10 oz. (by volume) of menstruum.

**Note:** If the volume of menstruum needed does NOT cover your herbs completely, either add more menstruum (noting the increase volume added), or blend the mixture to reduce the size of the herbs.

**Folk Method:**

This method does not require any measuring or weighing, however you will not be getting the maximum amount of extract from the herbs you are using. Prepare fresh or dried herbs, place in a jar; cover with menstruum. Menstruum should be at least 2 inches above the herbs.

**Maceration:** Allow the herbs and menstruum (prepared using either method) to macerate for at least 14 days. Shake the tincture well each day. After 14 days, you may strain and press out the herb (the marc) and compost it. Reserve the tincture extract and store in a brown bottle in cool, dark place. Shelf life for properly stored tincture is 7 to 10 years.
Tincture Menstruums:
Make custom menstruums, utilizing 195 proof/95% alcohol (Everclear, grain, grape) straight or blending with water to achieve a percentage ideal for extraction from the particular plant you are using. You may also use undiluted distilled 80 or 100 proof alcohols (brandy, vodka, tequila, etc.)

Here is a chart for computing menstruums using water and grain alcohol.

<table>
<thead>
<tr>
<th>Quantity of Menstruum Needed</th>
<th>Grain Alcohol to Water Ratios for Custom Menstruums</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>4 ounces</td>
<td>2 grain</td>
</tr>
<tr>
<td></td>
<td>2 water</td>
</tr>
<tr>
<td>8 ounces</td>
<td>4 grain</td>
</tr>
<tr>
<td></td>
<td>4 water</td>
</tr>
<tr>
<td>12 ounces</td>
<td>6 grain</td>
</tr>
<tr>
<td></td>
<td>6 water</td>
</tr>
<tr>
<td>16 ounces</td>
<td>8 grain</td>
</tr>
<tr>
<td></td>
<td>8 water</td>
</tr>
</tbody>
</table>

NOTE: To compute a 20%, 30% or 40% menstruums, simply switch amounts listed above. Example: For a 40% alcohol menstruums, use 2.5 oz water & 1.5 oz. grain alcohol, etc.

Sources of Quality Herbs, Herb Products and Medicine-Making Supplies

Mountain Rose Herbs [www.mountainroseherbs.com](http://www.mountainroseherbs.com): dried herbs (4 ounce minimum), essential oils, medicine making supplies

Frontier Herbs [www.frontiercoop.com](http://www.frontiercoop.com): dried herbs (1 pound minimum), essential oils, medicine making supplies


Pacific Botanicals [www.pacificbotanicals.com](http://www.pacificbotanicals.com): fresh and dried herbs (1 pound minimum)

Herbalist and Alchemist [www.herbalist-alchemist.com](http://www.herbalist-alchemist.com): tinctures, simples and formulae

Herb Pharm [www.herbpharm.com](http://www.herbpharm.com): tinctures

Gaia Herbs [www.gaiaherbs.com](http://www.gaiaherbs.com): tinctures and capsules

Sleepy Hollow Herb Farm [www.sleepyhollowherbfarm.com](http://www.sleepyhollowherbfarm.com): organic goldenseal, elderberry and other Georgia grown herb products