# Learning Through Recipes

12 Recipes For Making Plant Medicine By Doing!

Jamie Wayne Schmotzer

#### <u>Disclaimer</u>

While the author is a firm believer in the benefits of herbs and herbal preparations, the author is neither a medical doctor nor a clinical herbalist, and as such, the information presented is the author's opinion and does not constitute any health or medical advice. The content of this book is for informational purposes only and is not intended to diagnose, treat, cure, or prevent any condition or disease. Please seek advice from your healthcare provider for your personal health concerns prior to taking healthcare advice from this book. The use of any information contained in this book is solely at your own risk!

As I like to say:

"What you put on or in your body is your responsibility!"

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#### DEDICATION

It would have been enough that he planted within me the seeds of herbalism, but he also instilled in me an interest in the martial arts, Eastern philosophy, haversacks, and bedrolls.

Therefore, I dedicate this book to Kwai Chang Caine and the actor who portrayed him: David Carradine, of blessed memory...

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There are many people whose help along my journey in herbalism has been indispensable, but the *sine qua non* are my parents, who allowed me to watch the television series from which the earliest seeds of herbalism were planted in my imagination: *Kung Fu*; seeing Kwai Chang Caine, played by David Carradine, use herbs in the pilot episode left an indelible mark that is still with me to this day.

I would be remiss if I failed to mention a selection of the great herbalists who I have learned from through their books, videos, websites, and such, namely: Richo Cech, Rosemary Gladstar, Henriette Kress, Thomas Easley, Steven Horne, Jim McDonald, 7Song, and others, along with Susan M. Parker who inspired my study of oils, without which I would not have the foundation in the basics that I do. I stand on the shoulders of giants!

Along the path of arriving at publishing my first book, I would also like to thank my ex-wife, Valerie, who encouraged me years ago to make the leap into making herbalism more than an interest.

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## CHAPTER 1 – INTRODUCTION

It is often said that children are very impressionable, and I was no exception. I don't remember the year, but I remember watching the pilot episode of a particular television show set in the 1800's during the time when many Chinese were building the railroads out West when I was a young child, in which a Chinese American man, after walking across a desert with little beyond a bedroll and a haversack, arrived very thirsty to a town. Who knows for how long he had been walking, but his first stop was to get some water at the saloon. To make a long story short, some of the folks in the saloon weren't so fond of a "Chinaman" being in their saloon, leading to an altercation in which he defended himself from their aggression.

What does the pilot episode of the television show, Kung Fu, starring David Carradine have to do with this book about learning how to make plant medicine? Well, upon receiving a glass of water from the barkeep at the saloon, the character played by David Carradine reached into his haversack, pulled out a pouch containing herbs, and quickly added herbs to the water before drinking. To this day, I can be seen with a haversack, bedroll, and herbs. I haven't downloaded the program from The Matrix and can't say that "I know Kung Fu," but martial arts have long been an interest, too. Who could have predicted that watching a television show in the late 1970's would have such an impact? Thanks again to my parents for letting me watch Kung Fu when I was a little boy, full of wonder!

Before I continue, I want to be upfront about something: I am not a "Master Herbalist," and there's no standardized way of becoming one, anyway. As I write this book, I am surrounded by books written by herbalists with much more knowledge and experience than me. Compared to them, I am truly a novice. However, compared to someone with no knowledge or experience, well, I guess that I do know a lot. I don't need to be much further down the road than an absolute beginner to teach the basics!

My point is simply that this book does not claim to be written from an "expert" perspective. I think that many people are reluctant to look to Google or Amazon for resources to learn from because they don't know where to begin – there are a billion books on herbalism out there to pick from! Based on content, my book is certainly not the best available, but if mine is the book that simplifies things in such a way that helps you to start or further your journey, then it was well worth me writing it and you buying it.

My approach in this book is to keep things relatively simple and approach making plant medicine by doing it – by learning methodology through recipes. My goal is to help get you started with some recipes that I have personally used so that you can build some momentum. My hope is that you'll learn enough from my recipes to adapt to your own needs and those of your family. My intention is that this book is a starting point and, after grasping the methods shown within it, you'll move on to learn from other people and acquire other resources.

The structure of this book, mostly, is to present recipes by "menstruum," which is just a fancy word that means the "liquid" that the herbs are being infused into. Since water is the most abundant liquid on the planet and is necessary for human life, I will start by showing a few methods of infusing herbs into water. Next, I will approach using alcohol as the menstruum. Then, I will get into infusing oil, and finally, I will highlight a few other liquids that can be used as a menstruum, such as apple cider vinegar and vegetable glycerin. If you understand the methodology, then hopefully it won't seem so daunting to start exploring other books, other recipes, and even come up with recipes of your own.

If you have the greatest piano teacher in the world but don't sit down on the bench and practice, it's not fair to blame the teacher if you suck at playing the piano, and it's true what they say that you can lead a horse to water but not make it drink. If you're following my logic, I want to mix metaphors and be the salty crackers that make you sit down and tinkle the ivories. My first recipe is for a tea – I hope that you'll drink it.

#### CHAPTER 2 – WATER

Let's start with water, the most abundant menstruum (liquid that we infuse herbs into) that we can use to craft herbal solutions and begin with what most of us probably already know how to do: make "tea." When it comes to an herbal "tea," most of the time, if I'm being honest (which I am), I just buy ready-made products such as those from companies like Traditional Medicinals, co-founded by Rosemary Gladstar (who I was blessed to have me included in her book, Fire Cider!). Let's take a quick look at a popular recipe that Rosemary Gladstar formulated: Throat Coat, which features a slew of great herbs. Outside of the "proprietary blend" of wild cherry bark, fennel, cinnamon bark, and orange peel, the most prominent single ingredient is licorice root, then slippery elm bark, licorice extract, and lastly, marshmallow root.

I bring up these ingredients to make a point, which is that temperature and steeping time matters when it comes to the effectiveness and palatability of herbal teas. Some herbal teas require a higher temperature and longer steep time, while others are much more delicate and can taste truly repugnant if steeped too vigorously. In the case of Throat Coat, notice that the main ingredient, licorice, is primarily found in its root form, and included in the proprietary blend is wild cherry bark and cinnamon bark. When it comes to harder parts of a plant, usually the bark and root, often it is typical that a longer steep is required to draw out the desired constituents; however, since a tea bag typically includes ground or powdered plant matter, the increase in surface area allows for a quicker steep than if it weren't ground or powdered. According to the Traditional Medicinals website, it is recommended to use boiled water, cover, and steep for 10 to 15 minutes, which makes sense for this combination of herbs, while if you're making a calendula flower tea, I recommend a much quicker brew, as the flowers, though resinous, are much more delicate than a typical bark or root.

I hoped to get a few things across in this section. First, when it comes to "herbal teas," I typically don't make my own blends as it is very convenient to just buy them at a good grocery store or health food store. Second, it's important to pay attention to the labeling and follow instructions as to how to properly prepare an herbal tea, as steep time can make or break a preparation in terms of encouraging compliance or discouraging it altogether.

Recipe #1 is for making a simple fresh mint tea. I like to use Spearmint, or what I usually call "Grandma's Mint," as my grandmother had a prolific spearmint patch in her backyard, but this recipe works well for peppermint, too. Making a simple infusion of herbs in water is the first step. Often, I'll make at least a quart, as these infusions can last a day or so if it's refrigerated, and they can be frozen if you want to keep it on hand for a longer duration.

If you know how to make a basic water infusion, or herbal "tea," the next step is to make a decoction. A decoction is similar to when you're making a stew and you let the pot simmer for hours to reduce, thus concentrating the flavors as water steams off. This is exactly what the point of a decoction is: the herbal goodness is being concentrated by reducing the proportion of water. However, another purpose of a decoction comes into play when using harder barks, roots, and dried berries where it takes a longer time to extract the herbal goodness.

Sometimes, as in the case with making an elderberry decoction intended to be used to make elderberry syrup, which you'll find later in this book, a concentrated decoction makes for a better or stronger flavor. Imagine simmering apple cider with cinnamon, cloves, and orange peels until it has reduced by half and how sweet that would be, as when the water steams off, the proportion of sugar increases. In other cases, a decoction is going to taste terrible regardless of what you do. Well, to be honest, a lot of herbs taste terrible regardless, but where I'm going with this is that sometimes the goal of making a decoction isn't for internal use.

Sometimes the goal of a decoction is simply to produce a robust infusion of herbs into hot water that will subsequently be used as a soak or a compress. In the case of a puncture wound that I'm concerned about getting infected – let's say a dog bite on my hand, for example, I can make a decoction of yarrow or chaparral and soak my

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hand in the decoction to allow for the herbal action to penetrate everywhere the water is able to go. If the body part isn't easily able to be soaked, as such, a washcloth can be soaked in the decoction and applied as a compress, allowing the decoction to do its thing where needed. As I said, decoctions aren't just for making strong teas or syrups; decoctions can be used very effectively as a soak or compress.

Recipe #2, along these lines, is for a decoction of yarrow that I make for nasty things like cat scratches or dog bites, and it's intended to be utilized as a soak or compress. Certainly, you could use a variety of different herbs to make a decoction intended to be used as a soak or compress to assist with other issues, but the process or methodology is the same – basically you're making a strong water infusion by allowing the water to reduce by half.

Recipe #3 is for an elderberry syrup, though the same methodology could be used to make any number of other syrups using the same basic idea. The first step is to make a decoction, and to turn the decoction into a syrup you simply add an equal amount of honey. It's that simple. You're concentrating the proportion of herbal goodness by removing of the water, and then to replace the water, honey is added to give its own value and to help preserve the syrup for a much longer time than water by itself. Usually, I'll make two quarts of elderberry syrup at a time so that I can have a quart in the freezer being stored indefinitely while I can grab the other quart and store it in the refrigerator when it's needed.

# Recipe #1 – Fresh Mint Tea

#### Ingredients:

- Fresh Mint
- Water
- Optional: Honey

#### Directions:

Go out into the garden (or use store bought fresh mint) and loosely fill a quart sized Mason jar about 1/3 full of fresh mint leaves, crushing the leaves a bit by rolling them a bit in your hands to release the volatile oils. Use more mint if you prefer it stronger and less mint if you prefer a more delicate taste.

Fill the Mason jar with boiling water and put the Mason jar lid on top – not the band, just the lid, as it's important to not let the volatile oils from the mint escape.

Let the mint steep for 5 minutes.

Decant the herbal infusion and/or strain out the mint. There are mesh strainers that screw right onto a wide mouth Mason jar, and that's what I like to use.

When the mint tea is cool enough to drink, enjoy your mint tea! I like adding just a bit of local, raw honey. Store any leftover mint tea in the refrigerator for a day or so.

## Recipe #2 – Yarrow Decoction

#### Ingredients:

- Dried Yarrow Flowers
- Water

#### Directions:

I use a ratio of about 1 tablespoon of dried yarrow flowers to 1 cup of water for a milder decoction.

Remember, if you let half of the water simmer off, that you'll only be left with  $\frac{1}{2}$  cup of yarrow decoction if you start with 1 cup of water.

When I'm making a decoction meant to be used as a soak or compress, I typically begin with 2 quarts of water so that I have roughly 1 quart of decoction.

Doing the math, if the ratio that I'm going with is 1 tablespoon of dried yarrow flower per 1 cup of water, since two quarts is 8 cups of water, I'll need 8 tablespoons or 1/2 cup of dried yarrow flowers.

In a clean pot, add <sup>1</sup>/<sub>2</sub> cup of dried yarrow flowers and 2 quarts of water to a boil, reduce heat to a gentle simmer, wait until the liquid has reduced by about half, strain, and Bob's your uncle, you've made a yarrow decoction ready to be consumed or used as a soak or compress as soon as the temperature is tolerable.

Store any leftover decoction in the refrigerator for a day or two - or in the freezer for a month or so.

Feel free to make more or less decoction according to your own needs, and if you'd like to make the decoction stronger, you could double the amount of yarrow to 2 tablespoons per cup of water, but I tend to start with 1 tablespoon unless more is needed. You can also add other herbs, but the methodology for making a decoction remains the same.

## Recipe #3 – Elderberry Syrup

My favorite herbal syrup is elderberry syrup. It reminds me of my maternal grandmother, from whom my love of the taste of elderberries stems, as she took us out to go "berry picking" and made the loveliest elderberry jelly. At the time I had no clue how powerful elderberries were medicinally, but I knew that they sure did taste good! Just as she used a basic outline for making many things and then used experience to add a bit of this and that to the recipe, I'm going to do the same.

To recap, an *infusion* is made by pouring boiling water over herbs and letting them steep for a relatively short period of time, and a *decoction* is made by simmering over constant heat until the water has reduced by about half, thus producing a stronger, more concentrated liquid. After a *decoction* is made, it can be turned into a *syrup* by adding an equal amount of honey to the *decoction*.

#### Ingredients:

- 2 cups of dried elderberries
- 6 cups of distilled water
- 2-3 cups of local, raw honey

#### Optional ingredients, to taste:

- Cinnamon sticks
- Cloves
- Fresh sliced ginger
- Chinese licorice
- Dried orange peel

Please feel free to research other herbs, depending on what you want the syrup to do for you and experiment wisely! Have fun with it!

#### Directions:

Put all the ingredients (except the honey) in a clean pan and bring it to a good rolling boil, then drop the temperature to a simmer and let the concoction reduce down over the course of 45 minutes or more until it appears that the liquid has reduced by about half. I'll often use a wooden spoon to gauge when it has reduced by about halfway, as the purple solution will mark the wooden spoon as a sort of measuring stick.

After the liquid has reduced by about half (don't fret if you're not sure if it's exactly reduced by half!), turn off the heat and let the pan cool for a while, as the next step is to strain out the liquid from the herbs. Be careful not to burn yourself!

After the pan has cooled, line a big wire strainer with cheesecloth and decant the decoction into a 4 cup Pyrex measuring cup or your container of choice.

After all the liquid has passed through, the next step is to fold up the cheesecloth so that you can squeeze any remaining liquid out of the berries, which can be a messy process!

After getting as much out of the berries as you can, check to see how much elderberry decoction you've got in the Pyrex measuring cup and, in another Pyrex measuring cup, measure out an equal amount of honey.

Starting with 6 cups of water, you're shooting for about 3 cups of liquid or so, and then if you add another 3 cups of honey, the total is back to 6 cups. What I do is mix the decoction and honey in a half gallon Mason jar and then, after it's all mixed up, I'll pour 4 cups into a quart Mason jar that, after it's reached room temperature, I'll store in the freezer for long term storage, and what's left I'll pour into another Mason jar and store that for immediate use in the refrigerator, where it'll last a couple of months – if it's not consumed well before that! Learning Through Recipes

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#### CHAPTER 3 – ALCOHOL

The first thing that I want to say about making an alcoholbased infusion, called a tincture, is that the alcohol that you buy at a store is NEVER 100% alcohol. We call it alcohol, but in every instance, there is water included, and we need to be mindful of that. Alcoholic beverages bought at a store indicate either the "proof" of the alcohol or indicate the percentage of alcohol – or both. 100 proof vodka, for example, is 50% water and 50% alcohol. 80 proof vodka is 40% alcohol and 60% water. The easy math is to divide the proof by half to determine the percentage of alcohol or to double the percentage of alcohol to determine the proof. However, when it comes to using 190 proof Everclear, though it's actually 95% alcohol, to make the math easier, it is typically treated as if it's 100% alcohol; the reason why there is 5% water is so that the alcohol doesn't just evaporate away! If you see a recipe that calls for 100% alcohol, just use 190 proof.

The reason why knowing the proof is important is because every plant has its own ratio of water soluble constituents to alcohol soluble constituents. If you don't understand that last sentence, basically what we want to do is draw out of the plant the helpful herbal goodness, and some of that goodness can be drawn out and dissolved in water and other bits of that goodness can be drawn out and dissolved in alcohol. Some plants are mostly water soluble, other plants are mostly alcohol soluble, and some plants are on the spectrum in between. We want to capture all of the goodness, whether it be water or alcohol soluble. Therefore, if we're going to make a strong tincture, we need to know what ratio of alcohol and water to use to best draw out and dissolve the plant goodness.

The often utilized "Folk Method" basically employs simple logic and proposes that any given plant is probably either water soluble or alcohol soluble, so why not just use a solution that is half water and half alcohol? So, why not just fill a Mason jar halfway with dried herbs and then fill the jar to the top with 100 proof alcohol, which is half water and half alcohol. This covers all the bases, right? It makes a lot of sense to make a tincture this way *if and only if* you don't know (or can't guess) whether a plant has more water soluble constituents or more alcohol soluble constituents, but if you do know the ratio of water to alcohol soluble constituents, it makes much more sense to make the strongest tincture possible by altering the ratio to extract more goodness.

There is another reason why understanding tincture ratios is so important, and that comes into play whether you're using a fresh herb or a dried herb. Dried herbs have had water, well, dried out of them, while fresh herbs typically have some kind of moisture in them. Therefore, many herbal recipes books will give tincture ratios that distinguish between using fresh or dried herbs to account for the water already in the plant. In other words, we can increase the percentage of alcohol with fresh herbs that already have a higher water content. In this book, however, the tincture recipes will be using dried ingredients, but nevertheless, I want you to be thinking about ratios, ratios, ratios when it comes to making the highest quality tinctures.

Another ratio to consider when making tinctures is the ratio of herb to liquid. Some herbs are incredibly potent, like lobelia, for example, and a little bit of lobelia in a tincture is easier to dose than if a lot of lobelia is used. Generally, however, we want to make tinctures as strong as we can, so the idea is to use the most amount of herb that we reasonably can. There are advanced methods to get a 1:1 extraction of herb to menstruum (liquid), but to get started, a 1:4 or 1:5 ratio is usually effective and much simpler to make.

My goal for this chapter is for you to thoroughly understand tincture ratios. I've been teaching classes on understanding tincture ratios for years now, and I can't stress enough how important it is to understand what I'm talking about here. Hopefully you will buy books with recipes from other herbalists, and if you understand how to read a recipe, you'll be ahead of the game. Also, some companies list their ratios on their labels, and if you understand how to read a recipe, you'll understand so much more.

On the next page I'm going to show you what a recipe typically looks like in a book or on a product label...

# 1:5 50A

That is what a tincture recipe looks like:

- 1:5 means 1 part herb by weight to 5 parts liquid by volume.
- 50A means 50% alcohol & 50% water, which equals 100 proof.
- I simplify by using ounces by weight and ounces by volume.

Often a recipe is given in a short form like above where if it indicates 50A, "A" for alcohol, it is assumed that the other 50% is water, though in some cases, usually where there is a third liquid involved, the water is indicated. For example, a recipe might call for 50A:40W:10ACV, where A is for alcohol, W is for water, and ACV is for apple cider vinegar.

If a recipe calls for "G," that stands for vegetable glycerin, and if a recipe calls for all vegetable glycerin, such as 1:5 100G, the extraction is no longer referred to as a tincture – instead it's called a "glycerite," which we'll get more into later in the book with a recipe for an echinacea glycerite.

Similarly, if an extraction is made entirely with vinegar, such as apple cider vinegar, and honey is added to it, that's not called a tincture, either – instead it's called an "oxymel," which we'll also get into with the recipe for Fire Cider later in this book.

If a recipe calls for using rubbing alcohol (I haven't seen an abbreviation for that) instead of drinking alcohol, then that, too, is not called a tincture; rather, a "tincture" made with isopropyl alcohol is called a "liniment," which is intended for external use only. We'll get into this later with a recipe for a disinfecting liniment later in the book.

Regardless, I wanted to mention glycerites, oxymels, and liniments here because the methodology is basically the same as making a tincture, except there are different names when a different menstruum is used.

## Recipe #4 – Osha Root Tincture

One of my all-time favorite tinctures is made with Osha root, which is sometimes called "Bear Medicine," as bears often seek it out. I'll let you read between the lines, but one of the things that Osha root tincture has a propensity to do is increase oxygen to the lungs, as it's a bronchodilator. I was telling an asthmatic friend about Osha root tincture years ago, and he was interested in trying it. He asked how much I typically take, and I told him that I start at 7 drops. Wisely, he decided to reduce that to 3 drops for the sake of safety, and within 30 seconds he sat down and said that he's not used to so much oxygen. Your results may vary, and Osha is helpful for several things, but with the circumstances that we experienced in 2020 with the ventilator scare, I ordered more Osha root and made extra tincture just in case breathing became a problem that year.

Generally speaking, and again, your experience may differ, tinctures, well..., they often don't taste very pleasant. Shall we say, they can be an acquired taste when taken directly without being diluted, but in the case of Osha root tincture, it smells and tastes like peppery celery, which I find to be quite pleasant. As with the anecdote above, Osha is strong stuff, so instead of taking dropperfuls, I personally start with 7 drops, and because it helps increase oxygen to the lungs, I like to take it before hikes – especially at higher elevations where there's less oxygen in the air.

Out of respect to the plant, I want to encourage you, if you choose to do more research on Osha root and want to make this recipe, to only buy Osha from companies that are well respected and you can trust to properly harvest it in a responsible way. Osha is very difficult to cultivate, I've been told, so it's typically sourced by wild harvesting; as such, it would be a shame if it were overharvested and became more difficult to source and even more expensive to purchase.

I've included Osha root tincture in this book because Osha is truly a special plant that I want people to know about and use wisely. Let's get on with the recipe, then, shall we?

#### Ingredients:

- 1 Ounce of dried Osha root (by weight)
- 5 Ounces of 150 proof alcohol (by volume)

What you can see from the ingredient list is that the recipe calls for a 1:5 ratio of Osha to a menstruum consisting of 75% alcohol and 25% water, thus the recipe could be written as such:

#### 1:5 75A

#### Directions:

Osha root is, well, a root, and as such, it's hard. Therefore, unlike many dried leaves that can simply be chopped up to increase the surface area for a strong extraction, Osha root needs to be ground up. This raises the point of buying a dedicated coffee grinder or Magic Bullet or Ninja – whatever the latest and greatest thing is – to use only with herbs and never for coffee. 5 ounces of alcohol probably isn't going to cover an ounce of Osha unless it's ground, anyway, so the first step to make an Osha root tincture is to grind up the roots into a rough powder and place the Osha root powder into a pint-sized Mason jar.

Next, you need to measure out 5 ounces of 150 proof alcohol by volume. If you can't find exactly 150 proof, don't worry about it. Bacardi doesn't make 151 Rum anymore, but anything in the neighborhood of 150 proof is good enough for rock & roll. The liquor stores near me in Ohio have bottles of 153 proof neutral grain spirits that work just fine, but alternatively, you could use something like 190 proof Everclear and simply add distilled water until it's brought down to 150 proof. Reducing the proof of Everclear by adding distilled water is a nice method to use, as typically I only keep two proofs on hand for making tinctures – 100 proof vodka and 190 proof Everclear.

The next step, after combining the powdered Osha root and the alcohol is to cap the Mason jar and shake vigorously for a few minutes, after which the procedure is to try to shake the jar every day for a minute or so for at least 8 weeks. It's okay if you forget a day here and there but try to do your best to shake it up regularly. If possible, store the Mason jar away from direct sunlight, preferably in a cool, dark place.

After 8 weeks or so, the Osha is ready to be strained out of the liquid. Often, I'll decant just enough to fill a 2-ounce bottle and let the rest continue to macerate, otherwise I'll use a wire strainer for the first strain, pouring the tincture over the strainer set atop of a Pyrex measuring cup. After straining once, I'll let the strainer sit there for a few hours and let more slowly drip out. After a few hours of letting it drip, I'll dump the wet elderberries onto cheesecloth and squeeze out as much as I can. After squeezing out as much as I can, I'll strain it all again one or two more times until all the big particles have been removed. It's common that some sediment remains, but you can strain that out using a nonbleached coffee filter if it bothers you. After satisfied with your final strained liquid, bottle it up, label it, and return it to being stored in a cool, dark place for long term storage. Since you now know how to read formulas, I'd suggest including the 1:5 75A on your label.

## Recipe #5 – Elderberry Elixir

At this point we're going to look at a more advanced recipe by combining things that we already know how to make. Definitions vary, but the way that I'm defining an elixir is basically combining a syrup with alcohol to provide a longer shelf life. With 1/3 of the final elixir being 190 proof, which we'll just round up to be 100% alcohol, the elixir comes out to be about 30% alcohol – or 60 proof, and that's going to extend the shelf life well beyond what a syrup ever could.

If we're going to add alcohol to make an elixer, however, why not load the alcohol portion of the recipe with herbal goodness, too, by using a tincture? This is how I see it: the decoction that makes up the herbal extract in a syrup only includes the water soluble constituents of the plant as no alcohol was used; therefore, adding a tincture of the same plant reintroduces the alcohol soluble constituents, which may make for a substantially more potent concoction. Alternatively, you could add a tincture of another herb or combination of herbs to create your own recipe!

#### Ingredients:

- 2 cups of Elderberry Decoction
- 2 cups of raw, local Honey
- 2 cups of Elderberry Tincture (1:5 95A)

#### Directions:

This is a test: the ingredient list tells you everything that you need to know, presuming that we're using dried elderberries.

Basically, you're making the Elderberry Syrup recipe found in this book back on page 8, and then combining it with an elderberry tincture using 1:5 95A, which hopefully at this point you know how to make.

Some people bypass making a syrup and think of an elixir as elderberries tinctured in Brandy (1:5 40A) with honey added at the end to taste – that sounds yummy, too, but I think that my recipe contains more herbal value than just adding honey to a tincture.

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#### CHAPTER 4 – OILS

Before I continue, I want to clarify that this chapter is primarily about infusing herbs into oil and making further products with that infused oil; however, in the context of making those further products, two other types of oils will be mentioned. First, there are what I casually call "specialty oils," which are oils that have so much value on their own that they are used in recipes for their own benefit. An example of such a specialty oil is Tamanu oil, which is one of my personal favorites, but more common examples are rose hip, evening primrose, and even castor oil. These oils may have some manner of healing benefit and/or are used because of how they interact with the skin, as different oils absorb more quickly or less quickly than others. This leads me to a very important point that I want to make, that I think is often overlooked yet it should be rather obvious: oils that come from plants are "herbal" simply because they are plant oils. The selection of what oil(s) to use in a recipe are very important!

The second type of oil that I need to address are volatile oils, often called "essential" oils. Essential oils are "volatile" oils because they will evaporate when exposed to the air at normal temperatures. This is one of the reasons why it is commonly suggested that essential oils be diluted in a "carrier" oil - so that, by being mixed in a "fixed" oil, one that does not evaporate at room temperature, the essential oils will stick around to do their thing and not simply evaporate. A good test to demonstrate this is to place a few drops of "neat" (undiluted) essential oil on a white napkin alongside of a few drops of the same essential oil diluted to 5% in a fixed oil like olive oil; what you will invariably find is that the few drops of straight essential oil will evaporate rather quickly while the diluted essential oil will not. The other main reason why it is wise to dilute essential oils, generally, is because essential oils are very concentrated and powerful, and as such, very little is often needed to be effective and too much can lead to problems.

Depending on how complicated you want a formula to be, it could involve infused fixed oil(s), "specialty" oil(s), and essential oil(s), all of which, arguably, have their place in making herbal products. When it comes to infusing fixed oils, you can make a "simple" infused oil, which is to say that you've infused one herb into the oil, or you can make a "compound" infusion where you're infusing multiple herbs into the oil. Personally, I often do both. I see no difference in effectiveness between making a calendula infused oil and combining it with a plantain infused oil, for example, or infusing both calendula and plantain into the same oil at the same time. The benefit of making "simples" is having access to a variety of infused oils and being able to mix and match them however you'd like; the benefit of making a "compound" is that you only must do the process once. There's a place for both. When it comes to the recipes found later in this chapter, you can elect to make simples or compounds depending on what works best for you and what you want to do with them. For me, with established recipes, I often just throw in all the herbs up front and make a big batch of oil infused with everything that I need; however, some oils I always make separately as simples because I'm going to be using them as a part of many different products.

There are two basic ways of infusing herbs into oil. One way relies on time to infuse the oil, and the other way relies on using heat to infuse the oil. I prefer using heat, as I don't want to wait around for 4 weeks for my infused oil to be ready. There are lots of different ways of using heat to make infused oils. Some people like to use an oven. Other people like using a crockpot. The method that I'm going to use in this book is the double boiler method. If you don't know what a double boiler is, think of a pot of water with a Pyrex bowl sitting on top of it. The idea is that the hot water in the pot will heat the oil and herbs above in the Pyrex bowl, making sure that they don't ever get too hot. This same method is often used to melt chocolate.

Once you've successfully made an infused oil, lots can be done. Of course, the infused oil can be applied topically all by itself, but it can be blended with other infused oils, "specialty" oils can be added to it, essential oils can be added to it, and so on, maintaining and utilizing it in its liquid form. You can also add other ingredients to create salves, balms, lotions, hard lotion bars, whipped body butter, and all sorts of other creations. But first you need to know how to infuse the goodness of herbs into oil...

#### Recipe #6 – Scar Oil

This is a recipe that I'm very proud of, and I've given it to people with outstanding results. I don't remember exactly why I made it the first time, but the effectiveness of it was confirmed when I gave it to my mother to use after a surgery to help reduce scarring. When she returned to see the doctor a few weeks later, the incisions were completely healed, and he could find no evidence of the incisions at all. After he asked what she had done to get such incredible results, she told him that her son had made an herbal concoction for her to use, to which he replied, "Does he sell it?" In my experience, and your results may vary, this "scar oil" isn't meant to reduce or eliminate scars – it was crafted by me to prevent them; this is to say that I crafted it to be used in a case like that of my mother – immediately after a surgical incision or other such cut. I have given this formula to people to try weeks after such a wound, with varying results, but ultimately, it is my belief that it is best soon after a clean cut has closed.

I'm going to present this recipe in two parts. First, you need to make Comfrey infused oil, and then after making the infused oil, you can make the scar oil. Because I use comfrey infused oil in other recipes, I make at least 8 ounces at a time. Feel free to adjust the recipe to what is realistic for your purposes.

Comfrey is an herb not without controversy, but that is not within the scope of this book. I am simply going to tell you what I do, and it's your responsibility to do more research about whether to use comfrey leaves or comfrey root and to learn when not to use comfrey. One thing that I do want to stress, however, is that it is generally advised not to use comfrey on deep puncture wounds or on wounds that are not thoroughly disinfected because comfrey contains a constituent that stimulates the growth of new cells; you do not want comfrey to seal in an infection and make matters worse! Remember, I gave this to my mother to help seal clean, surgical incisions with the goal of there being zero scarring. Please do your own further research on this amazing plant!

## Part A: Making Comfrey Infused Oil

#### Ingredients:

- <sup>1</sup>/<sub>2</sub> ounce of dried Comfrey leaves by weight
- <sup>1</sup>/<sub>2</sub> ounce of dried Comfrey root by weight
- 8 ounces of Jojoba oil by volume

#### Notes:

- You can make this with either comfrey leaves or comfrey root depending on what is available to you.
- The general ratio for making an infused oil is 1 ounce of dried herb by weight to 8 ounces of oil by volume.

#### Directions:

The first step is to put together a double boiler. If you don't have a dedicated double boiler, just marry a pot with a Pyrex mixing bowl. The size of the pot and the size of the Pyrex mixing bowl will vary depending upon how much infused oil you're making, but for making it with 8 ounces of oil, a medium sized pot should be fine. Fill the pot with water as high as you can without the water touching the bottom of the Pyrex bowl when the bowl is set atop of the pot. The rim of the Pyrex bowl should completely cover and seal the pot – you don't want steam coming out of the pot, as water and oil don't mix!

Using a double boiler, bring the water up to a gentle simmer with 8 ounces of Jojoba oil in the Pyrex bowl. Anything more than a simmer may cause steam to escape from around the edges of the Pyrex bowl, and that's not what we want. A tiny bit is okay, but anything more means that either the Pyrex bowl isn't sealing well or that the temperature of the water is too high.

While the water is coming up to a gentle simmer, put  $\frac{1}{2}$  ounce of dried comfrey root into a grinder dedicated only for herbs and make a coarse powder of the comfrey root – a fine powder is more difficult to strain out later. After grinding the comfrey root, add it to the oil and stir well.

If you bought dried comfrey leaves, if they're already small, don't bother grinding them up, but if you've harvested your own comfrey, you may want to increase the surface area by giving them a quick grinding – again, a fine powder is more difficult to strain later! After grinding the comfrey leaves add them to the oil and stir well.

Most likely, water will escape from the pot unless you have a perfect seal, so occasionally check the water level, and add more water if necessary. Whenever you remove the Pyrex bowl from the pot, please be mindful about the ways water can get into the oil and try to avoid this happening.

If you ask 100 herbalists how long they let their oil infuse using heat, I wouldn't be surprised if you got more than 100 different answers. This isn't really an exact science, I supposed, but answers can vary from 3 hours to 1 week. I have let herbs infuse for days using a crockpot on the warm setting, but usually when I'm using a double boiler it's more like something between 6 and 12 hours – usually overnight, in which case I'll turn the stove off and just let the residual heat of the water do its thing.

After 8 hours, let's say, of infusing the herbs, it's time to take the Pyrex bowl off the pot, being very careful not to allow water into the oil. I usually wipe the bottom of the bowl off with a towel so that it's dry before I start straining out the oil from the herbs.

As with other preparations, there are many ways of straining out the liquid from the solids ranging from using a \$1,000 tincture press to squeeze out every last drop to pouring the pot through a stainless-steel mesh strainer lined with cheesecloth and then squeezing out as much as you can by hand. Also remember that starting with 8 ounces of oil, you're not going to get the full 8 ounces back – that's why often I'll It's up to you how you think you can get as much oil back from the herbs but some of the strongest infused oil is in or on the herb.

After straining out the herb, if I'm not going to be using it right away, I typically store the infused oil in an appropriately sized amber Boston round bottle or a Mason jar, label it, and store it in a cool, dark place until I need to use it.

## Part B: Making the Scar Oil

#### Ingredients:

- <sup>1</sup>/<sub>2</sub> ounce of Comfrey infused Jojoba oil by volume
- <sup>1</sup>/<sub>4</sub> ounce of Plantain infused Jojoba oil by volume
- <sup>1</sup>/<sub>4</sub> ounce of Tamanu oil by volume
- 5% dilution of "Age Defy" essential oil blend from Eden's Garden
- 5% dilution of Carrot Seed (Daucus carota) essential oil
- Optional: Vitamin E oil 1 or 2 capsules

#### Notes:

- This scar oil is intended to be used in a roller ball bottle, so depending on the size of the roller ball bottle that you're using, adjust the directions accordingly. For example, you might put this entire recipe into one larger roller ball bottle or you might fill two or three smaller bottles. Pay attention to the notes that I'll give about that in the directions...
- You don't have to use Jojoba oil to make your infused oils, though that's what I typically use for this formula because of how it absorbs into the skin. Olive oil or fractionated coconut oil would also be fine.
- If you don't have Tamanu oil, which has historically been used to prevent scarring, or don't want to use it, I'd either make up for it with another ¼ ounce of Plantain infused oil or substitute it with ¼ ounce of Calendula infused oil. However, Tamanu oil really shines in this application, in part because, like comfrey, it has constituents that promote the growth of new cells, so I'm inclined to always use it unless the person it's intended for has a reaction to it, which is why I recommend doing a spot test of 100% Tamanu oil with the person before making this formula.
- I believe that the "Age Defy" blend from Eden's Garden is very effective in this formula, and I think that it's worth the money to buy it. I'm not an affiliate or ambassador with them as of the writing of this book, though I'd love to be, but

I feel very strongly about its effectiveness. If you don't have access to this blend, as it is quite expensive, you can try to reproduce it by adding the essential oils that are in the blend; the following are listed in order of prevalence, as is standard with ingredient lists:

- o Frankincense- Carterii (Boswellia carterii)
- Sandalwood Hawaiian (Santalum paniculatum)
- o Lavender Bulgarian (Lavandula angustifolia)
- Myrrh (Commiphora myrrha)
- Helichrysum Italicum (Helichrysum italicum)
- o Rose Bulgarian Absolute (Rosa damascena)
- o Rose- Otto (Rosa damascena)

What's great about the premade blend is that it contains all these ingredients without needing to buy any of them separately. If, however, you already have many or most of these essential oils already and aren't going to use the premade blend, I'd add a few drops of whatever you've got. Personally, this recipe is not complete without Lavender and *Helichrysum italicum*, though.

- Carrot Seed (*Daucus carota*) essential oil, which comes from Queen Anne's Lace, is very affordable and I'd never wat to make this formula without it. I also buy this from Eden's Garden, but other essential oil companies sell it, too.
- I buy Vitamin E oil in bottles and just eyeball how much I include, and this ingredient is not absolutely necessary if you don't have it. However, if you have Vitamin E capsule, a common practice is to puncture the capsule and squeeze out the Vitamin E oil inside.

#### Directions:

Prepare as many roller ball bottles as you're going to fill and start by adding the essential oils to each bottle. Since I don't know what size bottle(s) you're going to use, you may want to ask Google or Siri or whoever for an "Essential Oil Dilution Chart," which should include enough information to tell you, based on your bottle size, how many drops to add. Sticking with my recipe, using 1 ounce of oil, a 5% dilution would be 30 drops, so I'd add 30 drops of "Age Defy" and 30

drops of Carrot Seed essential oil into a 1-ounce bottle. Accordingly, if you're using two ½ ounce bottles, you'd half the amount and put in 15 drops of "Age Defy" and 15 drops of Carrot Seed essential oil into each of the two bottles.

If you don't have the "Age Defy" blend, you've got 30 drops to divide among whatever you do have. I'd suggest 15 drops of Lavender and 15 drops of *Helichrysum italicum* if you only have those two. If you don't have Lavender or *Helichrysum italicum*, maybe do 15 drops of Frankincense and 15 drops of Myrrh. My recommendation, even if you're a diehard devotee of a multilevel marketing essential oil company, is just to buy the "Age Defy" blend from Eden's Garden and call it a day.

The next step is to add the Vitamin E oil if you're electing to add this optional ingredient. If you're using a single 1-ounce bottle, add the oil from two capsules. If you're using two ½ ounce bottles, use one capsule for each of the bottles. Vitamin E is commonly understood to be good for skin, and herbalists often use Vitamin E in oil-based recipes for its antioxidant value with an eye toward increasing the shelf life of the formula. The reason why I make this formula with Jojoba oil, by the way, is because it has an amazing shelf life on its own, which is why I don't always add Vitamin E oil; however, if you were to make this with another oil, it might help more to extend the shelf life by adding the Vitamin E.

After the essential oils and optional Vitamin E oil have been measured out into each bottle, measure out <sup>1</sup>/<sub>4</sub> ounce of Tamanu oil by volume and add it to each bottle. I find that straight Tamanu oils smells a bit like curry, so if you get hungry, that might be why. Remember, however, to spot test the Tamanu oil on yourself or whoever this formula is being made for to see if there are any reactions before using this ingredient. I mention this, in particular, because I used Tamanu oil on myself for years with no problems, but then one day I started to get a mild rash that, by the process of elimination, I realized was from the Tamanu oil – somehow I had developed a slightly adverse reaction to it. Tamanu oil is amazing stuff, but sadly, I no longer use it.

If you're choosing not to use Tamanu oil, this is where you either add  $\frac{1}{4}$  ounce of Calendula infused oil and  $\frac{1}{4}$  ounce of Plantain infused oil

- or  $\frac{1}{2}$  an ounce Plantain infused oil if you're making only one 1-ounce bottle. If you're filling multiple smaller bottles, split up the amounts proportionally.

The final ingredient to add is the Comfrey infused oil, and chances are that each bottle won't be able to fit the full portion remaining of ½ an ounce of infused oil. Therefore, I just bypass measuring and basically fill up the rest of the bottle(s) with Comfrey infused oil, attach the roller ball fitment, shake it up, and label the bottle(s).

Before you do that, however, remember that you need to leave room for the roller ball fitment! If you do not leave room and try to force the roller ball insert into the bottle, you may blow out the bottom of the bottle and you'll have wasted what you put inside!

What typically works for me is to fill the roller ball bottle to just below the point where the glass starts to curve at the top. Experiment with this gingerly! Sometimes the roller ball attachment is difficult to install, and some varieties fit best by starting to screw the cap on and using the mechanical advantage of the inclined plane to gently push the roller ball section into place.

If I may be blunt, I think that many roller ball attachments are utter crap. I've had so many cheap plastic balls just fall out. There are only two companies that I currently by <u>metal</u> roller ball attachments from. I am 100% not an advocate for multilevel marketing essential oil companies, but I can tell you that the "AromaGlide" roller fitments from Young Living are very high quality – their roller balls are metal, as is the casing that holds the metal ball, while the part that fits into the bottle is plastic. The problem, beyond being rather expensive, however, is that they are customized to fit 5 ml and 15 ml bottles with an "Sb" marking on the bottom, which makes pairing up the excellent fitments with bottles to be quite a pain since most bottle companies don't list the letters on the bottom of their bottles and, to the best of my knowledge, you can't just order these bottles from Young Living. If someone reading this knows a sure-fire way of ordering bulk "Sb" bottles, please let me know!

While it would be fantastic to use two 15 ml bottles with the Young

Living "AromaGlide" roller fitments, as 15 ml is roughly half an ounce, which would make for two lovely bottles of Scar Oil, the only other company that I know that makes decent roller ball fitments is a company that I've only found on Amazon.com called "HS HEALTHY SOLUTIONS GLASSWARE." Unfortunately, as of the time of writing this, they only offer bottles with metal roller balls in plastic fitments in 1 ml, 2 ml, 3 ml and 5 ml sizes AND they only sell in quantities of 72 or 144, which is fine if you're a company making products in bulk, but if you just want a bottle or two of Scar Oil, that's a lot to buy! They also sell fitments by the dozen that are designed to fit the same sized bottles as the Young Living AromaGlide fitments do, but then we're back to the same problem and, honestly, the AromaGlide fitments are better, in my opinion, if I'm going to hunt down the "Sb" bottles.

Practically speaking, while roller ball bottles can be fantastic to use (unless it's a cheap one and the plastic ball falls out and you lose all the goodness inside the bottle), there is no requirement that you use a roller ball bottle at all. The basic gist is to get the oil on your skin where it needs to go, and how you store it is up to you. If you want to store it in some other jar and apply the Scar Oil some other way, go for it!

At some point I may sell Scar Oil on Etsy, so if this all seems like a hassle, you might be able to just buy it someday at, and please don't complain about the price, as now you know what all goes into making it!

## JWapothecaryShop.etsy.com

#### Concluding Thought:

If you've made this recipe, you've learned how to make an infused oil, you've seen how some oils, such as Tamanu oil, can be used in a formula, and you've learned about essential oils. If you can successfully make this recipe, you've learned a lot!

## Recipe #7 – First Aid Salve

It was wanting to make a first aid salve to keep in my haversack that first got me into wanting to make herb infused oil to begin with. The two most common issues to deal with when camping or being out in the woods doing bushcraft and such are cuts and burns, as types like me are prone to play with knives and fire, right? Therefore, I set out to make my first salve, and so I did some research about what herbs would be best for a homemade salve that could potentially assist with the most common issues: cuts, scrapes, scratches, burns, bee stings, bug bites, and rashes. What I found is that there is a single herb that can potentially help with all those things, and lo and behold, that herb is one that I've seen all my life and just thought that it was a weed.

As I said at the beginning of this book, my intention is not to make this book so much about particular herbs; however, I feel so strongly about Plantain that I want everyone to know more about it. Therefore, I am going to spend a little bit of time talking about Plantain. Though there are many species of Plantain, we can basically say that there are broad leaf and narrow leaf varieties. Since I'm publishing this book myself and don't have a team of computer whizzes to add all sorts of cool pictures and charts and such, what I'd like you to do is do a quick Google search, or ask Siri or Alexa or whoever, to find pictures of Plantain – and I'm talking about the herb, not the banana!

Part of what I'm hoping for with this book is that YOU do some research, so if you haven't already done any whilst reading this book, now is your opportunity. Bookmark this page and close this book after reading the rest of this paragraph, and don't come back until you've looked at enough pictures of both broad and narrow leaf Plantain to realize that you've probably seen this plant growing in the cracks of sidewalks or in your front yard all your life. While you're at it, at the end of this chapter there is a page for notes; I want you to list 5 relevant properties or benefits of using Plantain topically, such as that Plantain contains allantoin, which is the same constituent found in Comfrey that aids wound healing by promoting cell proliferation. Now that you're back, I'm going to assume that you know what Plantain looks like. I'm also going to assume that now you have a general idea why I think that it's so important for anyone interested in making a first aid salve to know how to find and use it, and if you don't, I'd encourage you to spend a little bit more time doing some more research online. I know that there are a zillion unreliable resources online, which may be partly why you bought this book, but trust me, with a little digging, it should come as no surprise that the first salve that I ever made started by me going outside and picking some Plantain to wash, dry, and infuse into an oil to make my first salve.

By the way, if you get stung by a bee while you're outside harvesting Plantain, unless you're allergic to bees, just grab a fresh leaf of Plantain, put it in your mouth and chew it up a bit, and then smash the "spit poultice" that you just made over the sting and let the Plantain soothe your skin, draw out any venom and/or the stinger itself, and immediately act to assist with inflammation, bacterial growth, pain, and ultimately help to heal the wound. It's quite realistic to be able to find Plantain very closer to where you got stung, so why not try it sometime? If you don't have any band aids on you, when you get back inside you can use a band aid or tape to keep the spit poultice in place for a while. Consider that a bonus recipe!

Okay, so let's get into how to make a first aid salve...

## Ingredients:

- 1 ounce of dried Plantain by weight
- 8 ounces of good Coconut oil by volume
- 2 ounces of Beeswax
- <sup>1</sup>/<sub>2</sub> ounce of Cocoa Butter
- 10 drops of Tea Tree essential oil per tin
- 10 drops of Lavender essential oil per tin

## Note:

• This recipe will make about 10 1-ounce tins of salve.

## Directions:

First, go outside and find a bunch of Plantain! Harvest enough leaves, broad and/or narrow, to weight a full ounce after being dried. Don't worry, if you harvest more than an ounce, just save it for another project.

Second, since you're wildcrafting Plantain for yourself, you're going to want to rinse it well with warm water – you don't know what animal may have urinated on the plants! Ideally, you want to harvest Plantain from areas away from vehicular traffic, as traffic could mean that lots of contaminants have probably gotten on the plants.

If you truly don't have access to wild Plantain, or otherwise are unable to get outside to harvest it due to a medical condition, it's okay to just buy it. With the quantities that I need, often I just buy it, so I'd be a hypocrite to tell you not to.

Regardless, if you do harvest your own Plantain, after rinsing it off thoroughly, perhaps the easiest way to dry it is to use a dehydrator and simply follow the instructions. Otherwise, you can bundle plantain with some of the stalk still on, wrap the stalks up with cotton twine, and hang them outside to air dry. Alternatively, you can find out online how to dry herbs in an oven. Whichever way you do it, because oil and water don't mix well, and because water is a breeding ground for bacterial growth, you do need to make sure that the herb is bone dry before infusing it into oil.

After thoroughly drying the Plantain, you're going to want to roughly chop it up to increase the surface area, which makes for a more effective infusion. It's not terrible to let some stalks get by, but for the most part you want just the leaves.

At this point you can return to the recipe for making an herbal infusion if you've forgotten, but the gist is to use 1 ounce of dried Plantain leaves by weight to 8 ounces of oil by volume. Though you certainly could use another oil, because this recipe calls for coconut oil, which is solid at room temperature, you're going to need to warm up the coconut oil so that you can measure it by volume in its liquid form. Indeed, one reason why I like to use coconut oil to make salves is precisely because it's solid at room temperature, which means that I don't need to use as much beeswax to solidify it.

After you've made Plantain infused oil and you're ready to begin the process of making your salve, before you continue any further, I strongly suggest that you put two metal teaspoons in your freezer. I'll explain why later...

The next step is to put the infused oil back into a clean Pyrex bowl and continue using the double boiler method to melt in the cocoa butter and beeswax. If you just made the infused oil and are going to use the same Pyrex bowl, just wipe it out with a paper towel to get any herb particles out of the bowl.

When the cocoa butter and beeswax have both liquified, unless you're confident about the consistency of the recipe, you're going to want to check before finishing the salve. An easy way to do this is to grab a cold spoon from the freezer, dip it in the salve mixture, which will encourage the mixture to quickly cool and harden. If the salve mixture is too soft, add a little bit more wax to the bowl and get the double boiler going again to melt it. The second spoon is still in the freezer to test it again.

The "right" consistency, is really a matter of personal preference. I prefer softer salves because less beeswax means a higher ratio of herbal content, but on the other hand, if I just wanted to use herbal infused oil, I wouldn't be making a salve. The beeswax in a salve, beyond its value in hardening the salve, consists in protecting a wound. Similarly, while cocoa butter is not necessary to make an effective salve, I add cocoa butter because of its many skin nourishing abilities. Keep in mind that a salve that is too soft can become quite a mess in hot temperatures, so if you want a salve that is suitable for outdoor use, you might want to use more beeswax if you live, move, and have your being in a hot climate, whereas if you live, for example, in Antarctica, you can probably get away with less wax!

When you're convinced that you've found the consistency that you want, it's time for you to get prepared and be ready to function...

Because the salve mixture will begin to solidify quickly, it is very important to be prepared before you start pouring it into tins to set. The way that I prepare is by laying out a piece of waxed paper on the kitchen counter or dining room table – wherever makes sense for you, really, so that any spills (which will happen) land on waxed paper and you don't have to scrape wax from your counter or table. You'll want to have your tins ready to go.

Now let's talk about essential oils for a moment. Remember earlier in the book when I spoke of essential oils as being "volatile" oils? Yeah, well heat increases the volatility of essential oils. In other words, you don't want to add essential oils to the salve mixture while it's at the peak of hotness or you might just be letting the essential oils evaporate into the air.

When you're ready for the final steps before pouring the salve, and not a moment sooner, add 10 drops of Tea Tree oil and 10 drops of Lavender oil into each of the 1-ounce tins just before you're ready to pour the hot mixture.

Quickly, after adding the essential oils to each tin, remove the Pyrex bowl from the stove, drying off the sides, rim, and bottom with a dry towel – you do not want any water infiltrating an oil-based recipe.

Quickly, after drying off the condensation that will invariably be on the outer surface of the bowl, transfer the mixture into a Pyrex measuring cup. The spout will help when it comes to pouring it into your salve tins. After you've emptied the Pyrex mixing bowl, place it back above the hot water on the stove. I'll explain why later...

Quickly, pour the mixture into each tin, and try not to make a mess.

As soon as you removed the mixture from the stove it began the cooling process, so by the time you have poured it into a few tins, it is possible that the mixture is starting to solidify on the side of the measuring cup. The quickest way to make it fully liquid again is to put the Pyrex measuring cup in the microwave long enough to melt it thoroughly.

After all your tins are filled, leave the lids off and just walk away...

While you're waiting the hour or so for the salve to fully solidify, you're going to want to start the cleanup process. There's going to be more salve mixture in the Pyrex measuring cup, so rather than washing it away, use it! If anyone in your family has a boo-boo, apply it! If your hands are rough or dry, use it! Try to use as much of what's left in the measuring cup as possible, and when you're finally ready to clean, the trick to cleaning up stuff with wax is to use heat. That's why I told you to put the Pyrex mixing bowl back above the hot water on the stove. While it's liquid, use a paper towel to wipe out the waxy solution. Put the Pyrex measuring cup in the microwave to get it melted again, and then wipe it out with a paper towel, too. You're going to make it so much harder to do the cleanup if you don't do it while the mixture is liquid!

#### Concluding Thoughts:

While it is true that I'm trying to teach you through this book, *learning* is something that you must participate in. With that in mind, I want you to do some research online and write on the next page 3 reasons why I've included each of the ingredients. I want you to understand why I chose each of the ingredients so that you can more fully grasp the thought process behind formulation. Remember that I created this basic recipe to cover issues that arise outdoors. Why did I choose the ingredients that I did? How might you modify this recipe to tailor it to your specific needs? What other herbs might go well with Plantain? Would you choose different essential oils? Would Shea Butter be a better option than Cocoa Butter?

I first wanted to make a salve because I wanted a general purpose first aid solution for when I went out in the woods, but perhaps your needs are different, and you really want to make a salve for another purpose. What if you wanted a salve that focused more on preventing infections than healing wounds; how might you formulate a salve for that? What about a salve to help reduce pain? Would you use a different oil to infuse the herb(s) into? Would you use a "specialty" oil like Tamanu oil? I don't expect you to have all the answers, but what is the value of an answer without knowing or understanding the question?

#### Learning Through Recipes

# Salve Homework

#### 5 Topical Benefits of Plantain

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## 3 Topical Benefits of Coconut Oil

- 1.
- 2.
- 3.

## 3 Topical Benefits of Beeswax

- 1.
- 2.
- 3.

## 3 Topical Benefits of Cocoa Butter

- 1.
- 2.
- 3.

## 3 Topical Benefits of Tea Tree Essential Oil

- 1.
- 2.
- 3.

## 3 Topical Benefits of Lavender Essential Oil

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# Recipe #8 – Chocolate Mint Lip Balms

Since we covered so much in the recipe on making salves, the point of this recipe and the next one is to show how similar what we're doing with herbal recipes is like baking. You can take the same few ingredients and adjust the proportions or ratios and in one case you're baking a cake and in another you're baking bread. In this case, perhaps making lip balms is more like baking cookies, because the way that I see it, they're fun to make with kids and if I'm going to go through the work of making them, I might as well make at least 50 or 100 at a time!

When I first began making lip balms, I started with a basic ratio that I found online that called for 1 cup of oil by volume to 2 ounces of wax by weight. This isn't a terrible ratio, but I got a lot of feedback about my lip balms being too soft. To be fair, harder lip balms are harder because there's a lot higher ratio of wax, which isn't necessarily a bad thing - especially if the purpose of the lip balm is to be protective, but since I'm going through the processes of making and using oils that have been infused with herbal goodness, the more wax there is the less herbal infused oil there is. My lip balms tend to be softer because I want them to be more nourishing than protecting, so I was quite alright with using 2 ounces of wax per cup of oil. However, as I continued making lip balms and experimented with various ratios, eventually I came up with the formula that I'm presenting to you in this book. Please feel free to adjust the ratios to your own liking, and please keep in mind that you'll have to scale up or down depending on how many lip balms you want to make.

Here's the recipe, which at these quantities will make more than 100 lip balms using .15 ounce tubes:

#### Ingredients:

- 8 Oz Chocolate Mint Infused Jojoba Oil
- 4 Oz Cocoa Butter
- 4 Oz Beeswax
- 100 drops of peppermint and/or spearmint essential oils

• Optional: 1 teaspoon of Vitamin E Oil

Whereas with the salve recipe I asked you to answer a lot of questions about why I chose the ingredients that I did, along with this recipe I'm going to ask myself the questions and then answer them so that you can "hear" my thought process...

#### What the heck is "Chocolate Mint," and what's it for?

To the best of my knowledge, Chocolate Mint is one of many varieties of peppermint that was selectively cultivated and propagated because people liked it. The tingly, cooling action of peppermint may have a calming, anti-inflammatory effect that may relieve swelling and pain, but I didn't really consider any of that when I chose to formulate this lip balm. Instead, I considered something that herbalist need to be mindful of – compliance. Personally, I rarely use lip balm, so creating a lip balm that I enjoy using increases the likelihood of me using it. The smell, flavor, and sensation amount to that "spoonful of sugar" that Mary Poppins sung "makes the medicine go down."

#### Why did I choose to infuse jojoba oil?

In the past I used avocado oil in this recipe, and I thought that avocado oil worked very well in lip balms, but after a friend told me that she is allergic to avocados, I started playing around with other oils and settled on jojoba oil. Different oils can be used for different purposes, but what I particularly like about jojoba oil (which isn't technically an oil at all, but a liquid wax), is that it is very similar to the oils that our bodies naturally make and, therefore, it plays very well with our skin. Further, jojoba oil has a very long shelf life, which is important if I'm making 50 or 100 lip balms at a time! In the end, I would encourage you to experiment for yourself, as the possibilities are nearly endless depending on what you want. I've made lip balms that contain a blend of four different oils!

#### Why did I choose to use cocoa butter?

Cocoa butter is the butter that I use the most – there is no close second. I have experimented with other butters, but I find cocoa butter to be the easiest to get good results with. Shea butter is fantastic,

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but unrefined shea butter has an odor that I don't particularly like and sometimes sets (solidifies) a bit grainy, whereas refined cocoa butter smells great to me, and I've never had any problems with how it hardens. For me, using cocoa butter is an easy way to add a luxuriousness to many recipes, even if only using a little bit; however, when the lip balm is called Chocolate Mint, the unrefined odor of the cocoa butter just makes sense! There simply is not a better choice!

#### What's the deal with the optional Vitamin E oil?

Many people add Vitamin E oil for two basic reasons. First, it's commonly added as a kind of preservative to increase the shelf life of the product so that the product doesn't go rancid before it's all used up. Second, sometimes people add Vitamin E oil because it is seen as having its own benefits to the skin. I usually don't use Vitamin E oil in my lip balms, but I have included an optional amount that I think is suitable for use in lip balm recipes. I've never really had a problem with my lip balms going rancid quickly, so a few years ago I just stopped using it.

#### Variations...

It's easy to use the basic ratios that I use to create all sorts of variations. For example, and I guess I'm giving away another bonus recipe here, another of my standard lip balms is a luscious lavender lip balm that I don't use on my lips at all. Rather, it's basically like a softer salve in a compact form that I use in the kitchen when I get annoying burns like those from touching a hot oven rack. I can keep the lavender lip balm in my knife drawer and apply it directly to a smarting burn to help that annoying pain to go away. I use the same ratios as in the Chocolate Mint recipe, but instead of using mint infused jojoba oil I use lavender infused jojoba oil and substitute the peppermint and/or spearmint essential oils for lavender essential oils. As I mentioned earlier, I have developed a sensitivity to Tamanu oil, but if I were making a Lavender "lip balm" strictly for use on burns, I'd add some if I didn't react to it – though, since Tamanu oil smells like curry to me, if I did use it on my lips, I'd probably get hungry!

Other variations to consider for lips include playing around

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with different herbs, different oils, different butters, and different essential oils. Calendula comes to mind as a very friendly herb that is fantastic on skin and quite lovely in lip balms. A bit of castor oil can add shine and slow absorption. Refined shea butter can be a decadent substitution for unrefined cocoa butter. Further, and I'll admit that I'm no expert at this, you might want to investigate various compounds that can add color, but since my focus here is not cosmetics or aesthetics so much as making a nourishing and natural product, you'd have to do your own research and figure that out for yourself – and that is part of what I'm going for with this book!

#### Okay, so how do I make Chocolate Mint Lip Balms???

If you understand the salve recipe, you've already grasped everything you need to make the herb infused oil and add cocoa butter and beeswax to make this luscious lip balm base. All of that is identical to making a salve except for the ratios. Therefore, I'm going to count on you to demonstrate what you've learned in the salve recipe and roll with the changes in this recipe. Think through it!

The only significant differences between making a salve and a lip balm, procedurally, are due to the form factor and quantity. With 10 tins of salve, it's easy enough to add the essential oil(s) directly to the tins but doing that to 50 or 100 lip balm tubes with much narrower openings is a much more difficult and tedious task. Furthermore, pouring the base mixture into individual .15-ounce tubes is also much more challenging and laborious, as well. If you want to reduce the recipe down to making just a handful of lip balms, then it wouldn't be as big of a deal to just add drops of essential oil to each tube and then use a pipette to fill each tube with the base mixture, but again, why not make a bunch of them and give them to friends and family as gifts?

There are solutions. One solution to make things easier would be to simply use larger lip balm tubes. Larger tubes would hold more (reducing the monotony) and have a wider opening (reducing the difficulty). Another solution would be to use small <sup>1</sup>/<sub>4</sub> ounce plastic jars (something like what Carmex uses) or <sup>1</sup>/<sub>2</sub> ounce round metal tins. All these options are readily available and would be much easier than trying to fill .15-ounce tubes. I like .15-ounce tubes for numerous reasons, however. First, it's just a traditional, standard size and form factor. Second, I prefer applying lip balm directly to my lips rather than applying it with my fingers. Finally, from a business perspective, .15-ounce tubes are easy to display at events and have a very good profit margin; a similar logic may apply to gift giving, as with the same amount of ingredients you can produce many more lip balm tubes than you can, for example, <sup>1</sup>/<sub>2</sub> ounce tins of lip balm. In my opinion, the best solution if you're going to use tubes is to simply buy a lip balm kit that comes with a filling tray. A quick search on Google or Amazon will show you a picture of what I'm talking about.

A lip balm filling try makes things easier in several ways. First, the tray works by attaching 50 tubes to it at a time, which is why I've talking about making 50 or 100 lip balms at a time. Once the tubes are attached underneath the tray, the tubes become the "legs" that hold up the "table." Second, rather than tediously using a pipette to fill each of the tubes individually, which is such a slow way of doing it that the lip balm base will most likely need to be reheated several times to reliquefy, once 50 tubes are attached you can simply pour straight from a Pyrex measuring cup onto the tray and fill up all 50 tubes in less than a minute. The tradeoff for the ease of filling the tubes comes at the price of absolutely making a mess on the tray, but every kit that I've bought comes with a perfectly sized scraper that makes for easy cleanup. After scraping up the excess lip balm base from the filling try, you can either put it back in the Pyrex measuring cup to make another round of 50 lip balms (if you have more tubes) or simply store the lip balm base in a Mason jar to make more whenever you want. Finally, at the time of writing this, most lip balm kits on Amazon, for example, are between \$15 and \$25 and include 50 tubes, with some kits including labels; all in all, buying a lip balm kit is a good investment, especially if you intend to make more than one batch of 50.

The only detail that I think that I've left out is the matter of the essential oils. Instead of adding essential oils drop by drop to each tin, as was the case in my salve recipe, this time I suggest counting out all the drops into a small glass container shortly before removing the lip balm base from the stove and then mixing all the essential oils into

## the mixture seconds before pouring it all onto the filling tray. Recipe #9 – Calendula & Plantain Lotion Bars

In my experience, there is a decent amount of confusion about what lotion bars. The simple explanation is that a lotion bar is basically solid lotion. Whereas typical lotions are wet and absorb rather quickly into the skin, lotion bars are solid and have a waxy feel that might require getting used to. Compared to salves and lip balms,

I first made lotion bars because I wanted to learn more about using different ratios of oils, butters, and wax, and at the time I had no clue what a lotion bar was. I saw the basic recipe for a lotion bar while I was doing internet searches, and it seemed so easy to make them. The basic idea is using oil, butter, and wax in equal proportions, so the final recipe is almost exactly 1/3 of each. The way that I make them is by using 1 part oil by volume to 1 part each of butter and wax by weight, and then I use about 2% to 5% dilution of essential oils. This works very well for me. The following recipe produces roughly 18 2ounce lotion bars:

#### Ingredients:

- 4 ounces of Calendula infused Coconut oil by volume
- 4 ounces of Plantain infused Coconut oil by volume
- 8 ounces of Cocoa Butter by weight
- 8 ounces of Beeswax by weight
- 10 drops Lavender EO per tin

#### Why did I choose Coconut oil?

In the lip balm recipe, I chose to infuse the herb into Jojoba oil, but Coconut oil is my favorite general purpose fixed oil for several reasons. For starters, I like the smell of coconut oil, which I count as a factor influencing compliance or how likely I am to use the product; if you hate the smell of coconut oil, I'd suggest that you avoid using it! Coconut oil is also highly regarded for its own benefits to the skin. From a formulation perspective, coconut oil is nice to work with because it stays in a solid form unless exposed to heat. There would be nothing wrong with using a nice extra virgin olive oil, which also has its own benefits to the skin, but olive oil does not stay solid at room temperature in my climate. Many oils could be substituted for coconut oil and produce very nice results. Years ago I studied with Susan M. Parker, who wrote a book called *Power of the Seed*, and my eyes were opened to how complex the world of lipids actually is; you can look at the oil of plants as an entire category of herbal study in itself!

## Variations...

As I just mentioned, many oils can be used with nice results depending on what you're looking for in a lotion bar, but I typically stick with just coconut oil. However, if I'm making a lotion bar specifically to help with razor burns, for example, I might use 6 ounces of coconut oil and then make up the other 2 ounces of the oil ratio with what I like to think of as "specialty oils" such as rosehip oil, almond oil, tamanu oil, and the like, all of which can be chosen for their own particular properties. Using a combination of 4 ounces of unrefined cocoa butter and 4 ounces of refined shea butter can produce lovely results, as well. Certainly, you can choose other essential oils, but I suggest sticking to 2-5% as a total for whatever essential oils you may choose.

Finally, you can infuse your base fixed oil (not usually the specialty fixed oils, as they're often more sensitive to heat) with different combinations of herbs. Without a doubt my favorite combination of herbs to infuse for skin products is that of plantain and calendula in about equal parts, as both are generally very helpful herbal allies to the skin. You can infuse the plantain and calendula together or by prepare single infusions of each and combining them later. Since I use the combination of plantain and calendula so frequently in a variety of products, I tend to just infuse them together. However, often I will add other herbs to the plantain and calendula blend, and those additional herbs I will infuse as singles and blend them in later. If I want a really nourishing lotion bar that may help a minor wound to heal, I might add comfrey because of its cell proliferation properties and varrow because of its antimicrobial properties, but there are many, many herbs that can be used in lotion bars depending on what you're going for.

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# CHAPTER 5

# GLYCERITES, OXYMELS, & LINIMENTS

Glycerites, oxymels, and liniments are all types of herbal preparations that are easy to make and provide various health benefits. Each of them has a different base but very similar method of preparation, as you may be able to tell by the repetitive pattern that I use below to describe each, and they can be customized to suit individual preferences and purposes. They are listed together in this chapter because none of them fit neatly into the other chapters, but together these three preparations merit a chapter of their own.

A glycerite is a liquid herbal extract, for internal use, that uses vegetable glycerin as a base instead of alcohol. Glycerin is a sweet and viscous liquid that is made from vegetable oils. It is a great alternative for people who prefer not to consume alcohol or for children and pregnant women who cannot or ought not consume alcohol; however, the downside is that glycerites are not as potent as their alcoholic counterparts and glycerin has a much shorter shelf life. Recipe #10 will be Echinacea Glycerite.

To make a glycerite, start by selecting the herb of your choice. You can use fresh or dried herbs, but fresh herbs tend to work much better. Next, chop the herbs and place them in a jar. Cover the herbs with glycerin and stir well. Make sure that the herbs are completely covered with glycerin. Let the mixture sit for several weeks, shaking the jar daily. After the desired amount of time has passed, strain the mixture through a cheesecloth and/or a fine mesh strainer. The resulting liquid is a glycerite.

An oxymel is a sweet and sour herbal preparation, for internal use, that is made by combining honey and vinegar. Honey is a natural sweetener and has antibacterial properties, while vinegar helps to preserve the herbs and has health benefits of its own. Perhaps the most famous example of an oxymel is called Fire Cider, which will be Recipe #11. To make an oxymel, start by selecting the herb of your choice. You can use fresh or dried herbs, but dried herbs tend to work much better. Next, chop the herbs and place them in a jar. Cover the herbs with honey and stir well. Then, add vinegar to the mixture and stir again. Let the mixture sit for several weeks, shaking the jar daily. After the desired amount of time has passed, strain the mixture through a cheesecloth and/or fine mesh strainer. The resulting liquid is an oxymel.

A liniment is a liquid herbal preparation, <u>for external use only</u>, that is often used for pain relief and muscle soreness. It usually contains rubbing alcohol or vinegar as a base and is applied topically to the affected area. Witch Hazel can also be used to make a liniment. Perhaps the most famous liniment in the Western world was published in the 1939 book called *Back to Eden* by Jethro Kloss, often referred to as Kloss's Liniment. My adaptation of this liniment will be Recipe #12.

To make a liniment, start by selecting the herb of your choice. You can use fresh or dried herbs, but dried herbs tend to work much better. Next, chop the herbs and place them in a jar. Cover the herbs with rubbing alcohol or vinegar and stir well. Let the mixture sit for several weeks – or even months, shaking the jar daily. After the desired amount of time has passed, strain the mixture through a cheesecloth and/or fine mesh strainer. The resulting liquid is a liniment.

The first of the recipes that follows is for an Echinacea Glycerite that I first made an entire gallon of for my sister to give to my nieces and nephews so that they could avoid an alcoholic preparation and enjoy the sweeter taste of vegetable glycerin – remember what Mary Poppins sang about compliance! The second recipe is my recipe for Fire Cider which was published in the book called *Fire Cider! 101 Zesty Recipes For Health-Boosting Remedies Made With Apple Cider Vinegar* by Rosemary Gladstar and friends (that includes me!); I am very proud to have been a part of this book that raised money to help with the legal defense of the name "Fire Cider" against a company that trademarked the name - #traditionnottrademark. The final recipe is for my take on the liniment recipe found in *Back to Eden* 

by Jethro Kloss; my adaptation is geared less toward pain relief and sore muscles but rather was crafted specifically to be a powerful disinfecting liniment, suitable for predicaments such as cat scratches or dog bites that require disinfecting, that I included in my own personal herbal first aid kit that I carry with me when outdoors camping and such.

# Recipe # 10 – Echinacea Glycerite

#### Ingredients:

- 1 ounce of dried *Echinacea purpurea* leaves and flowers
- 1 ounce of dried *Echinacea angustifolia* root
- 16 ounces of Organic Vegetable Glycerin

#### Notes:

There are lots of debates about Echinacea as to which varieties are the most medicinally potent and which parts of the plants to use. My approach has been to sort of split the difference and use *E. purpurea* leaves and flowers and *E. angustifolia* root. In my experience, using a half and half ratio by weight has produced very nice tinctures and glycerites. If you only have one variety available, I'd do a little test and chew on the root; if the root causes you to salivate almost immediately and causes an oral buzzing that lasts for many minutes, I'd stick to using half a portion of root. If there's no salivation or oral buzzing, I'd just use all leaves and flowers.

Because vegetable glycerin is not as good of a solvent as alcohol, if you're using Echinacea root, you really need to help it out and powder the root to increase the surface area. Powder, however, tends to clump together on the bottom of your jar, so if you want your glycerite to be as strong as possible, it's going to take more diligent shaking than you can reasonably get away with when making a tincture.

#### Directions:

Basically, we're shooting for a 1:4 or 1:5 ratio of herb by weight to vegetable glycerin by volume. The process is the same as making a tincture, but in my opinion, more diligent shaking is required and, if you've got the time, I'd let it macerate for many months.

# Recipe # 11 – Fire Cider Oxymel

Fire Cider is a folk remedy that I never make exactly the same way twice. Every batch will be different based on myriad factors, but I suppose, if you wanted to, that you could standardize a recipe yourself. For this recipe, I'm just going to tell you what I do, and I hope that you make yours with your own personal twist!

## Ingredients:

- Onions
- Garlic
- Ginger
- Horseradish
- Cayenne Powder
- Habañero Peppers
- Rosemary Sprigs
- Lemon
- Four 32-ounce bottles of Apple Cider Vinegar
- Raw, Local Honey
- Optional: Fresh Turmeric & Black Pepper

## Notes:

- Vinegar can react with the metal bands and lids of Mason jars, so I highly recommend finding dedicated silicone lids reserved just for making Fire Cider.
- Garlic reacts in vinegar and will turn a bluish green after just a few days; do not freak out this is normal!
- Many recipes online talk about the shelf life of Fire Cider, but I have Fire Cider that is still good after 5 years on a shelf. Do whatever you're comfortable with.
- I always buy organic ginger because I don't want to bother peeling it with a spoon. I never buy organic onions or garlic because I think that the layers protect the insides from any chemicals. Do whatever you're comfortable with.

#### Directions:

When I make Fire Cider, I make it with three half gallon Mason jars.

I buy what looks like roughly equal amounts of onion, garlic, ginger, and horseradish by volume.

First, I dice the onions and add them to each of the three jars until it looks like each jar is about a quarter of the way full of onions.

Second, after peeling the garlic, I just give each clove a good whack by pounding on the side of my knife to crush them a bit, and then I add garlic to each of the three jars until it looks like each jar is about half full.

Third, since I'm using organic ginger, I just slice up the ginger thinly and then add the ginger to each of the three jars until it looks like each jar is about three quarters full.

Finally, I take the horseradish root and slice off the peel with a knife and then use a box grater to shred the horseradish root like I'm grating cheese. Let the grated horseradish root sit a while before adding it to each of the three Mason jars, filling them each to almost near the top.

After all these four main ingredients mostly fill each jar, it's time to add cayenne powder. This should be done to taste. I like my Fire Cider to give a good kick, but you may want to go much lighter with it. The same goes for adding Habañero peppers. I usually buy one whole Habañero pepper for each jar and simply slice them in half and throw them in seeds and all. You do not have to add them at all. Remember, when it comes to cayenne pepper, you can always add more later, so it's wise to go light and not add too much right away!

Next, I like to slice up one lemon and divide it up between the three jars – peel and all.

In honor of Rosemary Gladstar, a rockstar herbalist who I had the pleasure of being included in her Fire Cider book, I put a sprig or two of rosemary in each jar, and at this point, barring any additional ingredients that you might like to add, it's time to shake up each jar to allow for the "dry" ingredients to settle and then pour in apple cider vinegar all the way to the top.

After the apple cider vinegar has each jar filled to the top, cap each jar with silicone lids and give it all a good shake! In 12 to 24 hours check each jar to see if you need to add more vinegar. You may only need three 32-ounce bottles of vinegar, but it's best to have more than you need than not enough! Rinse out the emptied vinegar bottles and save them for later, as that's what I'm going to pour the final product back into.

Shake each jar for 30 seconds or more each day for the next 4 to 8 weeks. Personally, I just mark 6 weeks on my calendar because the vegetables can break down too much by the 8-week mark.

The next step is to strain the jars. For this, what I like to do is grab an original metal band for a Mason jar and put a piece of cheesecloth over the Mason jar opening and tighten it on with a band. This will allow for the liquid to come out of the Mason jar without anything else passing through. If the infused vinegar isn't coming out very well, I'll use clean scissors to make a few small holes in the cheesecloth. Typically I'll balance the Mason jar on top of a mesh strainer placed on top of a Pyrex measuring cup.

Eventually, the liquid from all three half gallon Mason jars is going to be mixed in a gallon vinegar jug and the final step is to add what makes Fire Cider an oxymel – adding honey! This is another "to taste" step, but I typically add 16 to 24 ounces of raw, local honey. After shaking up the final mixture completely, I find that the honey basically makes up for the vinegar lost to the vegetables and I can refill the original three bottles of Apple Cider Vinegar at the end.

Some people just compost the vegetables, but other people like to jar it up and freeze it for future use in Bloody Mary's or in stews.

# Recipe # 12 – Disinfecting Liniment

Before getting into the recipe, I want to admit that I have improperly used this liniment and found out the hard way that it can cause undesired negative results. To me, this formula is a last resort or emergency preparation perhaps best reserved for animal bites and scratches or other situations where there is an immediate concern of a serious infection. This is for topical application only!

As with any recipe, you can scale up or down, but the way that I see it, if I can make half a gallon of this stuff once and it lasts for 10 years, why bother make tiny amounts?

Ingredients:

- 91% Isopropyl Alcohol
- 4 Oz Chaparral Leaf
- 4 Oz Echinacea angustifolia Root
- 4 Oz Myrrh Gum Powder
- 4 Oz Oregon Grape Root
- 1 tsp Cayenne Powder (Optional)
- 1 tsp Habañero Powder (Optional)

#### Substitutions:

- ✓ Yarrow leaf & flowers may be substituted for the Chaparral leaf, but I prefer Chaparral; alternatively, you could use 2 ounces of each!
- ✓ Oregon Grape Root is generally regarded by herbalists as a good substitution for the over-harvested Goldenseal Root.
- ✓ 190 Proof Everclear may be used instead of 91% Isopropyl alcohol, but it is drastically more expensive.

#### Directions

- 1) Using a dedicated coffee grinder or other such apparatus, grind up the roots into a powder.
- 2) Add the dry ingredients to a half gallon Mason jar.
- 3) Fill the Mason jar with the alcohol, leaving an inch or two at the top.
- 4) Shake the Mason jar every day for at least 8 weeks I've let mine macerate for years, decanting off a little here and there to fill bottles as needed.
- 5) After at least 8 weeks, strain the liniment thoroughly or just decant however much you need and let the rest continue to macerate.
- 6) Store in dark bottles in a cool, dark place, and this formula will be potent for many years!
- 7) Use very sparingly and only when necessary...

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