

# Making Medicine from Plants

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# Overview

- About the History of Plants as Medicine
- Research on Plants
- Six Methods of Utilizing Plants for Medicinal and Therapeutic Purposes
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  - Decoctions
  - Tinctures
  - Oil Infused Herbal Preparations
  - Salves and Ointments
  - Compresses and Poultices
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- Conclusion

# About the History of Plants as Medicine

- The first medicines used were made from plants, especially herbal plants. Some can be made from trees, as well.
- Many of the prescription drugs used today are based from herbal plants.
- As some of the shortcomings of prescription drugs and other medical protocols become better known, interest is increasing in the use of plants for medicinal purposes.
- Another difference between prescription preparations and plant based preparations is that the prescription preparations contain the main factors whereas the plant based preparations will include various cofactors.
- Furthermore, medicinal plants are more compatible with our environment.

# About the History of Plants as Medicine continued

- The parts of the plants include the leaves (foliage), roots, flowers, and the stems. For trees, it can also include the bark.
- There are over 2,000 plants that have medicinal benefits. However, there are 25 that are extremely beneficial.
- Many of the homeopathic remedies are based on plants.
- These preparations can be used internally and/or externally (on the skin).
- Plants have two types of names, one is the common name and the other is the official Latin name. To get the right plant, it is important to include the Latin name.

# Research on Plants

- Various parts of the plants can be used for specific purposes. The literature will provide this information. Apparently, there are ideal times to harvest these plants, especially if you grow them yourself.
- It is important to read the instructions regarding the use of the plants
- Note that there are some plants that are toxic, e.g. like poison ivy
- Note that there can be allergic reactions to a specific plant or preparation, even carrier oils. For sensitive people, it is recommended that a test be done by using a small sample.

# Method One: Teas

- Teas are the easiest and simplest method of using these herbs.
- First boil the water, turn off the heat, and let the herbs seep in the water. It helps to use purified or filtered water.
- Then, the teas can be sweetened with honey and/or lemon.
- Then, consume the teas.
- It needs to be taken as soon as it has been prepared.

Note: Honey should not be given to children under the age of one year old.

## Method Two: Decoctions

- Decoctions are like teas, except that the herbs and usually herbs with thicker components like roots, stems, and etc. are cooked in water at a low heat for twenty minutes.
- It needs to be taken as soon as it has been prepared.

## Method Three: Tinctures

- With tinctures, herbs either fresh or dried are placed in a glass jar and filled with different types of liquids that can draw out the medicinal properties of the plant. They can include carrier oils or other liquids.
- The herbs need to be completely covered and have no contact with oxygen.
- For fresh herbs, you need one part liquid to 2 parts of the plant.
- For dried herbs, you need one part liquid to 5 parts of the plant.
- The various liquids that can be used are:
  - Alcohol (using vodka)
  - Glycerin - Glycerites
  - Apple Cider Vinegar - Acetas

# Method Three: Tinctures continued

- Placed the herbs inside a container and add the liquid known as the menstruum.
- Store the ingredients in a jar for about four to six weeks in a warm and dark place.
- Then, strain the solid matter from the liquid. Another option is to place the herb inside a hemp bag.
- Placed the liquid in smaller bottles (optional) and label the bottle(s) with the name of the herb, date, and the menstruum or liquid used in making the tincture.
- It helps to used to dark bottles, and keep it away from light and placed in a cool location. Keep the contents of the tincture away from contact with oxygen.
- Tinctures have a much longer shelf life.

# Method Four: Oil Infused Herbal Preparations

- Herbs can be placed in containers that have the carrier oil. This is similar to making tinctures, except that the solution is an oil.
- The appendix lists some of the oils that can be used as a carrier oil.

# Method Five: Salves and Ointments

- There are a number of approaches making salves and ointments
  - One, tinctures can be utilized along with using beeswax
  - Two, actual herbs can be used in making these salves, also with beeswax
  - Three, essential oils can be utilized along with using beeswax (will not be covered in this presentation).
- Both salves (more solid) and ointments (less solid) are for external use on the skin.

# Method Six: Compresses and Poultices

- A compress is a pad of absorbent material, in this case plant material, pressed onto part of the body to relieve inflammation or stop bleeding
- A poultice is a soft, moist mass of material, typically of plant material or flour, applied to the body to relieve soreness and inflammation and kept in place with a cloth.
- A pestle with a mortar can be used to smash the plant matter into a paste.

# Addendum

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- Bibliography
- Carrier Oils
- Containers
- Drying Herbs
- Equipment Helpful to Have on Hand for Making Herbal Medicine
- Examples of Plants that Make Excellent Herbal Medicine
- Examples of Plants Recommended for Salves
- Glossary of Herbalism Terms
- Other Methods for Using Medicinal Plants
- Recipes
  - Tincture
  - Oil Infused Herbal Preparation
  - Salve

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# Carrier Oils

- Oils with Nutrients
  - Almond Oil
  - Black Currant Seed Oil
  - Borage Seed
  - Evening Primrose
  - Grape seed Oil
  - Walnut

- Unsaturated Oils
  - Olive
  - Safflower
  - Sunflower
  - (Note: I would avoid Canola and Soybean)

Source: A guide to Drying Spices: growing and drying herbs and spices is among the easiest forms of food preservation by Tabitha Alterman in Mother Earth News: Food & Garden Series, Guide to Healing Herbs. (Winter 2013, pages 19-20)

Note #1: It depends on the use of the preparation. Smell and color have a role. Some of these preparations can be used for cosmetic purposes. Thickness of the oil also affects the preparation.

# Containers

- It is helpful to have a number of containers, using canning jars for larger preparations and smaller bottles to store tinctures and smaller containers for salves and ointments. Sterilize these bottles, using the dishwasher.
- It helps to have dark colored small bottles with droppers to store tinctures, and minimize exposure to light.
- When these preparations are made, label the bottles with the ingredients and date prepared.

# Drying Herbs

- Method one: Indoor Air-Drying

- Tie the herbs by the stems using twist ties or thin-gauge wire, hang them upside down. Wrap bundles with muslin, a mesh produce bag, or a paper bag with several holes. Another method is laying the herbs on an old window screen, over a sheet of cloth. Drying can take a few hours to a few days.

- Method Two: Solar Drying

- This method is ideal for warm, dry weather around 100 degrees and 60% humidity or less. Do not allow direct exposure to the sun.

- Method Three: Refrigerator Drying

- Place the herbs in the refrigerator for several days.

Note #1: The best time to harvest herbs is mid morning before the full sun comes out .

Note #2: Culinary herbs are from leaves while spices are obtained from the bark, berries, buds, fruit, roots, and seeds of plants.

Note #3: Fully dried herbs and spices are safe from bacteria, mold and yeast, and will remain potent for six to 12 months.

# Drying Herbs continued

- **Method Four: Dehydrating with a Machine**
  - Commercial food dehydrators can range in price from \$30 to 400. The ones that costs \$100 to \$200 is the best option. Quality dehydrators have features such as timers and adjustable temperature controls.
- **Method Five: Oven Drying**
  - It can be done in the oven however the temperature needs to be set at 100 degrees. Most ovens however don't go down that low. Also, you need to have air circulation. Herbs are easier to dry using this method, than fruits and vegetables.
- **Method Six: Microwave Drying**
  - It can be done, but not recommended for drying foods that have more moisture

Source: A guide to Drying Spices: growing and drying herbs and spices is among the easiest forms of food preservation by Tabitha Alterman in Mother Earth News: Food & Garden Series, Guide to Healing Herbs. (Winter 2013, pages 78-79)

# Equipment Helpful to Have on Hand for Making Herbal Medicine

- Cotton Muslin Cloth
- Double Boiler
- Electric Coffee Grinder
- Filter Papers
- Jars and bottles
- Labeling Materials
- Lid Grips
- Measuring Cups or Graduated Cylinders
- Mortars and Pestle
- Paper Towels
- Pouring Devices
- Rubber spatulas
- Stirring devices
- Strainer
- Scales (Metric)
- More sophisticated Equipment
  - Crock Pot
  - Blender/Juicer
  - Dehydrator
  - Food Processor
  - Yogurt Maker

Source: James Green, *The Herbal Medicine-Makers Handbook*, pages 66-72. Some questions exist about using glass in making ointments and salves, and avoiding contact with metal.

# Examples of Plants that Make Excellent Herbal Medicine

- Calendula Flowers
- Dandelion Flower
- Garlic
- Lavender
- Motherwort
- Mullein Flowers
- St. John's Wort Flowers

Note #1: There are resources on the internet that list a number of plants and their beneficial properties.

Note #2: Depending upon which types of health issues one is dealing with, different types of plants would be selected. What one person would need can be different for another person.

Note #3: As there are hundreds of plants with medicinal benefits, they vary in different parts of the world.

# Examples of Plants Recommended for Salves

- Arnica flowers
- Burdock root
- Calendula flowers
- Cayenne powder
- Chamomile flowers
- Chickweed
- Comfrey leaf and/or root
- Echinacea herb and/or root
- Ginger root
- Goldenseal leaf and/or root
- Lavender flowers
- Myrrh Gum powder
- Nettle leaf
- Oregon Grape root
- Plantain leaf
- St. John's Wort
- Thyme leaf
- Yarrow leaf and flowers

# Glossary of Herbalism Terms

- **Base oil**
- Also called a carrier oil, this is an oil such as olive, grapeseed, almond, apricot or jojoba oil that is used to extract herbs for medicinal purposes.
- **Compress**
- Cloth soaked in an herbal preparation and applied topically.
- **Constituents**
- A plant chemical, also called a compound, that creates a medicinal effect on the body.
- **Decoction**
- Tea made by simmering herbs such as roots, barks and nuts in water to extract medicinal properties.
- **Essential oil**
- A concentrated distilled oil of aromatic plants made using special equipment and training.
- **Herbal oil**
- Also called an infused oil, this is a medicinal oil preparation made by gently heating plants in a base oil.
- **Infusion**
- **Hot infusion:** Herbs such as leaves, flowers and fruit steeped in hot water to extract medicinal properties.
- **Cold infusion:** Herbs steeped in cold water to extract medicinal properties.
- **Solar infusion:** Also called sun tea, this is herbs and water placed in the sun for gentle heat to extract medicinal properties.
- **Menstruum**
- Liquid used to extract medicinal properties from plants such as alcohol, glycerine, vinegar or oil.

# Glossary continued

- **Poultice** (Three types)
  - **Soothing poultice:** Mashed herb applied topically to calm inflamed conditions.
  - **Drawing poultice:** Mashed herb applied topically to draw impurities and materials out of the skin.
  - **Heating poultice:** Mashed herb applied topically to bring circulation to the surface of the skin or for relaxing muscles.
- **Salve:** A semi-solid herbal preparation of oil and wax to be used topically.
- **Tincture** (Three types)
  - **Alcohol tincture:** Solution made by extracting medicinal properties with alcohol.
  - **Glycerite:** Solution made by extracting medicinal properties with glycerine.
  - **Aceta:** Solution made by extracting medicinal properties with vinegar.
- **Wildcraft:** Harvest plants from the wild. (Note: Be careful in harvesting plants that are on the endangered list, and avoid plants situated near heavily traveled roads and exposure to environmental pollution.) When picking out plants, have permission of the people who own that particular property or land.

# Other Methods for Using Medicinal Plants

- Capsules – Uses the plant matter in powder form and placed in capsules
- Essential Oils – Very concentrated and prepared by distilling
- Extracts, Freeze-Dried – Convenient, but cost more
- Honey Syrup
  - Note: do not heat the honey above 110 degrees
  - Alcohol with 100% proof is really half the alcohol and can be used as a preservative
- Juices – Using a juicer, these drinks have a short life span
- Powders – Tend to deteriorate quicker than normal dried herb material
- Tablets – Plant matter is compressed into tablet format, binding agents may be used along with other additives

Note: A number of these plants can be used for culinary purposes and cosmetic or personal care purposes. However, the focus of this presentation is on medicinal benefits.

Source: <https://nuserylive.com/32-medicinal-plants-to-keep-at-your-home-always>

# Tincture Recipe

- Use a pint size jar that has been sterilized or cleaned in the dishwasher.
- Have vodka available (at least 80% proof) (or apple cider vinegar or vegetable glycerine)
- Herbs of Choice
- Fill the jar 1/3 or ½ with dried herbs. If using fresh herbs, fill the jar with more of the herbs. (Optional, pour boiling water on herbs to soften it and increase its beneficial properties.)
- Pour the alcohol (or other substance) into the jar, covering the herbs.
- Put lid on jar and label it (date, herb, and liquid)
- Store the jar in a cool/dry place for three weeks to 6 months (author says she does it for six weeks)
- When ready to end the sitting, strain through tincture through a cheese cloth (to remove the solid matter) and pour into smaller dropper bottles. Label them.

# Tincture Recipe continued

- Use of tincture and dosage
  - Adult dosage is  $\frac{1}{2}$  to 1 teaspoon up to three times a day as needed
  - For kids, use  $\frac{1}{4}$  to  $\frac{1}{3}$  of the adult dose
- Tincture in alcohol can last for some time, as long as it remains clear

Source: <https://wellnessmama.com/8168/herbal-tinctures/>

# Oil Infused Herbal Preparations Recipe, part one

- You'll need:
- **Dried, coarsely chopped herbs.** Calendula (pictured), comfrey, plantain, St. John's Wort and lavender are popular ingredients for soothing oil infusions. Got fresh herbs? Learn how to dry them here. It's easiest to work with dried herbs, since fresh ones contain water which may lead to rotting or mold.
- **Oil.** Olive and sunflower oils are good choices. Be sure to use fresh oil so that the infusion will last longer.
- **A glass jar.** Canning jars work nicely, but any jar with a lid will do.
- **A strainer and cheesecloth or fine-weave towel.**
- **Bottle or jar for storage.** Amber glass blocks light and may help your infusion last longer.

Source: <https://www.hgtv.com/design/make-and-celebrate/handmade/healing-herbs-learn-to-make-infused-oils-and-balms>

# Oil Infused Herbal Preparations Recipe, part two

- How to make herb-infused oil:
- **Prepare your jar.** Make sure the jar is clean and *very* dry. Again, any water in the jar can lead to spoilage.
- **Fill the jar to the top with herbs.**
- **Pour oil over the herbs slowly.** Using a chopstick or knife, move the herbs around to make sure all air pockets are filled with oil. Add enough oil to completely cover all the herbs, filling right up to the brim of the jar.
- **Cover the jar,** give it a few shakes, and put it in a cool place inside your house. Every now and then, give your jar a shake. It will be ready to use in 3-6 weeks. The jar may ooze or leak a little, so place it on a plate or towel.
- **Strain the oil into your storage bottles through a cloth-lined strainer.** Give the herbs a final few squeezes to get the last of that herb-soaked goodness.
- **Cork and label your bottles.** The oil should last at room temperature for up to a year; two years if you add a capsule or two of vitamin E, a natural preservative.

Source: <https://www.hgtv.com/design/make-and-celebrate/handmade/healing-herbs-learn-to-make-infused-oils-and-balms>

Note: The appendix lists a number of carrier oils that can be used.

# Recipe for Making a Salve

- Once you've created your herbal oil, you're just a few simple steps away from your finished salve! See our basic salve recipe below, and follow along with herbal educator and author Maria Noël Groves for a comprehensive video how-to demonstration!
- *Makes 5 ounces.*
- **Ingredients**
- 1 oz. beeswax (use carnauba wax for a vegan salve)
- 4 oz. herbal infused oil(s) of your choice (choose one or a combination)
- 10-20 drops essential oil of choice (optional)

Source: <https://blog.mountainroseherbs.com/diy-herbal-salves>

# Recipe for Making a Salve continued

- **Directions**
- Wrap beeswax bar in an old towel. On a sturdy surface, use a hammer to break bar up into small chunks.
- Place beeswax in a double boiler and gently warm over low heat until the beeswax melts.
- Add herbal oils and stir over low heat until well-mixed.
- Remove from heat and add the essential oil(s).
- Quickly pour warm mixture into prepared [tins](#), [glass jars](#), or [lip balm tubes](#) and allow to cool completely.
- Store in a cool location for 1 to 3 years.
- **Pro tip:** The consistency of salves can easily be adjusted depending on your preferences. Use less beeswax for a softer salve and more beeswax if you'd like a firmer salve. You can test the consistency by placing a spoon in the freezer before making your salve. When the beeswax melts, pour a little salve onto one of the cold spoons and place it back into the freezer for 1 to 2 minutes. This will simulate what the final consistency will be like. Once cooled, you can make adjustments by adding more oil (for a softer salve) or more beeswax (for a firmer salve).

# Conclusion

- It can be fun to try making these herbal preparations
- In view of the growing number of allergic reactions to mainstream medications (both prescription and over the counter), it can be a good idea to try using herbs or medicinal plants and even trees with specific medicinal properties. Also, test these plants for possible allergic reactions.
- It is important to read the fine print regarding these plants. Some parts are specified and need to be harvested at a particular time. Some can be used internally or externally and the literature list for specific purposes.
- It is also important to label the tinctures and salves, as well as the herbs themselves, with the information about which herb was used, carrier oils, and date of preparation (as they do have a limited life span depending on a particular plant preparation).
- These herbal preparations can start with simple teas and progress to tinctures, ointments, and salves.