

Essential Oils for Pain and Inflammation



Remedy Guide

Dr. Eric L Zielinski

Bestselling Author of The Healing Power of Essential Oils



Essential Oils for Pain & Inflammation & Remedy Guide

by Dr. Eric Zielinski

Copyright © 2022 by NaturalLivingFamily.com

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted by any means – electronic, mechanical, photographic (photocopying), recording, or otherwise – without prior permission in writing from the author.

The products and statements in this book have not been evaluated by the United States Food and Drug Administration (FDA) and are not intended to diagnose, treat, cure or prevent disease. All information provided in this book is for informational purposes only, and is not intended as a substitute for advice from your physician or other health care professional. You should not use the information in this book for diagnosis or treatment of any health problem.

Learn more information at: NaturalLivingFamily.com.

The Essential Oils Apothecary

Alzheimer's, Cancer, Fatty Liver, Heart Disease & More... 150+ Soothing Remedies for Managing the Treatment & Symptoms of Chronic Illness!

Get Your Copy Here!

The Healing Power of Essential Oils

150+ Healing Recipes & Remedies to Soothe Inflammation, Boost Mood, Prevent Autoimmunity, and Feel Great in Every Way!

Get Your Copy Here!

GOOD NEWS! You Can Unlock My Complete Library of Backed-by-Science Resources so You Can Use Essential Oils with Confidence!

Unlock ALL of My eBooks & Get INSTANT Access to My Complete Collection of Backed-By-Science Aromatherapy Resources.

Join Here! EssentialOilsClub.info



The Risk-Free, Evidence-Based, Brand-Neutral Approach to Using Essential Oils... Safely.

Created by a Public Health Researcher & Essential Oils Lover. Trusted by over 11,019 families.

New to essential oils? Worried you aren't using them the "right" way? Want to live a healthier, more abundant life with oils but don't know where to start?

When you **join my club**, you'll get INSTANT access to my complete collection of **backed-by-science aromatherapy resources**.

Researcher-Formulated Mom-Approved

As a special bonus, my wife Sabrina ensures all the recipes and remedies we share with you are **kid-friendly**, **mother-approved** and **real-life tested** to ensure their safety and effectiveness.

"I started using EOs because I listened to you on a health summit.

Your education has helped me understand on a deeper level how to
use continue to use EOs wisely. Thank you for caring deeply about our
health and our choices.

"I have been using EOs in my homemade cleaning products. Now, I am confident to take it to the 'next level' and use them in body care and health prevention."

- Karen W.

Join Dr. Z's Essential Oils Club Today!
EssentialOilsClub.info

Spiritual Disclaimer

Please note that I am a Christian and it is from this perspective that I present the information that is in this book. Amongst other things, this means that I will refer to "God," not the "Universe." This also means that I may reference Biblical teaching and ancient proverbs that I have found to be helpful and applicable today.

Sometimes people get offended by the words that I use, or the spiritual references that I make. Please don't fall into this trap.

As a trained public health researcher and world-renowned essential oils educator, you can trust that the information presented in these pages is solid, evidence-based and that it will help you.

I do not judge people that don't share my faith and I am committed to helping everyone (regardless of who they are or what they believe) benefit from my experiences. In fact, I whole-heartedly believe this is my mission in life and why God put me on this planet.

You see, there I go referencing "God" again.;)

A Note About Faith

Personally, I have found that my faith has been vital to helping me overcome sickness and disease - as it has for the thousands of people that we have helped get well.

Being a Christian, it's impossible for me to separate my personal beliefs from my actions and lifestyle habits. As a researcher, I am intrigued to see how clinical trials and science continues to uncover the role that prayer, positive thinking and faith play in the healing journey.

My dear friend and Integrative Oncologist, Dr. Tony Jimenez often says that "cancer is an emotional disorder." The same can be said of all chronic, long-standing disease like gut disorders, autoimmunity, arthritis, fatigue and insomnia.

It is with this in mind that I present to you the information in the Introduction and scattered throughout this book where you will discover eternal truths that will provide you with hope, inspiration and may even shed some light on things if you are willing to take a dive into the spiritual side of healing with me.

Table of Contents

Click on Title to go to Chapter

The Foundation to Fight Pain
Bioactive Foods 8
Exercise 19
Arnica 32
Calendula 36
Echinacea 40
Magnesium 47
Turmeric 57
ArcticBlast 64
Must-Have Essential Oils
EOs for Pain Relief 71
EOs for Fibromyalgia 82
/ 0
Basil 85
, •
Basil 85
Basil 85 Black Pepper 89
Basil 85 Black Pepper 89 Copaiba 96
Basil 85 Black Pepper 89 Copaiba 96 Frankincense 102
Basil 85 Black Pepper 89 Copaiba 96 Frankincense 102 Lemongrass 108
Basil 85 Black Pepper 89 Copaiba 96 Frankincense 102 Lemongrass 108 Lime 113
Basil 85 Black Pepper 89 Copaiba 96 Frankincense 102 Lemongrass 108 Lime 113 Marjoram 123
Basil 85 Black Pepper 89 Copaiba 96 Frankincense 102 Lemongrass 108 Lime 113 Marjoram 123 Neroli 127
Basil 85 Black Pepper 89 Copaiba 96 Frankincense 102 Lemongrass 108 Lime 113 Marjoram 123 Neroli 127 Palo Santo 132

Part Three Easy Quick-Start Recipes

Bruises Healing Roll-On 162

Burn Relief Cream 163

Burn-no-More Skin Soothing Roll-On 164

Fibromyalgia Massage Oil 165

Magnesium Oil Spray 166

Natural Muscle Rub 167

Nerve Pain Relief Massage Oil 168

Pain Away Roll-On 169

Pain Relief Massage Oil 170

Roll Away the Itch Roll-On 171

References 172

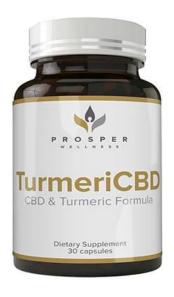
About the Author 184

PART ONE The Foundation to Fight Pain

A Better Pain-Relieving CBD

The industry changes nearly every day, and scientists have discovered a shocking new pain-relieving & inflammation-soothing formula that can yield 7x better results for patients.

It involves combining CBD with two related cannabinoids called CBG and CBC.



- CBG+CBC have been clinically shown to double the results of CBD.
- Plus, there's an ancient spice that can make CBD+CBG 6x more absorbable: turmeric (a natural painkiller and cancer-fighter).

This means that - by adding CBC, CBG, and turmeric - you can get 7x better results than just plain old CBD.

The product is called TurmeriCBD, and with our Natural Living Family "Group Buy" discount, you get an additional 10% off their already discounted price.

→ Get 40% OFF HERE!

CHAPTER 1 Bioactive Foods

Several years ago, we upgraded our diet and focused on eating more *bioactive foods*, and we have found them to be one of the biggest keys to unlocking abundant health for our family. But, if you're like most people, you've never heard of bioactive compounds, so let's start there...

What Are Bioactive Foods?

Today, as a society, we are more unhealthy and overweight than ever. In pursuit of both weight loss and better health, many people turn to fad diets and multivitamin supplementation, which often fails to address either of these issues. People discover that their weight-loss is short-lived and true health gains are not apparent.

What if there were a better way? I believe there is. Rather than turning to these quick fixes, adding foods rich in *bioactive compounds* to your diet along with adding essential oils to your routine can help ensure that you are getting the nourishment your body needs. It may even help you achieve your body's ideal weight.

When I was conducting research for our new book, *The Essential Oils Diet*, the term "bioactive" repeatedly caught my attention.

Assuming you're like me and you haven't heard of them before, bioactive compounds, are phytochemicals (plant-based chemicals) that help boost metabolism, prevent disease and make you feel great! Examples you may be familiar with include:

- Carotenoids tetraterpenoids that gives your carrots, corn, tomatoes and pumpkins their distinct orange, yellow and red pigments.
- **Polyphenols** a group of more than 8,000 antioxidant-rich phytochemicals such as flavonoids, lignans phenolic acid, which boost the immune system.
- **Fiber** Dietary "roughage" (such as cellulose, lignin, and pectin) that are resistant to the action of digestive enzymes and help gastric motility (i.e. aids in moving food through your system and makes you "regular").

• **Essential oils** – volatile organic compounds that are extracted from plants containing powerful antioxidant and healing properties

While you may not have heard of *bioactive* before, you are most likely familiar with the term "antioxidant." Antioxidants are the main reasons why more people should be talking about bioactives. In addition to fiber – yes, that stuff we all need for regular bowel movements – bioactive compounds are mainly comprised of *polyphenols*, *flavonoids*, *carotenoids* and *essential oils*, which are all plant-derived chemicals that contain outstanding antioxidant properties. Science has identified thousands of bioactive compounds including over 8000 polyphenols alone to date.

- One definition states that bioactive compounds are "components of food that influence physiological or cellular activities in the animals or humans that consume them."
- Or, in more practical terms, they are "phytochemicals found in certain foods "are capable of modulating metabolic processes, resulting in the promotion of better health."
- With these definitions in mind, "bioactive foods," therefore, would be those foods that are rich in plant-based chemicals that help boost immune function and promote robust health.

"So, why haven't I heard about bioactive foods before?" you may be asking.

Good question!

Truth be told I don't really know the reason. Maybe it's because a diet in bioactive compounds won't make anybody rich because the best way to get them in your system is through good ol' fashioned plant-based foods; not supplements, pills or expensive manufactured powders.

In fact, I'm somewhat befuddled by the fact that our diet program is the FIRST book ever to usher into the mainstream health and wellness community what researchers have been talking about for years.

Where Bioactive Compounds Fit in Nutrition

To put bioactive compounds into perspective, it's important to remember that our body requires two kinds of nutrients:

- 1. **Essential Nutrition** nutrients that are necessary for life that your body cannot make: carbs, fats, proteins, water, certain vitamins & minerals.
- 2. **Non-Essential Nutrition** can be made by the body or obtained from sources other than foods and beverages: vitamin D, cholesterol & amino acids.

Bioactive compounds, on the other hand, are considered "extra-nutritional," meaning they contain no calories (as protein, fat, and carbohydrates do), and they are not vitamins or minerals. They are not required for life, but they make you truly healthy.

Think of it like this: You can live on essential nutrients with a feeding tube but it doesn't mean you are truly alive. Bioactive compounds add spice to your life!

The European Journal of Nutrition published an article in 2013 that put it this way: "Whereas the absence of essential nutrients from the diet results in overt deficiency often times with moderate to severe physiological decrements, the absence of bioactive substances from the diet results in suboptimal health."

Unfortunately, today's trendy low-carb diets focus on "essential nutrition" and ignore bioactive compounds, which are necessary for truly robust health. Interest in these carbohydrate-starvation fad diets means that heavy consumption of meat and animal fat is highly promoted. We should be cautious about the "benefits" of these diets. Research strongly suggests that someone's chance of enjoying optimal health is greatly diminished if his or her diet consists primarily of animal fat and protein.

If you want to improve your health, skip the fad diets and add more bioactive compounds to your plate!

The Benefits of Bioactive Compounds

These compounds do more than just help us live vibrantly. Antioxidant bioactives like flavonoids, carotenoids, and polyphenols are plant chemicals that protect your body's cells from damage caused by unstable atoms known as free radicals, which cause disease and illness. If your diet is lacking in foods that contain these compounds, you're going to be sick and gain weight.

Research shows that they also protect us from numerous health problems. Studies have shown that bioactive compounds may help:

- Improve vision
- Prevent diabetes and obesity
- Manage blood pressure
- Protect against cardiovascular disease
- Lower cholesterol
- Possibly fight cancer and slow tumor growth

In fact, a study from the American Association for Cancer Research says, "A variety of bioactive food components have been shown to modulate inflammatory responses and to attenuate carcinogenesis," that is, weaken the process of cancer growth."

While researchers are just starting to dive into this topic, the bottom line is that plant foods and herbal remedies, including essential oils, contain bioactive compounds. Some are more robust than others but we can choose to bolster our so-called "nonessential" nutrition by incorporating more of these into our lives.

Why You Need Bioactive Foods In Your Diet

Every day, we are bombarded by toxins in our food, soil, water, air – in short, all around us. These toxins include:

- Organophosphates and other pesticides used in homes and schools that accumulate in the body.
- Chlorine, pesticides, and preservatives added to or sprayed on foods. These chemicals can cause multiple health problems.

 Overuse of antibiotics, leading to antibiotic resistance. These medications destroy healthy gut bacteria, an important contributor to a healthy immune system. Many are fed to the animals we eat as well.

Currently, scientists are researching the impact of bioactive compounds on the body's detoxification systems, since many studies show that "exposure to an accumulation of toxins play a significant role in cardiovascular disease, type 2 diabetes, and obesity." It's great to see science moving in this direction, however, you can start today with steps to improve your health by adding more bioactive foods to your diet.

The Essential Eight Bioactive Foods

As mentioned, not all bioactive foods are equal. We have picked out the "Essential Eight" foods that you should be putting into your diet to maximize your health. These are all rich in bioactive compounds that promote overall health or support fat-burning by addressing issues such as inflammation, stress, insulin resistance, and hyperglycemia, all contributors to the most common diseases in American today.

The Essential Eight are:

SEEDS

These embryonic plants contain many life-enhancing properties. Some great examples that you can easily incorporate into smoothies and other dishes include:

- **Hemp seed**: Full of omega-3 and omega-6, hemp seeds contain as much protein as an ounce of beef or lamb. They also provide all the essential amino acids your body requires that it cannot produce on its own and are a good source of Vitamin E and many minerals. They can also reduce inflammation.
- Cacao seeds: Cacao is a powerful antioxidant and can help regulate the immune system, protecting against oxidative stress. It can also offset hyperglycemia, improve cellular response, and modulate obesity-related inflammation caused by high-fat diets. Use 72% or more cacao nibs or sugar-free bars.
- Chia seeds may help lower total cholesterol and increase "good" cholesterol, reducing your risk of cardiac events.

• **Flaxseed** helps to manage your weight, lowers cholesterol, thereby reducing the risk of cardiovascular disease, and improves insulin resistance which can reduce your risk of developing type 2 diabetes.

HEALTHY FATS AND OILS

Healthy fats and oils are an important part of a balanced diet, however, not all of them are created equal. Some, such as vegetable oils and margarine, are unhealthy foods even though they are often labeled as healthy choices. Here are some excellent choices:

- Extra-virgin olive oil is one of the best overall sources of fat and adding it
 to a nutritious diet promotes weight loss. It contains oleic acid, which has
 been shown to reduce inflammation, aiding in diseases such as cancer,
 autoimmunity, and dementia. It is also rich in antioxidants and may even
 reduce the risk of a cardiovascular event or stroke. We get ours freshpressed here.
- Avocado oil can lower cholesterol, banish hunger pangs, and spot-reduce fat around the middle. Like olive oil, it's high in monounsaturated fats, which help bioactive compounds get into your bloodstream and to the mitochondria of your cells to fight free radicals.
- **Butter** is an important dietary fat that must be consumed in moderation if you can tolerate it. Conventional butter, however, often comes from cows that are fed hormone-filled feed and administered antibiotics. Always choose non-GMO and organic butter, preferably from grass-fed cows.

FRUIT

Some fad diets, like Atkins or the ketogenic diet, restrict the consumption of fruit. However, many are rich in antioxidants and appealing to eat.

- Berries of all varieties are packed with bioactive compounds and their seeds are a great source of fiber, which can help suppress your appetite.
- Eating avocados not just the oil can help you absorb bioactive compounds better and can reduce your desire to eat more. They're also a good source of fiber and vitamin K, which helps with weight control.
- Grapefruit has been well-researched as a weight loss tool and beneficial
 in managing diabetes and cardiovascular disorders. Be sure to eat the
 whole fruit, not just the juice, for the most benefit. However, this fruit can
 interact with certain pharmaceuticals so ask your doctor before adding to
 your diet.

CRUCIFEROUS VEGETABLES

This is one of the healthiest food groups we consume. Cruciferous vegetables are potent anti-inflammatories, cancer fighters, and natural detoxifers. They are rich in bioactive compounds, vitamins C, E, and K, folate, and minerals. In fact, the National Cancer Institute is studying the impact of cruciferous vegetables because they are known to:

- Protect cells from DNA damage
- Inactivate carcinogens
- Produce antiviral, antibacterial, and anti-inflammatory effects
- Induce cell death (apoptosis)
- Inhibit angiogenesis (tumor blood vessel formation) and tumor cell migration (which is needed for metastasis)

Best choices include:

- Broccoli, which has been shown to counteract nonalcoholic fatty liver disease that can progress to a deadly cancer. Buy it fresh as the prepackaged type may have reduce levels of bioactive compounds.
- Bok choy contains sulforaphane, which improves blood pressure and kidney function. It also has lutein and other anti-inflammatory cancerprotective compounds, vitamins A, B, and C. It's very low in calories and high in fiber!

NUTS

While they are calorie-dense, nuts are nutritional powerhouses full of protein, unsaturated fat, and fiber. A handful of nuts a day can help prevent obesity, type 2 diabetes, and heart disease. See our Fill-in-the-Gap Nut Snack Recipe for a delicious way of using nuts.

- Almonds: Research shows that daily consumption of small or large amounts of almonds does not result in weight gain! Even small amounts can improve health, including improving fat metabolism and moderating the rise in blood sugar after meals as well as increasing a pleasant feeling of fullness.
- Walnuts offer much of the same benefits as almonds but they contain higher amounts of both omega-3 and omega-6. This makes them particularly effective in reducing the risk of type 2 diabetes.

LEGUMES

Legumes contain bioactive components that may reduce the risk of developing cardiovascular disease and type 2 diabetes. They are also packed with fiber and antioxidants that together combat high blood sugar and excessive lipids in the blood, common for people who follow a typical American diet. (Note: we do not recommend soybeans or unfermented soy products as a legume choice as they are almost invariably GMO.)

- Black beans contain bioactive compounds known as anthocyanidins that give a fruit or vegetable its color. These help to lower blood sugar after a meal, which is particularly important in preventing the onset of heart disease and type 2 diabetes.
- Lentils may be green, black, red or yellow, and all varieties of lentils contain numerous bioactive components as well as prebiotic carbohydrates that help your healthy gut bacteria to survive. Prebiotic carbohydrates and dietary fiber have the potential or reduce the risks of becoming obese or developing cancer, heart disease, and diabetes.

WILD-CAUGHT COLD-WATER SALMON

Fish is an important protein food to include in your diet if you are not a vegetarian or vegan. Avoid farmed fish, which are fed grains and other unnatural ingredients that change their fat makeup. Cold-water fish are rich in omega-3 fats, making their consumption conducive to cardiovascular health. Avoid fish species that are endangered from overfishing. (Check SeafoodWatch.org to find a list.)

Cold-water salmon is harvested in the waters of Alaska, the Pacific Northwest or Northern Europe among other sources. Avoid Atlantic salmon. Omega-3 fatty acids provided by consuming these fish can help moderate inflammation. Along with caloric restriction, eating wild salmon has shown the best results in effecting weight loss and decreasing concentrations of some inflammation markers.

TEAS

Purified or distilled water is a necessary drink but when you need flavor, tea is your go-to solution.

 Matcha green tea is one of the best sources of catechins, bioactive compounds that act as antioxidants. The National Cancer Institute acknowledges that matcha could even help with cancer, partially by

- protecting DNA. It's also effective at burning body fat. Our favorite brand of matcha is Ujido. Learn why we love this brand.
- Rooibos and holy basil tea: This blend combines rooibos, which can help
 you lose weight and achieve your body's ideal weight with holy basil (tulsi),
 an herb that increases energy and relieves stress. Combined, they form a
 tea that revs you up when you're feeling sluggish. One of our metabolismboosting favorites is the Republic of Tea's Get Burning blend.
- Senna tea stimulates the intestines, aiding in the natural process of elimination. Traditional Medicinal's Smooth Move tea is a natural, gentle bowel cleanser best taken at bedtime.

Essential Oils are Also Bioactive Compounds

Foods are not the only way to access important bioactive compounds. Essential oils are also inherently bioactive but, unlike bioactive-rich foods, they are not a source of nutrition. For example, both the fruit of a lemon and lemon essential oil, which is extracted from the rind, contain bioactive compounds, but the latter doesn't provide any energy in the form of calories, vitamins, or minerals. However, together they become far more than the sum of their parts.

Essential oils offer a more concentrated form of bioactivity than food does. These minute but highly concentrated compounds are able to heal the body (and soul) with metabolic effects that can assist in weight loss – or weight gain, if that is your concern. Certain oils can also boost your energy so you can be more active and burn more body fat.

However, you need to use caution when using essential oils. The scientific term for essential oils is volatile organic compound. The volatile components of a plant are the parts that are quickly released into the air. Essential oils are why you smell lavender when you lean down to sniff the blooms.

When using essential oils, proper dilution is always recommended. The 3 basic ways to use them include: inhaling them, applying them to your skin, or consuming them. Inhalation from a diffuser is the safest and most popular way to use them. There are few risks to diffusing 4-5 drops of essentials oils in water as directed. Be sure that your room is well-ventilated especially if you have children or pets. Run it for a few minutes only at first, to gauge your reaction.

When applying topically, make sure that you use a carrier oil and dilute properly. Read more about the benefits of different carrier oils and proper dilution rates, or learn how to consume essential oils safely.

THE PHYSICAL BENEFITS OF USING ESSENTIAL OILS

How can essential oils help you reach your ideal weight? Essential oils have a host of healthy applications, supported by research. Grapefruit, lime, peppermint, and cinnamon oils support appetite reduction, fat-burning, and other processes key to weight loss. Orange oil is one of the most versatile and affordable essential oils and is an effective mood booster. Bergamot, another citrus oil, enhances weight loss, provides stress relief, and reduces anxiety. Topical applications of both peppermint and lavender oils are proven pain relievers and peppermint can help you get moving when you start a fitness routine as well as improving performance, endurance, and respiration rate.

Several oils are known for the blood-sugar balancing prowess, including clove, lavender, melissa (lemon balm), and lemongrass. They can help relieve stress, tame inflammation, and help heal your gut. This is just a small sampling of how the bioactive compounds in essential oils can help you achieve greater health. Learn more do's and don'ts on using essential oils safely with our free Essential Oils for Abundant Living Masterclass Video Series.

What to Expect with Bioactive Foods

Your health is either robust or poor, depending on your diet's proportion of bioactive foods. Many of these compounds are present in foods that you are probably already eating, but taking the time and effort to include more of them into your diet can have a real impact on your life. These benefits include:

- You will burn calories more efficiently, helping you lose weight and attain your ideal weight.
- Your cells will be better protected against free radicals, reducing illness and slowing down aging.
- A diet filled with bioactive compounds fine-tunes your metabolism so that your energy level remains high throughout the day.
- This also enables peak mental and physical performance.
- Since you are not tied to any "fad diet," you will have more food freedom as you integrate the many colors and flavors of bioactive-rich foods into your diet.

As you can see, bioactive compounds provide a wealth of health benefits. Adding them to your diet and your diffuser can help with many goals including achieving your body's ideal weight. With so many varieties and options, you have the freedom to create a healthy diet that you will enjoy while losing weight.

It's not that difficult to get started but here's a good place to start: with our fatburning matcha latte recipe. This is just one example of the many life-changing recipes you can use to reach your ideal weight with *The Essential Oils Diet* program. After you've grabbed a copy of the book for yourself, be sure you sign up for the bonuses and join the private group coaching community.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 2 Exercise

Work smarter (not harder) should be your motto when exercising, which is why high intensity internal training workouts have become so popular.

Everyone has heard the recommendation that you should exercise for one hour every single day. However, many people do not realize that exercising *too much* can be more harmful than not working out at all. More is not better in this case, which is why *Mama Z's Fit40 & Beyond* home exercise class focuses on the benefits of high intensity interval training.

Overexertion Is Dangerous

Long distance running is a great example in which overexertion can take place. Pheidippides was an Athenian messenger who ran across the land of Marathon to announce the Greek victory over the Persian army.

Since that time, marathon running has caused a great debate. When Pheidippides arrived, he said "Rejoice, we conquer," and then he immediately dropped dead.

While some contend this story is untrue, many understand that marathon running (and overexertion) can be very harmful to the human body. Dr. James O'Keefe of Preventive Cardiology at the Mid America Heart Institute of Saint Luke's Health System said,

"The heart pumps about 5 quarts per minute when we're sitting. When we're running, it goes up to 25 to 30 quarts. The heart wasn't meant to do that for hours, day in and day out. You end up overstretching the heart and tearing muscle fibers. Up to 30 percent of those who finish marathons have elevated troponin levels, which is a marker for heart damage. That's the marker we look for to see if someone's having a heart attack- it's irrefutable evidence of heart damage,"

There is a correlation between running and shortened life expectancy. A recent study shows that long distance runners have the same life span as couch potatoes.

3 Important Health Benefits

Fortunately, global health authorities have discovered a new effective way to train and exercise, which is high intensity interval training (HIIT). The *World Health Organization (WHO)* recommends:

"Adults aged 18-64 should do at least 150 minutes of moderate intensity aerobic physical activity through the week or do at least 75 minutes of vigorous-intensity aerobic physical activity through the week or an equivalent combination of moderate and vigorous intensity activity."

Although the WHO still recommends an hour of cardio five times a week, it is reassuring to know that the benefits of high intensity interval training workouts are getting more attention around the world.

1. ANTI-AGING

According to a 2012 presentation at the >European Society of Cardiology:

- HIIT activates telomerase, an anti-aging enzyme, and reduces p53 expression, reduces p53 expression – the most commonly mutated gene in people with cancer.
- One workout can increase telomerase by circulating the cells.
- Physical activity and life expectancy have a positive correlation.

Not only can HIIT workouts benefit our DNA, but they help the following:

- Decreased body fat
- Improved libido
- Better muscle tone
- Fewer wrinkles, firm skin
- Increased energy
- Boosted metabolism

2. BALANCING KEY HORMONES

The overall most important benefit of high intensity training is the management of hormones responsible for weight gain and unhealthy eating.

GHRELIN

Ghrelin is a hormone related to long-term weight gain and short term eating habits, such as the "munchies." This hunger hormone is produced in the stomach and can stimulate appetite. Ghrelin mainly contributes to sweet, salty, and fried food cravings. It has a unique way of slowing down fat usage. Some other important facts are:

- Ghrelin "primes the brain" for post-traumatic stress disorder."
- Ghrelin continues the stress-cycle, which contributes to weight gain.
- Ghrelin is released directly in response to stressful situations, which clarifies why people eat when they are stressed.

Associate Professor Jeffrey Zigman, MD, PhD, of *UT Southwestern Medical Center* states that ghrelin is related to stress and it helps explain certain complex eating behaviors and may be one of the mechanisms by which obesity develops in people exposed to psychosocial stress.

LEPTIN

Leptin is considered the "starvation hormone" because it makes your body feel like it is full. By telling your brain you have eaten enough, leptin ensures that your energy levels are adequate. Typically, your fat cells create enough leptin so your internal energy level manages your weight and helps your cells to function.

When people gain weight, their blood leptin levels can rise and weight loss will result because the body feels full faster when eating food. However, many individuals ignore these warning signs and they eat too much. This makes them "leptin resistant" which causes more weight gain and obesity.

Three important pointers:

- High intensity training is a natural way to control these hormones and more.
- Leptin manages long-term energy balance and suppresses food consumption, which helps weight loss.
- Ghrelin is a vital and fast-acting hormone that contributes to weight gain.

The past decade has had substantial research that shows ghrelin increases and leptin decreases after burst training workouts. High Intensity Interval Training

is one of the best ways to manage your hunger cues and to maximize your hormones to lose weight.

TESTOSTERONE

Researchers have been confused for years due to these four hormone facts:

- Both of these hormones increase after high intensity training workouts.
- Increases in testosterone encourage weight loss.
- Reduced levels of leptin are responsible for weight gain.
- Testosterone impedes the discharge of leptin in the body.

Ultimately, high intensity interval training creates an effect on testosterone and leptin in the body. These hormones offset each other, but promote the same weight loss effect. This poses many questions, "Would the level of leptin created as a result of HIIT be sufficient to offset testosterone's capacity to slow down leptin release?"

The journal *Endocrine* published a study that says, YES! High intensity workouts cause leptin to not be impacted by the harmful effects of high testosterone. No relation could be found between the two hormones during the study. By doingHigh Intensity Interval Training workouts, you receive the hormonal benefit of weight loss.

Additionally, health and exercise science researchers in the UK have shown the various hormone levels for individuals who do burst training:

- Growth hormone (accredited to weight loss) increases, which shows that burst training impacts other hormones besides ghrelin and leptin.
- Ghrelin declines after 30 minutes of recovery.

These two pieces of research show that burst training is effective in curbing appetite and controlling weight gain.

3. WEIGHT LOSS

High intensity interval training is super effective when you are working out to help increase weight loss. As you are getting a good cardio workout while focusing on major muscle groups, your workout will give you plenty of bang for your buck! The hormones that affect your mood and metabolism begin to regulate

and your body will learn to burn stored fat for energy during rest periods. Of course, it is important to ensure that you're fueling your body with high quality food to get the maximum benefits of both health and weight loss.

Strengthening the major muscle groups of the body, like those in the legs, glutes, and abs also works to improve your posture, strengthen joints, and relieve aches and pains in the lower back. The benefits of HIIT are so far reaching!

The Basic Principles Behind HIIT

HIIT is a combination of short but high intensity bursts of exercise with slow recovery times repeated during a short session, such as 15-20 minutes. The workout is completed at 85-100 percent of your maximum heart rate, rather than 50-70 percent in a moderate endurance activity. This burst training workout can be done anywhere with any type of movement, as long as it is performed like a sprint rather than a marathon.

It is best to exercise first thing in the morning to control your leptin and ghrelin throughout the day. According to the *Journal of Physiology*, exercising on an empty stomach has been shown to improve glucose tolerance and insulin sensitivity. This helps to prevent type II diabetes, improve weight loss, and curb any cravings to eat unhealthy food.

One of the advantages of high intensity workouts is that they can be done at home with little to no equipment. For example, you could go to a track and walk the curves and sprint the straight lines. If you enjoy biking, you can spin at maximum speed for 20 seconds, and then go easy for 20 seconds, repeating the bursts for 10-20 minutes.

Elite athletes have been using burst training for years. While this method of exercise isn't new, it proves that anybody can train this way, whether they are an Olympian or not.

How To Start Exercising

When you have made the decision to create a healthier lifestyle, there are a couple of different components that you need to put into place. It's important to make sure that you are eating right to give yourself the energy you need and support your total body health, first and foremost. Once you have that plan in hand, adding in a great exercise program, like Mama Z's HIIT workout, is crucial for your success.

The first step to getting started with a HIIT exercise program is understanding exactly what HIIT, or high-intensity interval training, means. With HIIT exercise plans, workouts consist of short bursts of high intensity exercise, followed by slow recovery periods. Also known as burst training, one of the most common examples is alternating a short sprint with a walk to bring your heartrate down. This allows your heart to work in the wonderfully efficient way that it was designed, while

giving you the physical activity that you need to tone muscles, boost metabolism, and increase your overall physical and mental well-being.

There are a lot of amazing benefits to HIIT, but there are also a few precautions and safety considerations, as well. Exercise is best done in the morning, on an empty stomach, to help control insulin and hormone levels throughout the day. If you have pain, dizziness, vertigo, or nausea, you might be pushing too hard, so dial down the workout. Soreness is normal as you tone and build muscle, but you should never have real pain when exercising.

HIIT WORKOUTS FOR BEGINNERS

There are HIIT workouts for every part of the body, which we cover extensively in our *The Essential Oils Diet* book. With HIIT training, you will focus on one muscle group with each working, making sure that the entire body gets the attention it needs. There will be days that you work upper body, days for lower body, and days where your focus will be on your abs and core. One thing that won't change from day to day is the need for a warmup and cool down to begin and end each workout.

As a beginner, we suggest that you start with a ten-minute warmup, 10 second "burst" intervals with a maximum level 5 out of ten for effort, 50 second "recovery" intervals at a level 2 out of 10, for a total of 10 intervals. This will help you begin to acclimate to the physical activity that you are adding into your daily routine and build up your energy levels and stamina. After a couple of weeks,

you can begin to increase the length and intensity of your intervals, making for an even more effective workout.

Anyone can do HIIT workouts! Even if an exercise seems to hard, performing a modified version that meets your personal limitations is perfectly alright. The key to success is keeping your heart rate up and performing in sprint-style bursts to maximize the effectiveness of the workout.

Warmup & Cool Down Routines

The purpose of warming up and cooling down are very much the same. It's all about preparing your body. Even if you are pressed for time, be sure to start every workout with a warmup, as it can prevent injuries to your muscles and tendons. You want to be sure that your muscles are limber and ready and your heart is engaged and prepared for the challenges ahead!

WHAT IS A SAFE HEART RATE FOR EXERCISE?

In order to find your target heart rate, you must first calculate your maximum heart rate by subtracting your age from 220. With HIIT, your target heart rate will be 85-100 percent of your maximum heart rate for the short period of time of your workout – typically around 15-20 minutes.

Simple warmups that will increase your heart rate and prepare your body for the more intense intervals to come include walking up and down stairs, brisk walks, or a low impact series of kicks, arm circles, and similar exercises that will help to increase your heart rate safely. Our Essential Eight Warm-up, which you can find in *The Essential Oils Diet* book, is a perfect, martial arts style warmup that is a lot of fun and quite effective.

WHAT LEVEL OF INTENSITY SHOULD A WARMUP BE?

While you want to begin increasing your heart rate during your warmup, it's important not to overdo it and burn out in the first few minutes of exercising. Instead, start slow and build momentum to the high intensity intervals in the workout. As your body begins to get into better shape, you can begin to increase the intensity of your workouts and challenge yourself even more to achieve even better results!

COOL DOWN EXERCISES

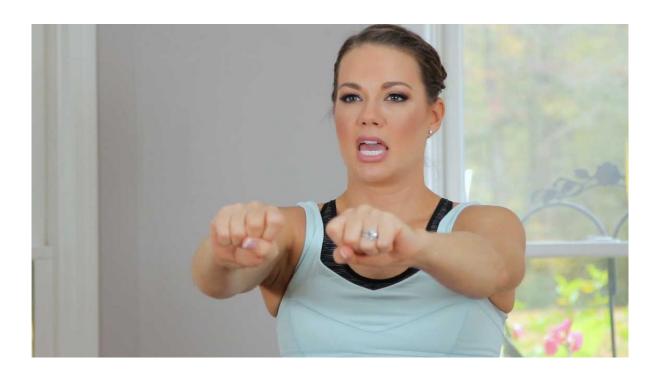
Just as important to your workout as warming up is cooling down. You want to bring your heart rate back down and signal to your muscles that it's time to rest and recover. A brisk walk for a few minutes is a perfect way to end your workout, as it will allow your heart rate to decrease slowly and your muscles to continue a slow stretch as you finish your routine.

Upper Body HIIT Workout Tips

When many people think upper body, their minds instantly go to workouts that include a large amount of weight work. With Mama Z's HIIT workout plan, nothing could be further from the truth. While you could add hand weights to increase the intensity of your workout and gain strength, everything within the Essential Exercise plan upper body HIIT Workout is done simply with your own body weight and resistance.

Your Upper Body HIIT Workout at home will consist of exercises specifically designed to strengthen the muscles of your arms, shoulders, and back. If you haven't been exercising regularly, you can begin with just a few reps or a shorter time period, modifying the moves to meet your own abilities. As time goes on, you can start to increase your reps or move to the unmodified version as you begin to increase your physical fitness.

Though Mama Z's arm circles and grip workout might seem simple, these seemingly easy moves can really pack a punch! Check out the video and see just how simple but effective these upper body HIIT exercise can be for your shoulders and arms.



Lower Body HIIT Workout Tips

Working out your lower body is so important to fitness and total body health. When you are carrying extra weight, it takes a serious toll on the joints in your legs, so by strengthening those muscles, they will better protect those joints as you work toward reaching your weight loss goals. Plus, the added weight loss will help to relieve some of the strain on your knees, hips, and ankles, as well.

The exercises in the HIIT leg workout will work your calves and thighs, without the need for excessive equipment. You may wish to use a yoga mat or folded blanket or towel to protect your knees when doing exercises that require kneeling on a hard surface. The HIIT Hips and Glute Workout gives your hips and backside a solid workout that will help to improve posture and increase joint stability and flexibility.

MOUNTAIN CLIMBERS FOR LOWER BODY

Keep in mind as you are coming up with your personalized workout that you can alternate leg days and arm days to give your muscles a chance to rest and recover between interval sessions. Working out the entire body will help you to maximize weight loss and enhance your body's overall health.

Check out the video below to see Mama Z demonstrate one of the most effective leg exercises, Mountain Climbers, as well as some modifications that you can do as you are working your way toward a higher fitness level. This exercise is so versatile! Anyone can find a way to do it, no matter their fitness level.



HIIT Ab Workout Tips

There are two ways that you can approach your HIIT ab workout as a beginner. You can rotate your ab days with your upper and lower body workouts, or you can do abs each day alongside another muscle group. As your fitness level and stamina begins to increase, you can work toward completing all the groups in one extensive workout session.

When doing your HIIT ab workout, you'll need a little bit of equipment. A towel, blanket, or mat for the floor is helpful. You also will need an exercise ball, some hand weights, and an ab wheel to get the most effective workout. Medicine balls in lower weights are also a great addition to your home workout equipment. All of these can be found at a relatively inexpensive price at your favorite big box store or on Amazon, allowing you to work out at home without expensive equipment.

IMPORTANCE OF HIIT CORE WORKOUT

Working out your core muscles is one of the most important parts of your total body health. When you have weak core muscles, it affects your posture, can cause back pain, and can also leave you open to injuries. Be sure that you include this interval set regularly in your HIIT workout plan.

Best High Intensity Interval Training Ab Exercises – Some of the best high intensity interval training ab exercises include:

- various crunches
- ab wheel rolls
- ab twists
- simple floor work like the "superman" and "ninja turtle" exercises

In the video below, see a great demonstration of Exercise Ball Crunches, with and without a medicine ball. Pay close attention to the advice given about form and learn how to modify the exercise if you aren't quite physically ready to go all-in.



15 MIN HIIT AB WORKOUT

Pressed for time? You can still fit in a quick ab workout to make sure that you don't miss a day in your new workout routine.

Start with a brisk 5 minute walk to get your body warmed up. Alternately, you can spend 5 minutes doing low impact exercises that will raise your heart rate. Choose 3 favorite exercises that work your core muscles and do a few sets of each in 10 second bursts with a 50 second cool-down exercise between each, for a total of 10 intervals.

Some of our favorite core exercises include:

- Exercise Ball Crunches
- Ab Wheel Roll Outs
- Fire Hydrants

It really is just that easy to fit a quick ab workout into your day! No more excuses about not having enough time to exercise!

WHAT DO I DO AFTER MY WORKOUT?

Of course you need to cool down. But exercise alone isn't going to make you healthy. One vitally important aspect of healthy living is to stay well-hydrated. Try our essential oil water concentrate to ensure proper hydration.

Make sure that you are eating plenty of bioactive foods that will fuel your body well. And if you find yourself a little stiff and sore after your workout, we have some great essential oil remedies for athletes that will help ease any aches and pains.

As you can see, making the move to HIIT workout plans is one that has far-reaching benefits and can help you to live the healthiest, most abundant life possible, as God intended. Want to learn more about HIIT and how you can get started on a path to weight loss and total body health? Pick up a copy of *The Essential Oils Diet* book and unlock the rest of the bonuses including more workout videos to help you maximize your fitness routine!

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 3 Arnica

Arnica oil benefits skin and muscles, and is a main staple in our home. Definitely one that you'll want in your first aid kit for bumps, bruises and more!

The phrase *put some arnica on it* has become the natural health world's version of *rub some dirt on it*. Arnica is typically referred to in this one-word-term fashion and used as a catch all for bumps and bruises. But what exactly is everyone talking about, and what does it do? What arnica oil uses are the most beneficial?

Types of Arnica

Before we can even talk about arnica oil, it's important to know what the term "arnica" might refer to. One person's arnica oil is another's arnica homeopathic remedy; the two are vastly different but may both be referred to simply as arnica. On top of that, they are all derived from *Arnica Montana*, so even the Latin name isn't enough to distinguish the difference.

HOMEOPATHIC

Arnica homeopathic remedy is an internal caplet that dissolves in your mouth. Homeopathic remedies are made of an incredibly diluted substance – so much that it's sometimes considered to be just the essence of the substance. The premise is that they can be taken for effects that are similar to the ailment, triggering the body to deal with the ailment on its own. So, an inflammatory substance would be used for inflammation.

In the case of arnica, the toxic effects of the herbal matter are diluted and reduced to a homeopathic substance that is safe for ingestion and used to stimulate the body to heal not only bruising but internal ailments.

INFUSED OR EXTRACTED ARNICA OIL BENEFITS

While arnica homeopathic remedies are safe for internal use due to their incredibly reduced preparation (not feasible at home – you must buy it!), the herbal matter is *not*. No matter, though; arnica has plenty of uses without the need to ingest it.

The most common use of arnica herbal matter is in an infused or extracted oil. Often used as a carrier oil or to make compresses, arnica oil uses are safe for wounds that did not break the skin.

CO2 ARNICA OIL USES

A relatively new preparation that is gaining traction, some sources provide an arnica aromatic extract that uses carbon dioxide as the solvent for extraction, like some of the vanilla oil available today. Carbon dioxide extraction is able to extract constituents from the plant that the steam distillation typical to essential oils cannot, usually due to a delicate nature.

Because it's not technically an essential oil, the end product is different – usually thicker, almost solid like a resin. However, because of the toxins present in arnica, use should mirror that of the extract. Broken skin and internal use are contraindicated, when applying arnica oil topically. But the thick nature of the extract would make diffusion difficult.

3 Healing Benefits of Arnica Oil

Homeopathy is an intriguing field, but today, we'll focus on the benefits of arnica oil uses – whether extracted traditionally or via CO2 extraction.

Arnica oil work well as a carrier for other soothing and healing essential oils, like geranium and lavender, and can be blended to apply to bumps and bruises for faster healing. If you find the thick extracts difficult to work with, a pre-diluted mix with a quality carrier oil is usually easier to use in a hurry.

1. SOOTHING BENEFITS OF ARNICA OIL

The primary use for arnica oil is that of healing wounds (when they are closed). But healing comes in many forms and can be pursued in many ways. Moms who keep arnica on hand for a kiddo's bump on the head may also share the arnica oil benefits with their own moms who are recovering from surgery. A very recent study (2016) tracked the use of arnica oil uses in a post-operative setting. While the oil would not have been used on the open incision site, it was found useful for "post-traumatic and postoperative pain, edema, and ecchymosis."

We all need soothing at some point or another, even if we do seem to be beyond the trips and falls of childhood. One of the main arnica oil uses is keeping it on hand can provide a quick remedy for swelling, inflammation, and pain.

2. SKIN HEALING

As a topical treatment, we expect arnica oil to seep down into the skin, be used and detoxified on its way through, and ultimately have an effect on the body by way of skin barrier. On its way through, however, there are other arnica oil uses and actions than simple pain relief occurring.

An evaluation of the actions of arnica oil uses in this in vitro study revealed antioxidant capabilities supporting traditional use of arnica "in treatment of skin disorders." Why the connection? Antioxidants repair damage on a cellular level, so the relief you feel after using arnica isn't just numbing or relaxation. It's actual healing from the cells out.

3. RESTORE MUSCLES AND RELIEVE PAIN

Another aspect of pain relief from arnica oil takes us to post-workout times, when you've tested your body and are now resting in the fruits of your efforts. Stiff, uncomfortable, even painful fruits of your efforts.

While nothing can give us complete relief from that post-workout ache any more than something could magically boost athletic performance, arnica' restorative effects of the arnica oil uses can help to take the edge off.

This was demonstrated in a double blind trial using arnica gel. After an intense workout and in the days that followed, participants applied their gel (some placebo, some arnica) to sore quadriceps. Best results followed in the immediate few days after a workout, when the body is restoring and repairing itself.

Making or Sourcing Arnica Oil

Arnica oil, used properly, is one of the most important tools for our healing essential oil first aid kits. Because it's commonly used as an extract, the temptation to make your own infused or extracted oil exists. While this isn't impossible, I personally don't recommend it.

Because of the unstable nature of the oil when prepared or used improperly, the typical home methods of extraction and infusion seem ill advised.

Extracts can be readily purchased through any herbal supplier, and they make excellent carrier oils for other healing essential oils. Check up on the brands your store has available and only choose reputable, high quality companies.

I personally prefer the CO2 essential oil extraction route. Why? Because it's easy to integrate into my essential oil uses, and because it has a more consistent composition than traditional extracts.

Remember to dilute the CO2 arnica essential oil heavily – my favorite source suggests .5-1% or less – and avoid internal use, broken skin, and diffusion or inhalation.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 4 Calendula

Calendula oil benefits your skin like few oils can. It's soothing, healing and can help with fungal infections, rashes, sunburns, and so much more!

Calendula Herbal Oil as a Base

When researching calendula oil uses, we find that calendula is an edible flower that is widely regarded in the botanical remedies world. It's included in organic gardens for its ability to detract detrimental bugs, proving itself as a valuable companion plant and addition to any garden. In fact, the practice of brewing calendula tea and using it as an insect spray, is getting renewed attention in garden circles. Although, it's usually used as a base for body care ointments, the beautiful flower is also used to create an CO2 extract or absolute that is rich in healing compounds like *alpha-cadinol*, which is heralded for anti-cancer properties.

The bright golden petals of a calendula flower are rich in medicinal compounds. Some of the earliest remedies using calendula would have utilized these components even without the availability of more complex extraction methods. Calendula can be used in simple herbal preparations like poultices and teas, and in more potent (but still simple!) preparations like herbal oil infusions.

When the active components of calendula petals are macerated in carrier oil, that oil becomes a calendula infusion, carrying both the original benefits and that of the calendula itself. Some of the volatile content will find its way into this kind of preparation, as well, making it a win/win/win formulation.

Ideal for: balms, salves, and lotions, diluting essential oils, and direct topical application.

4 Incredible Calendula Oil Uses

Calendula undoubtedly utilizes its CO2 extracts, absolutes or infused oils for the legendary beneficial companion plant actions it executes. The ability to harness those actions and apply them to our health and wellness goals is rather exciting, don't you think?

Whether you prefer the standalone extract or the combination of volatile content alongside full medicinal compounds extracted within carrier oil, there are some overarching and incredible actions you will benefit from. Here are the top four to consider, keeping in mind that these are broad actions that can cover a range of applications.

1. BACTERIA

Throughout history, calendula oil has been used as an antibacterial treatment for wound care. In World War 1 and previous wars, calendula was a primary first-aid herbal oil included in balms, creams, or poultices to keep infection at bay. If not in a poultice, an extract or infusion of calendula was most likely to be used in their preparations, retaining medicinal properties in a usable form.

An article in the journal *Evidence Based Complementary and Alternative Medicine* demonstrates calendula's ability to soothe and heal wounds, confirming historical use and giving us a picture of the way(s) it works on the body. An interesting note that the authors included was that "the antibacterial activity is due to the presence of flavonoids and essential oils in *C. officinalis.*"

This gives us a good range of uses for calendula, from extracts and infusions that retain some volatile content for specific and potent antibacterial effects.

Indications: Healing sprays, soothing balms, cleansing oils.

2. FUNGAL OUTBREAKS

Essential oils are very frequently found to be antifungal, no doubt as a function of their role in protecting the plant they originated from. This is excellent news for us, since essential oils have easy applications and are (usually) pleasant to use.

Calendula essential oil was tested for its antifungal capabilities in the lab – in vitro – by Brazilian researchers in 2008. Twenty-three strains of fungi were chosen, and calendula oil was introduced to each of them on a Petri dish. The result?

The antifungal assay results showed for the first time that the essential oil has good potential antifungal activity: it was effective against all 23 clinical fungi strains tested.

We can place calendula oil in the ranks of other antifungal powerhouses, furthering its status as a healing and protective must-have.

Indications: Diffusion, cleaning sprays, healing and protective balms.

3. SUNBURN

Suncreen is important for protecting the skin against potential cancer-causing sun rays, but the additives and ingredients of commercial sun screen can be toxic in their own right! The search for an effective, natural, ideally-DIY sunscreen continues. A natural alternative needs to be effective in studies – not just anecdotal or observational – because you can't necessarily see or feel the damage that UVA rays are inflicting.

In 2012, calendula essential oil was tested for its UV-protective ability, blended into a sunscreen cream at 5% dilution. No previous studies had been conducted; the inspiration to try it came from traditional use. Happily, calendula essential oil was found to have good sun protective ability as part of a protective cream.

If you are building your own sunscreen formula or looking for a natural commercial option, calendula is an ingredient to watch out for!

Indications: Daily protective lotion, soothing sun burn spray, regular inclusion in cosmetics.

4. INFLAMMATION

Topical inflammation ranges from uncomfortable distractions to painful problems. Anti-inflammatory herbs, flowers, and essential oils have a well-deserved place in natural remedies, and calendula is one of the best. In a summary of major monographs for calendula healing properties, the researchers note:

Calendula flower is used for compresses in poorly healing wounds, bruises, rashes, boils and dermatitis.

This backs the traditional use of calendula petals and extracts for soothing and healing inflammation and wounds and gives it a prominent place in our natural medicine cabinets. Keep both an extract and essential oil or infused carrier oil on hand for versatility.

Indications: Poultices, healing balms, soothing sprays.

How to Make Your Own Calendula Preparations

Calendula is an excellent "gateway drug" into natural remedies. Keep a variety of preparations on hand to get the most out of this important herbal flower.

- Dried petals can be used in poultices for bumps, bites, and scrapes.
- Oil extracts can be made into healing balms.
- CO2 Extract/Absolute can be added to sprays, balms, and other preparations.

Get your calendula oil from a trusted source that will be pesticide-free, preferably certified organic, then use it at 3-5% dilutions in your cosmetic and topical preparations.

Petals can be purchased at health food stores or online herbal supply stores. They should be fully dried and bright yellow or orange in color.

Create a simple oil infusion/extraction for balms and carrier oil use by placing the petals in coconut or olive oil at a ratio of 1:5 herb to oil by weight. Let sit in a warmed oven for several hours, then strain off the herbal matter and enjoy!

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 5 Echinacea

If you even remotely pay attention to the natural health community, I'm sure you've heard that echinacea benefits your health in a variety of ways – including its healing powers associated with cancer, inflammation and pain. Not only has the flower garnered a lot of media attention lately, it has turned into quite the industry!

Echinacea Benefits Equal Big Business!

In fact, "Sales of herbal dietary supplements in the United States increased by 7.9% in 2013, reaching six billion dollars for the first time," according to the American Botanical Council. This is by far the largest increase since the 1990s and we've seen steady growth in herbal sales for the last 10+ years straight.

And echinacea, as you may have guessed, is leading that impressive growth – by a long shot. In fact, echinacea, more commonly known as the purple coneflower, is now a \$28 million industry with sales increasing to 94.7 percent in 2013 alone. But this growth is not surprising when you consider the amazing health benefits associated with this flower.

History & Chemical Makeup

Native to North America, echinacea is a coneflower that has been used in natural medicine for more than 400 years. In fact, Native Americans from the Great Plains Indian tribes were known to use the flower for medicinal purposes. Although it's technically an herb, medicine can be made from echinacea's roots, flowers and leaves.

Before the mass introduction of antibiotics during WWII, echinacea benefits were widely enjoyed by the medical community. But the famed herb lost the bulk of its esteem after antibiotics caused a massive shift in the medical world.

Surprisingly, the chemicals found in the root of echinacea differ greatly from those in the upper section of the flower. When the roots are analyzed, we can see elevated concentrations of essential oils. Contrast that with the

polysaccharides contained in the parts of the plant that grow above ground, and you can see how the plant has real immune boosting powers.

In fact, several of echinacea's chemical constituents are known immune system enhancers and offer great therapeutic value. These include essential oils, vitamin C, insulin, flavonoids and polysaccharides.

Researchers at the University of Maryland Medical Center found that the above-ground portion of the plant is the most beneficial. The German government has actually approved the above-ground parts of echinacea in treatments for upper respiratory tract infections, urinary tract infections, slow healing wounds and colds.

9 Health Benefits

While there are a seemingly endless number of healthy echinacea benefits, these nine strike me as the most beneficial.

1. BOOSTS IMMUNE FUNCTION

An analysis conducted by the University of Connecticut looked at 14 different echinacea studies. The results, which were published in the journal *Lancet Infectious Diseases*, found the following:

- Consuming Echinacea improves immunity and reduces the chances of catching the common cold by 58 percent.
- Taking Echinacea can cut the duration of a cold by nearly a day and a half.

"The take home message from our study is that echinacea does indeed have powerful cold prevention and cold treatment benefits," said Craig Coleman, Assistant Professor of Pharmacy Practice and lead author of the study. "The significance of that finding becomes clear when you consider Americans suffer from one billion colds annually and spend about \$1.5 billion annually for doctor visits and another \$2 billion annually on non-prescription cough and cold treatments."

In fact, the immune system is strongly influenced by dosage of Echinacea, according to the United States Department of Agriculture Natural Resources Conservation Service. Research shows that 10 mg of echinacea for every kilogram of body weight is effective at stimulating the immune system when taken daily over a 10-day period.

Moreover, new research published in the medical journal *Hindawi* suggests that echinacea can stop viral colds, too. Still, when it comes to the immune system, the best results for using echinacea is how it works on recurring infections. While research proves the flower is an effective cold deterrent, its real power comes once cold symptoms appear.

2. FIGHTS INFECTION

Echinacea is also a perfect cure for a slew of infections. According to the National Institutes of Health (NIH), taking echinacea and rubbing a medicinal cream on the skin can reduce the rate of reoccurring vaginal infections by 16 percent, as opposed to taking the medicine by itself. It is also known to help with:

- Vaginal yeast infections
- Urinary tract infections
- Typhoid
- Syphilis
- Malaria
- Bloodstream infections
- Genital herpes
- Oral health

3. SUPPORTS UPPER RESPIRATORY

Due to its immune boosting and anti-inflammatory powers, echinacea can improve upper respiratory infections:

- Whooping cough
- Tuberculosis
- Strep throat
- Inflammation
- Croup
- Common cold
- Diphtheria
- Acute sinusitis
- All flu

For more acute problems, a much easier route is to take supplements since drinking tea may not be a rigorous enough treatment. Try implementing them in a homemade cough drop recipe if needed too.

4. BOOSTS MENTAL HEALTH

When it comes to issues related to ADD and ADHD, *Echinacea angustifolia* is the suggested species for use. Anyone suffering from ADD/ADHD, adults and children alike, is more likely to experience emotional disturbances, such as:

- Social phobias
- Depression
- Anxiety

But, as always, the key is proper dosage. Recommendations are to take just 20 mg at a time – no more. Shockingly, taking more than 20 mg in one sitting can actually counteract the benefits of anxiety relief.

5. RELIEVES PAIN

The history of echinacea purpurea dates back to a painkiller used by the Great Plans Indians. Specifically, it is effective at treating the following pain conditions as well!

- Toothache
- Tonsillitis
- Stomachaches
- Sore throat
- Snake bites
- Pain from measles
- Pain from gonorrhea
- Pain from herpes (HSV)
- Pain from headaches
- Pain in the bowel

Drinking echinacea in an herbal tea is a common way to use the herb to fight pain. On the other hand, you can make a paste by grinding the herb and rubbing it directly on the affected area.

6. SOOTHES INFLAMMATION

Inflammation can be deadly and is arguable the leading cause of disease all across the globe. Anything from eating a poor diet – to the poisons in the foods we eat – to not getting enough sleep can contribute to inflammation. But there's hope. Regular echinacea consumption can slow or even stop various forms of inflammation, according to the University of British Columbia.

Reports from the NIH claim that the flower is effective at treating uveitis, also known as eye inflammation, and anyone suffering from chronic inflammation such as rheumatoid arthritis, should consume echinacea regularly through an herbal tea.

7. LAXATIVE FOR CONSTIPATION

Like a variety of other herbs, echinacea is excellent for stomach and overall gut health. For instance, echinacea is useful as a mild laxative, which acts as a gut calming agent and ends constipation, according to *Medical Herbalism*. Drinking herbal tea with echinacea is a great starting point. When it comes to more chronic issues, drinking tea daily will help loosen your bowels, and two to three cups a day will help resolve sudden attacks. But it is important that you don't overuse echinacea and follow usage directions closely.

8. SUPPORTS SKIN ISSUES

When it comes to rashes, eczema and other minor to moderate skin irritations, echinacea works wonderfully. Dr. Armando González Stuart describes, in the paper on herbal safety, the various uses of echinacea on the skin. He says echinacea is good for:

- Healing wounds
- Insect stings
- Skin infections
- Snakebites
- Psoriasis
- Skin inflammation
- Eczema
- Arthropod bites
- Echinacea is also useful for skin rejuvenation.

9. FIGHTS CANCER

Some of the more fascinating research surrounding echinacea has been published on the topic of cancer. A report is the NIH says:

"The medicinal value of phytochemicals contained in Echinacea is clearly evident and indicates that these agents, as well as phytochemicals not yet discovered in other herbs, may be valuable tools to combat tumor."

In fact, Echinacea is being used to treat cancer patients literally "alongside—or indeed in place of—conventional therapy."

Potential Side Effects

I have warned numerous times about the dangers of exceeding the recommended doses of echinacea. That is because overuse can lead to nausea and dizziness, specifically affecting those with allergies. Plus, excessive echinacea use is known to cause:

- Nausea
- Vomiting
- Upset stomach
- Diarrhea
- Dizziness
- Headache
- Fever
- Insomnia
- Sore throat
- Joint and muscle pain
- Dry mouth
- Unpleasant taste
- Numbness of the tongue

Echinacea use is OK for pregnant or breastfeeding moms, according to the Mayo Clinic. But, they do make the point that information on this topic is scarce and echinacea should be used with caution.

How To Use Echinacea

There is no formal guide or instruction book on how to use echinacea, however, the NIH says that using echinacea on a daily basis is great for immune support and better health.

It is said that echinacea is better taken once symptoms begin to appear and not proactively. At which point the herb can be taken several times a day for up to 10 days. Liquid varieties of echinacea have also been seen to be more effective than capsules.

It is also important to ensure that an alcohol-free preparation is used whether the treatment is for you or a child.

Word Of Caution Against Imitators

The University of Maryland Medical Center reported on the results of a study that examined 11 brands of echinacea. They discovered that just four of the examined brands actually contained what their labels stated. In fact:

- As many as 10 percent of the products tested contained no echinacea at all.
- Half of the products were mislabeled as to what species of echinacea was used.
- More than 50 percent of the preparations did not contain the labeled amount of ingredients.

Here is the bottom line: make sure that what you are buying is the real deal and not some cheap imitation. To guarantee you get the most echinacea benefits, it is important to purchase from a brand you know and trust.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 6 Magnesium

If you're asking yourself "What does magnesium do for my body?" you might be better asking, what doesn't it do! As you'll see below, magnesium is a very important mineral for bones, nervous system, and proper functioning of our cells. Make sure you're not missing out on this wonderful nutrient!

What Does Magnesium Do For Your Body

First off, if you live in the U.S., it's likely that you are not getting enough of this important mineral. Research shows that 68% of adults in the U.S. fall below the recommended dietary allowances for magnesium. That means that two-thirds of all adult Americans suffer from "magnesium inadequacy."

Magnesium is said to be crucial for optimal health because this it is required for over 300 enzyme systems in the human body to function properly. It plays a significant role in cellular processes and protein synthesis. It's also important for proper maintenance of your bones, nerve function, muscles, digestive system, and many other parts of your body.

Magnesium works together with calcium. It helps flush it out of the cells when calcium has served its function. When magnesium is depleted, calcium levels in the cells can rise, causing hyperexcitability in the nervous system, calcification, and cell dysfunction.

It can even kill cells. Elevated levels of calcium in the cells can lead to muscle twitching, cramping, and in severe cases to seizures or convulsions. Additionally, it can contribute to some of the more serious health issues listed below.

The George Mateljan Foundation breaks down magnesium's many roles into 5 main categories:

- Creating and maintaining bone integrity. In fact, even a mild but ongoing deficiency can result in bone loss.
- 2. Enabling energy production so your cells can function properly. Without proper amounts of magnesium, certain chemical reactions that impact

- enzymes cannot take place. Enzymes are needed throughout your body. Without proper energy production, you can experience fatigue.
- 3. Balancing the nervous system. Because magnesium helps to maintain balance in the nervous system, it can impact brain functions. It impacts a receptor in the brain called NMDA so when levels are low, there is an increased risk of depression. And research shows that magnesium can help alleviate depression.
- 4. Enhanced control of inflammation. Chronic inflammation has been linked to risk of diseases such as heart disease, obesity, and diabetes.
- 5. Enhanced control of blood sugar. Magnesium is involved with blood sugar and glucose metabolism.

Are You At Risk For Magnesium Deficiency?

The NIH states that true deficiencies are rare in healthy people because your kidneys limit how much of it is expelled from your body. However, there are certain health conditions that can lower your levels by either reducing the amount of magnesium that your body absorbs or increasing its loss from the body. They include:

- People with gastrointestinal disorders, renal disorders, Crohn's disease, or kidney disease.
- People who suffer from chronic alcoholism.
- People with parathyroid problems.
- Other diseases that can impede the absorption of magnesium include stomach infections, immune diseases, and inflammatory bowel disease.

Additionally, certain medications can put you at risk for abnormally low levels of magnesium, including:

- Some antibiotics.
- Medications for cancer.
- Bisphosphonates used for osteoporosis.
- Diuretic medications for diabetes.
- Certain drugs called proton pump inhibitors, which are prescribed for acid reflux, such as Nexium or Prilosec.

If you fall into any of these groups or take these medications, you may be at risk for magnesium deficiency. Seniors are also at risk for reduced magnesium levels as well. Talk to your doctor about testing your levels.

Recommended Dietary Allowances (RDAs) for Magnesium

For the rest of us, the bigger problem is falling below recommended levels. Here are the recommended levels as outlined by the *Institute of Medicine's Food and Nutrition Board*:

Age	Male	Female	Pregnancy	Lactation
0-6 months	30mg	30mg		
7-12 months	75mg	75mg		
1-3 years	80mg	80mg		
4-8 years	130mg	130mg		
9-13 years	240mg	240mg		
14-18 years	410mg	360mg	400mg	360mg
19-30 years	400mg	310mg	350mg	310mg
31-50 years	420mg	320mg	360mg	320mg
51+ years	420mg	320mg		

The Health Risks of Low Magnesium Levels

Unfortunately, low levels can have serious implications on your health. People with low levels of magnesium are at least 1.5 times more likely to have elevated levels of C-reactive protein, a marker of inflammation.

Low magnesium levels are linked to cardiovascular disease and also play a role in cancer, Alzheimer's disease, obesity, and other age-related disorders. Deficiency has also been shown to increase the risk of osteoporosis and metabolic disorders such as hypertension (high blood pressure) and Type 2 diabetes.

Signs of Deficiency Or Inadequacy

If you are deficient or not getting recommended levels of magnesium, the signs can be very confusing since they include common symptoms. For example, early signs of deficiency include loss of appetite, nausea, vomiting, and fatigue. As the deficiency goes on, you can also experience seizures, numbness, tingling, seizures, and even personality changes.

Symptoms of low magnesium can also include:

- Muscle weakness
- Hyperexcitability
- Sleepiness
- Seizures
- Low blood calcium or potassium

The most advanced symptoms, however, are far more serious:

- Cardiovascular issues including irregular heart rhythm
- Muscle cramping, spasms, and twitching
- High blood pressure
- Type 2 diabetes
- Osteoporosis
- Migraine headaches
- Diabetes

If you don't suffer any of these symptoms or are not in one of the high-risk groups mentioned above, you may be getting sufficient amounts of magnesium from your diet. If so, you can try increasing your intake of foods rich in magnesium to see if they make a difference.

Blood lab tests can determine if you have inadequate levels of magnesium but they are not reliable unless your levels are low. That's because you may have enough in your blood but not in your cells. Remember, magnesium provides energy that allows your cells to function properly.

There are two other options. The red blood cell (RBC) magnesium test is a better indicator and the white blood (WBC) test is the most accurate. Unfortunately, the WBC is complicated and few labs will perform it.

Common Problems Caused by Low Levels

Here are the most common health problems caused by inadequate levels of magnesium:

CARDIOVASCULAR DISEASE AND IRREGULAR HEARTBEAT

Magnesium deficiencies have been linked to cardiovascular issues, including arrhythmias (irregular heartbeat). In fact, low levels could even be a predictor of heart disease because it is associated with all its known risk factors, including high blood pressure, cholesterol, plaque build up on the arteries, diabetes, and hardening of the arteries. What precisely does magnesium do for the circulatory system? Research is showing, it can do a lot!

Low levels mean calcium buildup, which can calcify the arteries. This narrows the passage and impedes blood flow, enabling plaque build up. That can lead to heart attack, heart failure, and heart disease.

However, we also see that people who routinely drink hard water have a lower mortality rate from cardiovascular disease. Hard water is frequently high in magnesium as well as calcium and fluoride, making it difficult to ascertain which element contributes the most. If you filter your water (and most of you probably should!) be sure you are getting enough magnesium in your daily food choices.

Deficiency may predispose people to irregular heartbeat when potassium levels are also low. We see that impact on the circulatory system is profound.

HIGH BLOOD PRESSURE (HYPERTENSION)

Research shows that those with a low dietary intake of magnesium have a higher incidence of high blood pressure. This is important because hypertension is a major risk factor for both heart disease and stroke. While magnesium supplements have been shown to reduce blood pressure, it only makes a small contribution.

Diuretic medications are often prescribed for high blood pressure, further depleting magnesium levels as well as other key minerals. A better option is making sure you are eating enough in your diet along with other minerals that can help lower blood pressure. Look at essential oils for high blood pressure, and choose healthy meat options to help naturally manage blood pressure as well.

OSTEOPOROSIS

To understand how magnesium is important for good bone health, you should understand bone mineral density (BMD), or the "amount of mineral in a given area of the bone," according to Oregon State's *Micronutrient Information Center*. BMD is used to diagnose osteoporosis, which means that bones are more fragile than they should be and are at risk of fracture.

Low levels of magnesium can contribute to an increase in bone loss. Studies show that people with higher levels in their diet had better levels of BMD, thereby protecting against osteoporosis. However, these same foods often contain high levels of potassium, so it's not clear which mineral is providing protection. Once again, we see the benefits of balanced, mineral-rich diet.

MIGRAINE HEADACHES

People suffering from recurring migraine headaches have been shown to have lower levels. While there is conflicting data about whether magnesium supplements can help alleviate migraines, *The American Migraine Foundation* considers this a relatively safe treatment, particularly if you have aura with your migraine.

Magnesium comes in many varieties as a supplement. For migraines, you should try magnesium citrate. You can also try magnesium oxide supplements but it does leave the body quickly. Side effects may include diarrhea and abdominal cramping so check with your doctor before adding any supplements to your health regimen.

TYPE 2 DIABETES

Magnesium helps the body process glucose and insulin. Low magnesium can contribute to metabolic syndrome, also called insulin resistance syndrome resulting in many of the diseases we've discussed. Studies show that low levels are found in people with type 2 diabetes. Additionally, other research shows that increasing levels with food or food and supplements decreases the risk of diabetes.

A supplement might be a helpful solution if you are on a restricted diet. You can try magnesium citrate, magnesium glycinate, or magnesium taurate, as well as magnesium theonate.

Choose supplements from a high-quality, reliable company. You can try trust worthy brands – we like Natural Vitality for magnesium supplements if needed. Of course it's best to use wise food choices whenever possible to help maintain healthy levels, but these supplements can help keep your body in balance!

What Foods Are High In Magnesium?

The foods that provide the richest sources of magnesium are:

- 1. Pumpkin Seeds ¼ cup, 190mg (45% DV) See a delicious way to use pumpkin seeds in a healthy nut butter recipe!
- 2. Organic Spinach 1 cup, 156mg (37% DV)- You'll love this healthy spinach salad for a nutritious energy boost!
- 3. Swiss Chard 1 cup, 150mg (36% DV)
- 4. Organic Soybeans 1 cup, 148mg (35% DV) (Note soy is one of the most frequently modified foods. Look for GMO-free sources if you choose soy.)
- 5. Sesame Seeds ¼ cup, 126mg (30% DV)
- 6. Black Beans 1 cup, 120mg (29% DV)- Not only high in magnesium, see how black beans fight cancer!
- 7. Quinoa ¾ cup, 118mg (28% DV)- Learn more about the health benefits of quinoa.
- 8. Cashews 1 cup, 115mg (23% DV)
- 9. Sunflower Seeds 1 cup, 98mg (27% DV)
- 10. Beet Greens 1 cup, 98mg (23% DV)

Add these to a nutritious diet, rich in clean meats and fish, whole foods and produce, while limiting or eliminating white sugar and processed food. Many other nuts, green vegetables, and legumes are good sources as well. Additionally, oats, tofu, and millet are also beneficial as are roasted chicken and grass-fed beef.

It's important to select and cook foods that are as close to their natural state as possible when you are attempting to renew your body's magnesium stores with diet. Cooking or processing food, including as milling flour or roasting nuts, can deplete magnesium. Eat as fresh and as raw as you can for the best nutrition.

SIDE EFFECTS OF MAGNESIUM

Magnesium does not generally pose any risk in a healthy individual since the kidneys flush out any excess. The exception includes supplements, which can result in diarrhea or constipation. However, it can be toxic at very high levels – 5,000mg or more per day. Generally, that can only be achieved by taking too high of a supplement. Be careful that you stick to recommended guidelines with dosage unless otherwise recommended by your physician.

However, people with impaired kidney function or diseases such as chronic kidney disease or renal disease can be at elevated risk from magnesium toxicity since the kidney is not properly cleaning out the excess. This is called hypermagnesemia. Symptoms include nausea, vomiting, neurological impairment, flushing, headache, and low blood pressure, also called hypotension. When severe, this can cause cardiac and muscular problems.

You are also at risk for hypermagnesemia if you have one of these conditions:

- Hypothyroidism
- Addison's disease
- Milk-alkali syndrome
- Familial hypocalciurichypercalcemia

Elevated magnesium levels can be treated by removing any excess sources of magnesium and then following up by treating symptoms with intravenous calcium. Medication is then used to rid the body of any remaining excess.

How Does Magnesium Help Health Concerns?

Magnesium is also used to treat certain conditions, including the following:

PROBLEMS DURING PREGNANCY

- Preeclampsia: Elevated blood pressure and severe swelling can be very dangerous, leading to seizures and eclampsia, which poses a high risk of death. Treatment with intravenous magnesium sulfate has been shown to be more effective at preventing seizures and death than the standard pharmaceutical treatment of diazepam. We recommend you request this treatment if you are diagnosed with this condition. Additionally, babies born after eclampsia treatment had higher Apgar scores.
- Protecting the child's brain in the womb during prolonged pregnancy or anticipated premature delivery. Research shows that treating mothers before birth with magnesium therapy lowered the risk of cystic fibrosis and gross motor dysfunction.

Cardiovascular disease: Shown to help heart disease patients with exercise. It can also open up blood vessels when needed.

High blood pressure: Oral supplements have also been shown to lower blood pressure. Consider combining proper nutrition with essential oils for high blood pressure if this is something you're struggling with.

HOW WILL MAGNESIUM HELP GENERAL WELLNESS?

The benefits of magnesium don't end with its use as a low-risk medical intervention. It can aide in:

- Detoxing your body. Magnesium seems to aid detoxification pathways and neutralize toxins, protecting us from acidic conditions and heavy metals in the body.
- Reducing stress and depression. High stress can reduce your body's levels
 of magnesium as well. Studies have shown that low magnesium may also
 impact mood and contribute to depression.
- Teeth and dental care. We talked about the positive effects of magnesium on your bones, in concert with calcium. Those benefits include your teeth and oral health according to research.

• Preventing dementia. More recently, magnesium levels have been linked to Alzheimer's and other dementias. More research needs to be done but this is certainly a great argument for getting safe amounts into your diet.

Safe Ways To Add More Magnesium To Your Routine

- Topical treatments are helpful for people who cannot get enough magnesium in their diet and want a simpler choice than supplements. Consider making a magnesium oil spray-on recipe.
- Baths with Epsom salt are a great way to relax and soothe aches and pains from a variety of causes, from working out to fibromyalgia. In water, Epsom salt breaks down into magnesium and sulfate and then it gets absorbed into your skin. Use Epsom salt in our DIY essential oil bath bomb recipe.

As you can see, magnesium is a very important mineral for our bones, nervous system, and proper functioning of our cells. Make sure you're not missing out on this wonderful nutrient.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 7 Turmeric

The main spice in curry, many experts claim that turmeric health benefits include more disease-fighting properties than any other plant on the planet. In fact, over 15,000 peer-reviewed articles review the healing benefits of curcumin, which is the main curcuminoid within turmeric, and the biggest finding is that turmeric be more helpful in disease management than many conventional drugs!

What is Turmeric?

The RT French Company, which makes French's Mustard, first used turmeric as a color agent and preservative for its "creamy salad mustard" in the early 1900s. Tragically, turmeric actually has a long history of misuse as a food dye dating all the way back to medieval England when it was more commonly known as "Indian saffron."

Turmeric is a traditional Chinese and Indian medicinal herb that comes from the rootstock of the Curcuma longa plant, a member of the ginger family. To produce turmeric, the roots of the Curcuma longa plant are boiled, dried and then ground into a powder.

Turmeric has been used over the centuries to treat a variety of diseases, including cancer, and is a powerful anti-inflammatory and antiseptic. With its warm, bitter, peppery flavoring, turmeric's mild smell resembles orange and ginger, which is why it is so popular in curry dishes. Today, it can mostly be found as a coloring agent in mustards and in a few natural health supplements.

The Super Power Behind Turmeric

Turmeric's secret healing powers aren't, well, all that secret. In fact, the herb draws its miracle powers from the chemical compound curcumin. And just in case you find the skeptic in you questioning this powerful healer, consider that over 20,000 peer-reviewed articles have been published in scientific journals exploring turmeric and its main component, curcumin.

Here's what just a few recent studies say curcumin can do:

- Defend against intellectual/memory deficiencies from heavy ion irradiation.
- Lower blood cholesterol levels.
- Destroy lung cancer
- Kill bladder cancer cells.
- Prompt tumor cell death in the deepest parts of individual cells.
- Stronger antifungal than ginger, clove, and oregano.
- Protect the liver from oxidative stress.
- Increase lifespan.

The Impacts of Dosage

Turmeric dosage varies by age. It is recommended that adults, for example, follow the following guidelines:

- Supplement: 450 milligrams of curcumin capsules each day or up to 3 grams of turmeric root daily (divided into several doses).
- Tea: 1 to 1.5 grams of dried root steeped in 5 ounces of water for 15 minutes twice daily.
- Oil: One-half tablespoon of turmeric oil three times daily.

For kids, on the other hand, there is no clinically known dose that's considered safe. However, I recommend culinary uses of turmeric, such as including it in your children's natural health meal plan as you would any other spice or herb. This will help ensure your children are getting the curcumin they need on a daily basis. It's helpful to know that the "Average dietary intake of turmeric in the Indian population may range between 2 to 2.5 grams, corresponding to 60 to 200 milligrams of curcumin daily."

In some cases, you may be in a position where you simply have to be on medications. If this is the case for you, do not discount taking ample amounts of turmeric in organic, fresh form. Of course, contact our physician and pharmacist to make sure there are no potential side effects, but adding turmeric health benefits to your diet can help reduce the negative effects of your medicine.

A recent study in the *Journal of Pharmacy and Pharmacology*, for example, described how combining prednisolone, which is a steroid, and curcumin can

greatly reduce side effects from glucocorticoids when it comes to managing arthritis symptoms.

In fact, when curcumin was involved, there was a marked reduction in toxicity from steroids and a marked reduction in anti-arthritic activity. The study said that this was "Evidenced by an increase in body weight, low toxicity to immune organs, reduction in leucocyte count, increase in spleen anti-oxidant enzymes and potent inhibition of cytokines in the combination group."

You can use it as a spice to flavor your food, or you can take it as a supplement. We know that the turmeric health benefit results will be very helpful.

7 Benefits of Turmeric

In the mid-1980s, groundbreaking studies also showed that curcumin should be recommended by doctors as being preferable for those who are prone to diseases that require anticoagulant treatment.

There's a seemingly endless list of health benefits associated with turmeric. In fact, of the more than 7,000 reports looking at turmeric's effectiveness, few have found any reportable turmeric side effects. While there are some dangers connected to the spice for certain individuals, the research by far points to its health benefits. Just a few conditions turmeric is known to help are:

1. CHRONIC INFLAMMATION & PAIN

Curcumin is also widely known it to manage pain conditions. When compared to aspirin (Bayer, etc.) and ibuprofen (Motrin, Advil, ect.), curcumin is the strongest anti-inflammatory and antiproliferative agents on the planet, according to a report published in the journal *Oncogene*.

Severe burns are another types of pain conditions that turmeric may be able to help. Usually, those who are affected by burns are treated with non-steroidal anti-inflammatories, anticonvulsants, dangerous opioids, and antidepressants. But because we know that curcumin has wonderful anti-inflammatory powers, it has been suggested in *U.S. Army Institute of Surgical Research* that the commonly unmet clinical needs of these patients may be able to be treated by curcumin.

2. RHEUMATOID ARTHRITIS

Turmeric has been shown to be highly effective at helping people manage Rheumatoid Arthritis (RA) thanks to its well-known anti-inflammatory properties. In fact, the relationship between turmeric and Interleukin (IL)-6, a common inflammatory known to contribute to RA, was found to be beneficial to RA sufferers. The study from Japan found that turmeric "significantly reduced" the inflammatory markers in Interleukin (IL)-6, suggesting that routine use of the spice can possibly ward off RA from the onset.

In comparison to Voltaren, Cambia, Zipsor, and Cataflam (drugs used for arthritis that often puts people at risk for getting heart disease or gastrointestinal disease), researchers uncovered that curcumin may be "superior" to convention medicine:

The curcumin group showed the highest percentage of improvement in overall [Disease Activity Score] and [American College of Rheumatoid criteria] scores (ACR 20, 50 and 70) and these scores were significantly better than the patients in the diclofenac sodium group. More importantly, curcumin treatment was found to be safe and did not relate to any adverse events. Our study provides the first evidence for the safety and superiority of curcumin treatment in patients with active RA, and highlights the need for future large-scale trials to validate these findings in patients with RA and other arthritic conditions.

3. DEPRESSION

There is a growing body of research evaluating curcumin's impact on depression. In one particular study, 60 patients, who had been diagnosed with a major depressive disorder (MDD), volunteered to undergo turmeric treatments compared to fluoxetine (Prozac) treatments. Scientists from the *Government Medical College* (Bhavnagar, Gujarat, India) found that turmeric was not only equally as effective as Prozac, but it didn't carry with it all the perilous side effects associated with antidepressant drugs. According to the report, "This study provides *first clinical evidence* that curcumin may be used as an effective and safe modality for treatment in patients with MDD."

4. DIABETES

One of the more interesting benefits of turmeric is its ability to reduce blood glucose levels and reverse insulin resistance. In fact, curcumin suppresses glucose production in the liver, according to a study out of Auburn University published in *Biochemistry and Biophysical Research Communications*. Now here's what's even more amazing: That study found that turmeric is 400 times better than the diabetes drug Metformin when it comes to triggering AMPK and its downstream goal acetyl-CoA carboxylase (ACC).

It was also shown to help reverse numerous issues that are related to hyperglycemia as well as insulin resistance. Let's look at diabetic retinopathy. This is a common complication of having type II diabetes, and it can severely damage blood vessels inside the retina. In some cases, it can even cause blindness.

Last year, a study was published in *International Journal of Physiology*, *Pathophysiology*, *and Pharmacology* that looked at how circumin may be able to use its antioxidant and anti-inflammatory properties to delay this disease complication. The results showed that it slowed down vascular endothelial growth as well as nuclear transcription factors that are in charge of gene expression regulation. Numerous other side effects of diabetes, such as diabetic neuropathy have been seen to improve with the use of curcumin as well.

5. CANCER SUPPORT

One of the most thoroughly evaluated topics in regards to how curcumin may be able to help with disease is cancer. We are looking at cancer prevention and reversal. Global authority, *Cancer Research UK*, had these words to say about cancer and curcumin:

A number of laboratory studies on cancer cells have shown that curcumin does have anticancer effects. It seems to be able to kill cancer cells and prevent more from growing. It has the best effects on breast cancer, bowel cancer, stomach cancer and skin cancer cells.... combined curcumin with chemotherapy to treat bowel cancer cells in a laboratory showed that the combined treatment killed more cancer cells than the chemotherapy alone.

In line with the trends to study turmeric health benefits more within arthritis research, numerous studies are cropping up everywhere looking at natural approaches to cancer as well. As we move forward, we expect and hope to see larger amounts of studies on humans with cancer that look at the ways in which turmeric and other curcumin-rich foods can help prevent and reverse it. We are hopeful that the results from these studies will be groundbreaking as we move forward!

6. GASTROINTESTINAL SUPPORT

Much of the time, those who have stomach complaints and digestive problems cannot take medical interventions. The flora in the stomach is already compromised, so drugs worsen the state of the mucosal lining. On the other hand, it was revealed through a meta-analysis of every study that has evaluated how curcumin may be able to take care of inflammatory bowel conditions that curcumin can definitely decrease symptoms that are caused by this condition. In fact, some patients were even able to stop taking the corticosteroids that were being prescribed to them because the effects were so wonderful.

7. STEROID ALTERNATIVE

Finally, let's look at how well turmeric health benefits do against corticosteroids in the treatment of illnesses like:

- Lupus
- Rheumatoid arthritis
- Vasculitis
- Dermatomyositis
- Ankylosing spondylitis
- Scleroderma

Numerous studies have looked at the ability of curcumin to treat chronic anterior uveitis. A breakthrough trial conducted in 1999 was the catalyst for these studies because it proved that, "The efficacy of curcumin and recurrences following treatment are comparable to corticosteroid therapy which is presently the only available standard treatment for this disease."

One of the other studies published was released in 2008 in Critical Care Medicine. It looked at dexamethasone and curcumin and attempted to evaluate which was better for lung injury patients who had had transplantations.

Dexamethasone is a corticosteroid and is often used to treat organ disease and cancer. Chinese Zhongshan Hospital researchers found that both treatments help to prevent barrier disruption, decreased oxygen, tissue inflammation, and lung swelling. It was also found that, "Curcumin can be an alternative therapy for protecting lung transplantation-associated injury by suppressing the nuclear factor-kappa B-mediated expression of inflammatory genes." This has great possibility and could mean reversing countless illnesses and diseases on a large scale.

Possible Side Effects

It has been reported that one of the turmeric side effects is that it can cause allergic reactions, especially if it comes in contact with the skin. Side effects of turmeric can cause symptoms which include mild itching and rash. Also, the side effects of turmeric used in elevated doses can cause:

- Increased menstrual flow
- Uterine contractions in pregnant women
- Hypotension (lowered blood pressure)
- Alopecia (hair loss)
- Hyperactive gallbladder contractions
- Increased liver function tests
- Increased risk of bleeding
- Liver problems
- Diarrhea
- Nausea
- Heart burn
- Indigestion

Please pay attention to the side effects of turmeric. You should also use turmeric with caution if you're taking other medications. Turmeric has the ability to interfere with warfarin, aspirin and other anticoagulants. It is also known to impact other anti-inflammatory drugs.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 8 ArcticBlast

When you try to find the truth about chronic pain relief online, you end up finding a lot of myths that many of us have clung to over the years. One being that chronic pain is unavoidable as people get older. "It's just part of the aging process," some say.

Well, we're here to say that does NOT have to be true for you, and my hope and prayer is that the information you'll learn in this report will help you find the relief that you've been looking for!

The Widespread Chronic Pain Problem

A whopping one-third of Americans are cursed with chronic pain. That's more than heart disease, diabetes, and cancer combined.

However, even though everyone is at risk of chronic pain caused by illness or injury, some people have a much higher risk of experiencing pain than others. Today, pain sufferers are faced with a mix of doctor biases and prejudices, as well as strict government regulations. The result: inadequate treatment, and staying in pain.

Across a person's lifespan, pain is one of the most frequent reasons for physician visits. It's also one of the most common reasons for taking medications. Severe chronic pain affects physical and mental functioning, quality of life, and productivity.

But it's more than the physical pain. Chronic pain—and its treatment—is a significant financial burden on sufferers, their families, employers, friends, communities, and the nation as a whole. According to one study, the annual cost of chronic pain in adults, including health care expenses and time off from work, is \$560–630 billion a year.

As you can imagine, millions of Americans are searching for pain relief alternatives that will get them out of pain, while putting such a big dent in their pocketbooks. Let's take a look at three commonly-believed myths about pain relief, and potential options.

Dangers of Prescription Pain Meds

Myth #1: "You should automatically use a drug for pain relief" – If someone's in pain, doctors usually just hand them some kind of pill. But there are two huge problems with prescription painkillers (especially opioids):

1) THE SIDE EFFECTS CAN BE WORSE THAN THE ACTUAL PAIN

Now, we're not just talking about painkillers that make you suffer from nausea, fatigue, and brain fog. Or, even how some of these medications can actually make your pain WORSE in the long run. While that's bad, the more serious side effects are downright scary.

Just take a look at what the F.D.A. says about some of these drugs:

```
"... can lead to overdose or death ..."
```

These risks may not even be worth it. Because...

2) PAINKILLERS OFTEN DON'T HELP WITH CHRONIC PAIN

In fact, a recent study advised doctors NOT to prescribe opioids for Arthritis, backaches, and other causes of ongoing agony. The study found the top pain meds were simply "not better" than alternative methods.

Why?

The answer lies when we look at over-the-counter pain relievers, and prescription opioids.

THE DANGERS OF OVER-THE-COUNTER PAIN RELIEVERS

A pill may not always be the best thing for your pain. Sure, your pain may subside temporarily, but there's a cost.

According to WebMD, Advil, Motrin, Aleve, generic Ibuprofen, Acetaminophen, and Naproxen can have harmful side effects, including:

Stomach Pain

[&]quot;... serious, life-threatening, or fatal respiratory depression ..."

[&]quot;... profound sedation... coma, or death ..."

[&]quot;... fatal to children ..."

- Heartburn
- Internal Bleeding
- Headaches and Dizziness
- Ringing in the Ears
- Rashes, Wheezing and Throat Swelling
- Liver Damage
- Kidney Damage
- High Blood Pressure
- Confusion

That means, over time, you would be in worse shape than before.

THE DANGERS OF OPIOIDS

Narcotic painkillers, such as oxycodone (OxyContin), hydrocodone (Vicodin), and meperidine (Demerol) are among the most powerful painkillers around. These drugs are known as opioids. And in the brain, they act the same way as heroin.

The top 10 most addictive painkillers include:

- Fentanyl
- OxyContin
- Demerol
- Hydrocodone
- Morphine
- Percocet
- Codeine
- Methadone
- Dilaudid
- Oxymorphone

However, drug companies are hiding how dangerously addictive these painkillers are. Ads say their drugs are "safe" or "not very addictive at all." Yet, opioid addiction is an epidemic. Over 2 million Americans are hooked on them, and they kill 115 people daily.

For example, there was a recent report about a bout a man who shot himself when doctors threatened to lower his dose.

Pain Before and After Injury

Myth #2: "If you fix the injury, your pain will go away" – Imagine you could somehow miraculously stop inflammation from your arthritis, fix your back, or repair any strained or damaged muscles in your body. You'd expect that to cure your pain, right?

But here's the surprising thing: It might not. In fact, your pain may still be just as severe.

According to a groundbreaking study by Harvard Medical School, people can become overly sensitive to pain after an injury. This pain can then exist long after the injury has healed.

Other research shows that pain is actually interpreted in the brain differently from person to person. What some find unbearable, others find mild. If your brain has overreacted to the pain, it can cause you to hurt more, and longer, than previously thought.

In that case, if you want relief, you need to "switch off" the nerves that trigger your pain. And certain essential oil compounds have been shown to do just that.

Is Pain Inevitable with Aging?

Myth #3: "Pain is a normal part of aging" – You've probably had people say, "Oh, everyone hurts when they get older. You just have to deal with it." Maybe you've even heard this from your doctor.

They're wrong. You shouldn't have to suffer from pain. Even if nothing you've tried so far has worked, there are solutions out there.

Let me tell you a story we heard recently. It's about a man named Robert. And due to some chronic issues, his past doctor had put him on a course of Percocet and Flexeril... indefinitely.

The side effects were horrible, and after 10 years of dealing with them, Robert was completely hopeless. Yet thanks to a very simple, natural approach, he not

only reported a "significant drop" in pain levels, but he was also even able to quit his pain meds just 6 weeks later.

ARTICBLAST

ArticBlast is a breakthrough new pain relief method. It contains certain plant compounds that can "flick off" your body's pain switch, no matter the time of day, and no matter what life throws at you.

Most ointments and creams end up coating your skin. And while these creams may make your skin feel "tingly"—or feel like it's doing something—they don't get deep down to the painful spots where they're needed most. So when you can deliver actual cooling, healing nutrients down to those areas, that's when the pain actually stops. No matter what kind of pain it is, or the time of day.

And, the beauty is, unlike opioids & OTC pain-killers, ArticBlast is not habit-forming has NO known side effects or long-term unknown risks.

FAQs About ArcticBlast Pain Relief

Q. Have these nutrients been studied?

Yes. In multiple double-blind, randomized, placebo-controlled studies. The results were amazing, as participants experienced decreased pain and stiffness. Safety has also been tested and there are no reported side effects.

Q. Why should I take this instead of other pain relievers?

This is the first-ever-of-its-kind supplement that works to heal BOTH causes of your pain. It is unique. You have NEVER tried anything like it before. This product is based on the most recent cutting-edge and revolutionary pain relief studies.

Q. Is the guarantee real?

Yes. After you click the button below and place your order, you can return an empty bottle within a year of your purchase and still get 100% of your purchase price back.

Q. What if I'm taking pain relief supplements or medicine already?

Of course, talk to your medical doctor about potential drug interactions, but there is no research to suggest that you cannot take ArticBlast while on prescription painkillers. Then if you are like so many of their customers, you may find you can stop taking your current pain relievers after a while because ArcticBlast™ works so much better for you and with no side effects and it is all you need.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

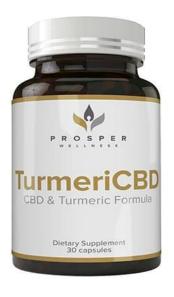
Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

PART TWO Must-Have Essential Oils

A Better Pain-Relieving CBD

The industry changes nearly every day, and scientists have discovered a shocking new pain-relieving & inflammation-soothing formula that can yield 7x better results for patients.

It involves combining CBD with two related cannabinoids called CBG and CBC.



- CBG+CBC have been clinically shown to double the results of CBD.
- Plus, there's an ancient spice that can make CBD+CBG 6x more absorbable: turmeric (a natural painkiller and cancer-fighter).

This means that - by adding CBC, CBG, and turmeric - you can get 7x better results than just plain old CBD.

The product is called TurmeriCBD, and with our Natural Living Family "Group Buy" discount, you get an additional 10% off their already discounted price.

→ Get 40% OFF HERE!

CHAPTER 9 EOs for Pain Relief

Essential oils for pain relief may very well be the missing link to giving you a life free from suffering that you've been praying for! Pain conditions are not only rampant, but they can be difficult to treat with conventional medication, and you may find natural remedies Here are some tips that can help you.

Chronic Pain Lethal?

Chronic pain ... it will take down the toughest of the tough, harming livelihood and lives. It can impact you and those you love on every level – the ability or inability to work and make a living, relationships, and your very way of functioning successfully in life.

Each kind of pain and each person is different. In general, however, chronic pain is generally defined as ongoing, unrelenting pain. We're talking about daily headaches, arthritic pain, or pain that persists after an injury heals. There may be an underlying cause like cancer, a virus, or an infection. But some people hurt even in the absence of any past injury or body damage.

The problem with pain relief lies is that there is no great solution. If pain is considered a symptom, are you more focused on managing symptoms or discovering what the symptoms point to? And no matter the goal, with painful conditions, it's difficult to do more than damage control simply because you have to ease it in order to function.

Unfortunately, that damage control has created a lethal epidemic in the U.S with millions of people becoming hooked on prescription painkillers, technically termed "opioids." Opioid subscription rates are higher than they've ever been, and more and more people have become dependent on painkillers. Tragically, on average, 130 Americans die every day from an opioid overdose, according to the CDC, making safe alternatives for pain relief more urgent than ever.

Chances are, you've turned to this chapter because you're struggling with pain and tired of the bandage solutions that just treat it symptomatically and come with a myriad of side effects. You want a real change instead of temporary relief. Read on!

Chronic Pain & Inflamation

What actually causes chronic pain?

There are a huge number of possible causes. For some people, it's activated by an illness such as diabetes, arthritis, or cancer; for others, it turns up after an injury or accident. Sometimes chronic pain can erupt for no obvious reason. Medical tests and scans can't always determine the source.

But one common denominator exists: The genesis of pain is inflammation, regardless of the factors producing the pain.

Inflammation is not necessarily bad and can be a part of your body's healing system. When you injure a muscle (as in a twisted ankle), for example, your immune system initiates an inflammatory response by sending blood and immune cells to the affected area, which can result in redness, heat, and swelling. Otherwise, why would God design our immune system to function this way? The problem is when our bodies become chronically inflamed due to preventable risks such as food choices, stress, anxiety, and overuse of harmful medications.

Thankfully, a growing number of physicians are looking into root causes of disease and helping their patients get off unnecessary drugs, discover unknown food allergies (which trigger inflammation), detoxify heavy metal poisoning, and address other chronic inflammation triggers.

The bottom line is this: if you want to solve and prevent chronic pain effectively, you need to solve your inflammation problem. You can find out clinically if your body is inflamed through a simple blood test that looks for a marker called c-reactive protein, or CRP. Increased levels of CRP could be a major warning sign for health problems. But the good news is that higher CRP levels can be brought down with certain lifestyle adjustments, including exercise, weight loss, and an anti-inflammatory diet, along with anti-inflammatory supplements.

Disease-Related Chronic Pain

Pain can manifest due to a variety of causes such as illness, injury, and inflammation. It can be dull or sharp, acute or chronic, widespread or at a specific point. The unifying factor is that pain is incredibly difficult to live with and endure.

Here's a brief rundown of some of the most prevalent chronic pain conditions:

Chronic Back Pain. This the leading cause of disability in the United States. It can be caused by injury or develop with advancing age. A common source of back pain is a spinal misalignment called a "subluxation" in chiropractic terms. Misalignments "pinch" or irritate spinal nerves, leading to spasms and pain. Disc herniations in the spine, which press against nerves as they exit the spinal cord, may also be involved. (This condition is frequently misdiagnosed by MRIs.) Other sources of chronic back pain include soft tissue damage; traumatic fractures; and structural problems in the back that strain muscles, among many other causes.

Disease-Related Headaches. Certain diseases will cause chronic headaches: MS, cancer, brain injuries, HIV, and high blood pressure. Even the prescription drugs used to treat these illnesses can cause headaches.

Chronic Joint Pain. The most common types of joint pain include osteoarthritis, the wear and tear on joints over time; rheumatoid arthritis, an autoimmune disease in which the body attacks its own bones, ligaments and tendons; and repetitive strain injury, in which frequent assaults on larger joints, like the knee or shoulder, result in chronic pain.

Neuropathic Pain. With neuropathic pain, there is a lesion, disease, or dysfunction in the nervous system. When impacted like this, the nerves within that system can't transmit sensations to the brain. This often leads to numbness, or lack of sensation, or pain that is often described as pricking, tingling, pins and needles, electrically shocking or shooting, or hot or burning. For many patients, pain intensity can wax and wane throughout the day. Injuries to the brain or spinal cord can also lead to chronic neuropathic pain. A few examples of neuropathic pain are neuropathy (a common nerve disorder), shingles, diabetic neuropathy, and trigeminal neuralgia (a type of facial pain),

Chronic Illness-Related Pain. People also suffer from cancer pain, caused by tumors or even by the cancer drugs used to treat the disease. Similarly, people with heart disease often experience angina (chest pain). Angina is considered a sign of heart disease, and indicates that you might be at an increased risk of suffering a heart attack.

Conventional Treatment

As we mentioned, opioids are commonly prescribed for pain, including morphine, oxycodone, and milder painkillers like tramadol. Once opioids enter your bloodstream, they attach to brain receptors, producing a sense of euphoria. This sensation is very addictive and creates a physiological dependency that is very difficult for people to overcome. Medical studies have shown that physical dependence can happen in as few as five days.

Then are also over-the-counter products to fight pain, particularly NSAIDs. These include aspirin and drugs containing ibuprofen or naproxen, such as Advil and Aleve, or acetaminophen (Tylenol). Some of these most commonly used pain relievers can cause troublesome and potentially deadly side effects: kidney damage, liver damage (particularly with acetaminophen combined with alcohol), and stomach bleeding. Researchers say 16,500 people die and 107,000 are hospitalized each year because of NSAID-related problems, according to a report published online by the American Nutrition Association.

Over-the-counter NSAIDs are routinely taken for arthritis. They don't really treat the arthritis, however; they really just ease the pain and discomfort of the disease. Still, some people mistakenly believe that they actually slow the progression of arthritis or that by taking them, their arthritis will improve, but that's not true. Outcome studies have shown that these drugs, may actually accelerate joint and cartilage damage – the very condition patients think they are "curing."

Finally, there are surgical options to correct pain. But many of these represent a major assault on our bodies. Consider back surgery, for example. Currently, nearly 700,000 disc surgeries are performed in the United States, supposedly to remove pain-producing herniated discs in the back. Research now indicates that perhaps only one percent of these procedures is necessary, and that herniated discs, in most cases don't produce pain.

Total knee replacement has emerged as a mainstream surgery. These procedures are performed more frequently for women than men, according to the National Center for Health Statistics.

An estimated 4.7 million Americans have undergone total knee replacement. Another orthopedic surgery on the rise is total hip replacement. More than 2.5 million people in the U.S. have had this procedure.

Whether it's back, knee, hip, or other surgery, the risk of complications looms, such as blood clots, infections, allergy to metal implants, complications of

anesthesia, artery damage, nerve damage, joint stiffness, loss of mobility in the joint, and ironically, continued pain.

Top 5 Essential Oils For Inflammation

Of all of the essential oils evaluated for their pain-relieving, inflammation-busting properties, these top the list.

1. FRANKINCENSE

The pain relieving ability of aromatherapy massage was tested with patients struggling with cancer. They were treated with an aromatherapy hand massage that included frankincense, and their pain was relieved significantly. Because there is a connection between inflammatory processes and pain, oils that are anti-inflammatory (as we will see below) are often analgesic, as well. Frankincense has this dual role.

While the trial may have been directed toward cancer rather than arthritis, the hands are a common site of pain for people with arthritis, and the analgesic effects can be appreciated by all.

These pain-relieving essential oils for arthritis can be used in diffusers, topical body care products, and can be directly inhaled. It's one of the main ingredients in my favorite essential oil pain-relief roll-on recipe.

2. LAVENDER

When discussing the best essential oils for arthritis inflammation, lavender will always come up. Generally used to improve sleep or treat the skin, lavender essential oil once again displays its wide range of results when considering its therapeutic benefits for arthritis.

As an anti-inflammatory oil, lavender can help to relieve the painful swelling and inflammation that arthritis, in its various forms, creates. Lavender is an analgesic as well, tackling arthritic pain from multiple angles.

Since lavender can be used for anxiety and depression, it may also help to relieve secondary issues that arise in a life of a person in chronic pain. Its gentle nature makes lavender a reliable choice for most people's use and application.

3. ROMAN CHAMOMILE

Roman chamomile essential oil is regularly used for its calming, soothing, and anti-inflammatory effects. As a whole herb, chamomile is renowned for its healing, soothing, and calming effects. The essential oil isolates some of these abilities, especially as an anti-inflammatory substance.

To work the anti-inflammatory compounds into the skin and onto joints and other sites of pain, add roman chamomile to topical massage oils. You can also diffuse chamomile for relaxing an anxious or depressed mind.

Note: Those with allergies to ragweed will want to test chamomile first as they are related.

4. YARROW

Yarrow is a soothing and healing herb, and its essential oil also carries antiinflammatory components that can be beneficial for arthritic ailments. Yarrow essential oil is used in many anti-inflammatory preparations, and is part of the Ayurvedic tradition.

Topical preparations of yarrow essential oils for arthritis can help to improve anti-inflammatory and pain relieving combinations. Making the most of synergistic reactions – oils working together to make each other more effective – creates special blends that help to relieve pain and inflammation for your specific arthritis conditions.

5. WINTERGREEN

Wintergreen oil, another traditional analgesic that has helped countless arthritis patients, is known as "liquid aspirin." Used with peppermint, it is particularly effective in reducing inflammation. A 2014 study published in the *Journal of Alternative and Complementary Medicine* states,

"The predominant natural ingredient in wintergreen oil is methyl salicylate, which is a compound closely related to acetylsalicylic acid, or aspirin. When applied to the skin, including tissues at the site of pain, wintergreen oil has analgesic properties... A combination of wintergreen oil and peppermint oil is commonly used because it is believed to give far better pain relief than either wintergreen oil or peppermint oil alone.

In addition, the combination of the two essential oils for arthritis may potentiate the individual effects of each oil, thus enabling the use of lower doses of each, which, as a consequence, is likely to produce fewer side effects."

Using Essential Oils For Specific Conditions

Each kind of pain and each person is different, but taking a whole body approach and using natural solutions like essential oils for pain relief and other conditions in a much more direct way.

As easy topical applications, essential oils for pain relief can complement a holistic, natural approach to minimizing your suffering and giving you your life back! Oils and methods chosen might vary based on the kind of pain and the part of the painful condition you wish to address. Here are some of the more prominent painful illnesses and the essential oils that may help.

Looking for a general essential oils for pain relief remedy? Check out our Pain Away Roll-On!

For specific conditions, I have listed some below and discuss what the research has to say about each one.

1. FIBROMYALGIA

As a relatively recent official diagnosis, fibromyalgia is increasing in prevalence simply because more and more people realize there is a name for the pain they have struggled with for years. At this point, about 5 million people are diagnosed with fibromyalgia, dealing with many concurrent symptoms:

- Morning stiffness.
- Tingling or numbness in hands and feet.
- Headaches, including migraines.
- Irritable bowel syndrome.
- Sleep disturbances.
- Cognitive problems with thinking and memory (sometimes called "fibro fog").
- Painful menstrual periods and other pain syndromes.

Essential oils for pain relief can address many of these symptoms, helping to alleviate the various forms of suffering that fibromyalgia present as. Relieving these symptoms can help to slow the pain cycle, allowing more movement

and rest that can limit further pain. Try this fibromyalgia massage blend with essential oils designed to relieve muscle aches.

Application: Consider bolstering gut health with essential oils and probiotics. Alleviate sleep issues with lavender and bergamot. Improve focus with citrus and peppermint. And massage painful menstrual abdominals with clary sage and ylang ylang.

2. HEADACHES

Caused by sinuses, migraine disorders, diet and hydration, and even stress, headaches can range from mildly annoying to debilitating pain. The cause of the headaches need to be discovered to rule out anything serious and to help prevent recurrences, but acute pain relief is necessary when a headache strikes.

- The cooling, pain relieving effects that peppermint oil has make it soothing for headache applications. Massaged with a carrier oil onto the site of pain, such as sinus pressure, peppermint can help to work the pain of a headache away. It may also help to counter headaches that are triggered by scent.
- In light of chamomile's traditional use for migraine relief, researchers are looking into verifying its mechanisms of action. Known for its relaxing abilities, Roman chamomile as both an herb and an essential oil is good to have on hand for headache relief.
- Calming in cases of anxiety and useful when sleep is hindered, lavender essential oil is effective simply via inhalation. In a placebo-controlled trial, lavender exhibited excellent pain relief in a simple inhalation application.

Application: Headache relief with essential oils can be administered with inhalation or by adding the oil to a carrier and massaging the temples.

3. ARTHRITIS

Arthritis comes in multiple forms, sometimes caused by age and others by genetics. The type of arthritis can affect both severity and location of pain, but the results are similar across the board. Secondary depression that comes with chronic pain is common and difficult to counteract.

A 2005 study used aromatherapy to help relieve the depressive symptoms associated with arthritic pain. The study used lavender, marjoram, eucalyptus, rosemary, and peppermint in a blend of carrier oils on a total of 40 patients. After using the oils, both pain and depression were lessened.

Application: Blend lavender, marjoram, eucalyptus, rosemary and peppermint essential oils into a carrier and massage into painful areas.

4. INFLAMMATORY ILLNESS

Inflammation is at the heart of most painful conditions, from injuries to chronic illness. Anti-inflammatory oils are important tools when fighting pain.

- A good reason for lavender's pain relieving abilities is that it's an antiinflammatory essential oil.
- Tested in the lab, Melissa (lemon balm) essential oil has shown some effectiveness against both inflammation and swelling.
- Monoterpenes. Really, any essential oils with monoterpenes which, as one study notes, can comprise about 90% of essential oils – have some level of anti-inflammatory ability. So feel free to play!

Application: For relief of inflammation, add a blend of anti-inflammatory essential oils to to your carrier oil(s) of choice and massage onto areas that are painful.

Other Natural Therapies

Approach pain relief as a holistic venture in order to carry your efforts further. Keeping your body loose with exercise, getting good sleep, and eating good foods are all important. In fact, one of the biggest benefits we hear from people who go through The Essential Oils Diet book *Fast Track challenge*, report less pain and inflammation.

It's also helpful to minimize stress and keep the immune system functioning well. And remember, using essential oils for pain relief is great to have as part of your pain relief toolbox. For example, you might like to try this magnesium spray for muscle relief as well.

The problem with conventional pain relief lies is that there is no great solution. If pain is considered a symptom, are you more focused on managing symptoms or discovering what the symptoms point to? And no matter the goal, with painful conditions, it's difficult to do more than damage control simply because you have to ease it in order to function.

Natural pain remedies are often less invasive than medications and usually include lifestyle changes that begin to address the underlying causes. Stretches to ease back pain, for starters, and then essential oils for advanced relief. With

something like essential oils for pain relief, you can easily incorporate them into your lifestyle while taking advantage of pain-relieving effects that – when used properly – carry few side effects.

Additionally, a comprehensive review of complementary and alternative medical therapies for chronic pain was published in the China Journal of Integrative Medicine in 2016. It outlined several researched-based treatments worth looking into the following.

Massage therapy. Massage may be a helpful addition to the overall treatment strategy of patients with chronic pain. It has a short-term effect on pain, but also relieves the stress associated with trying to live with chronic pain, and in this regard, has a healing benefit.

Acupuncture. The practice of acupuncture, is an ancient system that recognizes that disease is due to imbalances in the flow of Qi (pronounced "chee") or "life energy" that moves through everyone. Qi is believed to be disrupted by stress, poor diet, fatigue, and excessive heat or cold.

Traditional acupuncturists insert hair-thin needles into acupuncture "points," located throughout the body, to balance the Qi and restore health. When energy "flows" freely, there is less pain, better communication among bodily systems, and improved well-being. Some Western scientists believe that acupuncture triggers the release of the body's natural painkillers.

Unlike some forms of alternative medicine, acupuncture has been well researched. To date, nearly 20,000 human trials have studied this system. In the area of chronic pain, results from a number of studies suggest that acupuncture may help ease low-back pain, neck pain, and osteoarthritis/knee pain, to name just a few

In other conditions of chronic pain, acupuncture may also help reduce the frequency of tension headaches and prevent migraine headaches. It is also effective for people with neuropathy, the painful nerve damage of diabetes. Acupuncture therefore appears to be a reasonable option for people with chronic pain to consider, and it works well with other drugless, non-surgical treatments.

Herbs and Dietary Supplements. This review listed several pain-relieving supplements that have been fairly well-researched: Devil's claw, curcumin, capsaicin, white willow bark), and Boswellia.

Prayer & Meditation. Several mind-body interventions can alter how your brain processes pain, thereby reducing your perception of pain, plus ramping up production of the body's supply of natural painkillers. Common therapies include prayer, Bible reading and meditation, guided imagery, and the "moving meditations" like yoga, Tai Chi, and qi gong.

To this review study, we would add natural therapy with essential oils. With something like essential oils for pain relief, you can easily incorporate them into your lifestyle while taking advantage of pain-relieving effects that – when used properly – carry few side effects.

As easy topical applications, essential oils for pain relief can complement a holistic, natural approach to minimizing your suffering and giving you your life back! Oils and methods chosen might vary based on the kind of pain and the part of the painful condition you wish to address.

With that said, you should always work with your doctor to determine the best strategy for tackling pain and its causes. Use caution and learn of contraindications and interactions before introducing supplements and essential oils for pain relief when you are already taking medications.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 10 EOs for Fibromyalgia

As the popularity of natural medicine skyrockets, people are now using essential oils for fibromyalgia with great results. Truly, they are pure herbal pain relief in a bottle! To make a massage oil at home is relatively simple, and you can easily make preparations by using some of the most popular essential oils that you probably have in your cabinet already. The key is to know which ones, and that's what we'll help you with in this post.

Fibromyalgia Symptoms

Many people have fibromyalgia and don't even know it! Here are some symptoms to look out for:

- Morning stiffness
- Sleep disturbances
- Tingling or numbness in hands and feet
- Headaches, including migraines
- Irritable bowel syndrome
- Problems with thinking and memory (sometimes called "fibro fog")
- Painful menstrual cycles

Of the more than 5 million people diagnosed with fibromyalgia, many deal with these symptoms so be sure to discuss them with your doctor.

Essential Oils For Fibromyalgia

Essential oils and other natural therapies can address all of these symptoms, helping to alleviate the various forms of suffering that pain presents. Relieving these symptoms can further help to slow the pain cycle, which helps people suffering from fibromyalgia become more mobile and help them sleep better, which can limit further pain.

With this in mind, look at this list again knowing which essential oils can help for which symptom:

- Morning stiffness (peppermint)
- Sleep disturbances (lavender)
- Tingling or numbness in hands and feet (frankincense)
- Headaches, including migraines (copaiba)
- Irritable bowel syndrome (peppermint)
- Problems with thinking and memory (vetiver, cedar wood)
- Painful menstrual cycles (clary sage)
- Other pain syndromes (wintergreen, orange)

The rule of thumb is to make a 2-5% dilution massage oil out of each of these oils to address the conditions that you need help with. Apply appropriately:

- Have a headache? Rub diluted copaiba into your neck.
- Sleep issues? Massage your feet and shoulders with some lavender.
- Morning stiffness? Run some peppermint into your achy joints.
- And etc.

Fibromyalgia Massage Oil

Although limited research has been done evaluating which essential oils for fibro-myalgia are best, clinical trials have been done testing individual chemical constituents that are present in certain oils. For example, animal studies suggest that linalool (a monoterpene found in oils like bergamot), can be exceptionally pain-relieving for people suffering from fibromyalgia.

Other phytochemicals can help as well, and this was the inspiration for the recipe below. We have shared this blend for years now and the results that we've heard from people who try it have been superb. Our hope and prayer is that you find relief as well!

INGREDIENTS

- 3 ounces of Mama Z's Oil Base
- 2 drops of Bergamot Essential Oil
- 2 drops of Camphor Essential Oil
- 2 drops of Lemon Essential Oil
- 2 drops of Peppermint Essential Oil
- 2 drops of Rosemary Essential Oil
- 4 oz Glass Jar

INSTRUCTIONS

- 1. Once you have your Mama Z's oil base ready, mix in the essential oils until well blended.
- 2. Store in a glass jar in the refrigerator and use every four hours as needed.
- 3. Shake before each use as the ingredients may separate.

NOTES

* One ounce of oil base = 2 tablespoons

Optional – You can replace one ounce of oil with thickened aloe vera gel if you are also battling dry or irritated skin.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 11 Basil

Not just for mediterranean cooking, basil essential oil benefits your health in a variety of ways and should be a staple in your medicine cabinet. The protective effects include antimicrobial, anti-inflammatory, and even bug-repelling!

Basil as a Culinary Herb

In a kitchen herb garden, basil is a staple for its delicious leaves both fresh and dried. In your local pizzeria, basil is a must for that distinctive herbed flavor. But what is basil doing when you add it to your favorite recipe?

There could be a lot more going on in your plate than you realized.

Even as a fresh cut or dried and powdered herb, sweet basil is a strong gastroprotective agent. A 1999 study indicated in animal models that the fixed oil (not essential oil) in basil has the ability to protect the stomach from ulcers triggered by various irritating factors. These include aspirin, alcohol, and stress.

Essential oil content is, of course, part of the whole herb, and it seems that the protective effects that basil exhibits overall are concentrated with the distillation of the essential oil. More on this below. Note that holy basil is different entirely from culinary sweet basil, which will be the topic of discussion in this article.

Some safety precautions should be noted for internal use of the oil, but safe use should translate to effective use – and basil has plenty of effects to enjoy.

Top 5 Benefits of Basil Essential Oil

Here are the top uses of basil essential oil that demonstrate its protective capacity.

1. POTENT ANTIBACTERIAL

The problem of antibiotic-resistant bacteria is ever-growing, with the potential to become a major threat to public health. The search for effective solutions has been ongoing for some time now, hoping that we can maintain the ability to combat bacteria before "superbugs" become a pandemic.

While many of us believe that a paradigm shift away from the germ theory needs to take place, there are also natural products that we can use to tackle harmful bacteria without being so harsh as to quickly develop resistance to OTC antibiotics. From the conclusion of an in vitro study conducted in 2003:

The chosen bacteria are widespread and pose serious therapeutic difficulties because of their high level of resistance. For this reason, the results obtained were considered encouraging.

Use of antibacterial essential oils like basil can extend from topical healing to preventive cleansers and internal use.

Indications: Healing balms, hand sanitizers, cleaning, diluted and careful ingestion.

2. SYNERGETIC ANTIFUNGAL

The way that the compounds within a given essential oil combine to make effective structures is neat, but when two essential oils combine to be stronger than before, it is amazing. Beyond the delicious fresh herb, the uses for basil essential oil are profound.

The synergy between basil and peppermint was utilized to create an effective antifungal compound where there once were two mediocre compounds. Aromatherapy is often executed with blends of oils, and studies like these remind us why it's important. As you learn about an essential oil like basil, take notes about its properties so that you can quickly reference them and see where combinations could be made.

Note the uses and actions of your favorite scents, as well; you never know when they might combine into something bigger and better!

Indications: Blends for topical healing; combining oils for culinary preparation

3. ORAL HEALTH GUARDIAN

As an effective antibacterial oil, basil found its way into a 2014 clinical trial of an essential oil blend for oral health mouthrinses. After three weeks of monitoring around forty participants, the results came with sparkling smiles.

Basil, combined with other oral health strengths in tea tree oil and clove, in a mouth rinse was able to inhibit plaque, gingivitis, and other dangerous microbes in the mouth. See more about basil essential oil's benefit for oral health in this study.

Indications: Blends for regular mouthrinses; inclusion within DIY toothpaste formulas

4. PROTECTIVE DIGESTIVE SUPPORT

Just as the fixed oil has gastroprotective effects, the essential oil of basil retains some, as well. In fact, when tested under monitor of physicians and researchers, significant doses were able to protect against colitis and ulcer damage.

While we can't necessarily replicate the study at home, we can use safety precautions to begin including basil essential oil into our recipes and formulations. Essential oils exert great effects in small doses. Including it periodically can introduce the healing and protective abilities without worrying so much about estragole.

Indications: Periodic culinary inclusion; specific formulation by an aromatherapist trained in internal use.

5. A BUG REPELLENT THAT WORKS

Basil essential oil takes protection to the next level by even keeping us safe from mosquitos. A common summertime frustration is the pervasiveness of mosquitos and bug bites; in many parts of the world, these irritating concerns of ours could be life threatening.

Basil essential oil compounds include many phytochemicals known to keep bugs away, and it blends well with other oils to create an effective spray.

Indications: Outdoor diffusion; topical bug spray or cream. Use it in our natural mosquito repelling spray!

Estragole Caution

There have been some documented concerns with toxicity of one of basil's main compounds, methyl-chavicol (otherwise known as estragole). A public statement on the use of herbal medicinal products containing estragole by the European Medicines Agency states that the risks are in vulnerable populations (children, pregnant or nursing women) and with high volumes of the substance.

It would, therefore, be wise to restrict internal use to a minimum and preferably with oils that have been evaluated and have lower percentages of estragole/methyl chavicol.

Recommended Blends Using Basil

Take advantage of basil's protective abilities by blending it with other antimicrobial and anti-inflammatory oils. As a herbaceous, slightly spicy smelling oil, it blends nicely with light- and fresh-smelling oils.

- Chamomile, lavender, and basil for healing
- Citrus, basil, and tea tree for cleaning
- Basil, eucalyptus, and cardamom as a bug spray
- Carrier-oil dilutions included in culinary recipes
- Clove, tea tree oil, and basil as a mouth rinse, with peppermint for good measure

Basil's flexibility in blending aromas, protective effects in nearly every way, and overall safe and simple application measures make it an underrated essential oil.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 12 Black Pepper

Learning about the wide variety of black pepper essential oil benefits will most certainly cause you to see the common pairing to table salt in an entirely new light. We are starting to see more research being done on this increasingly popular natural remedy and for good reason!

Source And Chemical Components

Derived from Piper nigrum, a flowering vine that produces peppercorns as its fruit, black pepper is known as the "king of spices" and was originally cultivated in India. It is one of the most frequently used spices in the world and its history dates back as far as the ancient Greeks and Romans thousands of years ago.

Black pepper essential oil is steam distilled from peppercorns and while it does have plenty of health uses, you can still enjoy it in your culinary preparations. Robust in a wide array of phytochemical properties, the major constituents responsible for black pepper essential oil benefits include:

- beta-caryophyllene
- limonene
- sabinene
- beta-pinene
- 3-carene
- alpha-pinene

Of interest, beta-caryophyllene, the first known "dietary cannabinoid" that has been approved by the FDA as GRAS (Generally Recognized as Safe) to be used in food for its flavor. It so also happens to be the primary sesquiterpene in cloves, hops, rosemary, copaiba, and cannabis, which binds with CB2 receptors.

Meaning, when you use black pepper, copaiba or any essential oil that contain *beta-caryophyllene*, you activate the ECS without any psychotrophic effects (i.e. you won't get "high"). Kinda of like having your gluten-free, naturally-sweetened cake and eating it, too, huh?

Endocannabinoid System

One of the reasons black pepper essential oil benefits have received a resurgence of popularity in the aromatherapy world is because of its ability to interact with the endocannabinoid system.

Discovered in the 1990s when researchers were studying *tetrahydrocannabinol* (THC – a known cannabinoid), the endocannabinoid system (ECS) is crucial for our survival as it plays a critical role in maintaining homeostasis of the human body:pain, memory, mood, appetite, stress, sleep, metabolism, immune and reproductive function.

For the ECS to work properly, it requires cannabinoids, compounds made by the body and in nature (i.e. cannabis), which bind with and trigger cannabinoid receptors that, in turn, produce a variety of physiological responses such as pain relief, insomnia relief, increased appetite, reduced stress, euphoria and the feeling of being "high."

The two receptors of interest to us include:

- **CB1 receptors** found in the central nervous system (i.e. brain and spinal cord). Can trigger the sensation of being "high."
- CB2 receptors found in the peripheral nervous system, immune cells, muscles, skin, and vital organs. When triggered, will not get you "high."

THC is the famous cannabinoid in cannabis that gets people high and it can bind with both CB1 and CB2 receptors.

So, to confirm, will enjoying black pepper essential oil benefits get you high like cannabis can? Of course not!

Can it help you in ways that CBD can? Yep!

8 Black Pepper Essentila Oil Benefits

Here are 8 ways you can incorporate black pepper essential oil into your life for better health.

1. HELPS YOU QUIT SMOKING

According to the CDC, smoking cigarettes is one of the top causes of preventable illness and mortality in the United States – and almost 40 million adults smoke! This devastating habit adds up to \$170 billion worth of treatment for diseases related to smoking.

The Office of the Surgeon General has reported that that two-thirds of smokers try to quit but nicotine is so addictive that it often takes at least several attempts to permanently kick the habit. The good news is that quitting at any age helps the healing start.

And that's where black pepper essential oil can help. A study from 2013 showed that inhaling this oil reduced nicotine craving. It also "allowed a longer delay before next use of tobacco."

Black pepper essential oil benefits can also be include relieving food cravings and other types of addictive cravings, so try this any time you feel the urge to make an unhealthy food or drink choice.

Application: Add 2 drops of black pepper oil to an organic cotton cloth in a personal inhaler. Inhale when cravings arise.

2. MANAGE OR PREVENT TYPE 2 DIABETES

Type 2 diabetes is another preventable disease that is on the rise. The CDC reports that 90-95% of the 34 million Americans with diabetes suffer from type 2. To reduce your chance of getting this disease, we recommend a healthy diet and talk to your doctor about developing a fitness regimen.

In addition, black pepper essential oil can support you on your journey to good health. Research from Nigeria shows that its antioxidant abilities along with its impact on enzyme activity may help you to manage or even prevent type 2 diabetes. If you struggle to keep your blood sugar in line, you may want to add this oil to your routine.

Application: Add 1 drop of black pepper essential oil to your savory recipes.

3. HELP FOR HYPERTENSION

Nearly half of all American adults also suffer from high blood pressure. This condition can lead to heart disease or stroke and it contributed to half a million deaths in the U.S. in 2018. Fortunately, because of its antioxidant abilities, black pepper oil may be able to prevent or manage hypertension, when added to other healthy habits such as managing stress, eating right, and proper exercise.

Application: Diffuse with lavender and vetiver oils to create a relaxing atmosphere during stressful times or before sleep.

4. ACTIVATES YOUR ENDOCANNABINOID SYSTEM

As discussed above, black pepper is one of several essential oils that interacts with your endocannabinoid system (ECS). You may have heard of this thanks to the popularity of CBD oil and medical uses for THC found in cannabis. ECS was discovered in the 1990s when scientists researched the effects of THC. This system is responsible for maintaining homeostasis in many of our body's processes such as sleep, metabolism, immune function, and memory, just to name a few.

ECS requires cannabinoids, which trigger receptors inside the system. These then produce responses such as pain relief, reduced stress, improved appetite, and the feeling of getting "high" that people experience with cannabis.

Beta-caryophyllene (BCP), one of the major constituents of black pepper oil, binds with receptors that are found in the peripheral nervous system, immune cells, muscles, skin, and vital organs. When you use oils that are rich in BCP, you activate the benefits of ECS without getting high, making black pepper oil an excellent choice if you are leery about using THC.

Application: Add 2-3 drops each of marjoram, black pepper, lavender, and peppermint oils to your homemade body lotion recipes.

5. RELIEVES CHRONIC PAIN AND INFLAMMATION

Thanks to that interaction with ECS, black pepper oil also has analgesic and antiinflammatory properties. Lab experiments on mice showed that BCP is ideal for treating chronic pain, without developing a tolerance that leads to reduced effectiveness, as many pain medications do. In fact, "the researchers concluded that the effect of BCP became stronger during the treatment period," making this an effective and safe choice for dealing with pain and inflammation. Application: Add your favorite carrier oil to a roller bottle and add 2 drops of black pepper oil, 2 drops of lavender oil, and 1 drop of clove oil. Roll over painful areas.

6. ANTIMICROBIAL PROPERTIES

Numerous research articles have been written on the antimicrobial benefits of black pepper essential oil. For example, it's been shown to be effective against Staphylococcus aureus, a bacteria that is strongly resistant to antibiotics. Several essential oils were tested in this experiment and black pepper was one of the most effective in eliminating Staph biofilm. It also hindered its ability to damage and infect the host.

Black pepper oil also inhibited the growth and proliferation of bacteria in in vitro studies. In this particular study, researchers compared the effectiveness of essential oils commercially available compared to ones that they distilled in their lab and found samples to be more effective. This underscores the importance of finding a trustworthy brand that sells unadulterated oils. Learn how to choose the best brand of essential oil.

Application: Add a few drops of black pepper oil to your homemade all-purpose or bathroom cleaner recipes.

7. HELPS WITH TICK BITE INFECTIONS (BABESIOSIS)

Babesiosis is an infection caused by the parasite Babesia microti and is spread by black-legged (or deer) ticks, mostly in the Northeast and upper Midwest United States. In this region, the number of cases of this infection has nearly doubled from 2011 to 2018. This disease can be life-threatening for at-risk populations, such as those with compromised immune systems, serious health conditions, or people of advanced age.

In 2020, researchers sought alternatives to the standard medical treatments of babesiosis. These medications can have serious side effects and do not always prevent the infection from repeatedly returning. Ninety-seven essential oils were tested and black pepper and garlic oils were discovered to be the most effective at fighting these infections.

Application: Use a pipette to add 2-3 drops of black pepper oil to a gel capsule and fill the rest with coconut or olive oil, then seal snugly. Take with water twice daily for no more than 2 weeks.

8. WOUND DRESSING

Minor cuts and abrasions don't generally need a trip to the doctor but they can become infected and lead to more serious issues if not treated properly. It's important to clean and dress your wound well but most over-the-counter solutions are laden with antibiotics that can be harmful if used too frequently.

Essential oils can help here. Scientists in India and Poland tested the properties of black pepper and ginger essential oil on films and discovered that both significantly inhibit the growth of various bacteria. They suggested that a blend of these oils can be a potential alternative wound dressing option.

Application: Add one to two drops each of ginger and black pepper essential oils to your healing salve recipes.

A NOTE ABOUT SAFETY

Black pepper essential oil is relatively safe and poses only a slight risk of skin sensitization. According to Tisserand Institute, one of the foremost leading authorities on essential oil safety, there are no known contraindications, or maximum adult oral or dermal dose limits.

Black pepper essential oil is somewhat mild. It has warming properties but it is not a "hot" oil, the term for essential oils that can be irritants or allergens.

Use these common-sense tips when working with black pepper essential oil:

- At present, there is no clinically safe level of dosage for children, but this
 doesn't mean that you cannot give it to them. You should start off small with
 "culinary doses," that is, no more than one drop per dish. Black pepper essential oil is safe to use in your diffuser and topical applications if you keep it
 to 1% or less for children.
- Don't consume it straight out of the bottle, and don't add it to water for drinking (remember that oil and water do not mix).
- You can consume safely by adding 2-3 drops of black pepper essential oil into a veggie gel capsule and fill it with olive oil. Consume with food.
- Do not stay on black pepper oil for an extended length of time. Ideally, you should rotate your oils every few weeks.

- Stop using it immediately if you experience any side effects.
- Use with caution if you take medications. Check with your healthcare provider first.

Black pepper has a long and rich history, especially in traditional cooking, and its essential oil has many uses as well. Its aroma is energizing and peppery, and it blends well with other spice oils.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 13 Copaiba

Best known for its sweet aroma and often used as a lacquer or varnish, the many copaiba essential oil uses make it a must-have. It's renowned for healing, which has made it a great natural solution for pain relief, infection, and even skin care. You may be surprised to learn how far-reaching its health benefits can take you!

The key is to use the pure essential oil, making sure that you're not putting synthetic ingredients on your skin, inhaling them into your lungs, or ingesting them. Finding out Where to Buy Essential Oils (Choosing the Best Brand for You!) takes a little effort, but is worth the time!

Copaiba Essential Oil Properties

Copaiba essential oil is steam distilled from the gum resin that is tapped from Brazil's copaiba tree. This tree grows upwards to 100 feet and produces yellow flowers and a reddish fruit. Interestingly, a single tree may offer up to twelve gallons of oil each season! Burned in ceremonies for physical and spiritual healing, the resin is used in a variety of ways and can be found in virtually every market in South America.

Like frankincense, there are a variety of species including *Copaifera officinalis*, *Copaifera langsdorffii*, and *Copaifera reticulata*. There are subtle differences in the chemical makeup of each and the research discusses most of them.

Which one do you use?

Practically-speaking, your favorite supplier will only sell one or two species and this will largely determine which one(s) you purchase. Personally, I have found the differences between species is minimal and I use them interchangeably. Ideally, like I do with frankincense, mix all the species you can find together to create a synergistic blend!

Endocannabinoid System

One of the reasons copaiba has received a resurgence of popularity in the essential oil world is because of its ability to interact with the endocannabinoid system.

Discovered in the 1990s when researchers were studying *tetrahydrocannabinol* (THC – a known cannabinoid), the endocannabinoid system (ECS) is crucial for our survival as it plays a critical role in maintaining homeostasis of the human body:pain, memory, mood, appetite, stress, sleep, metabolism, immune and reproductive function.

For the ECS to work properly, it requires cannabinoids, compounds made by the body and in nature (i.e. cannabis), which bind with and trigger cannabinoid receptors that, in turn, produce a variety of physiological responses such as pain relief, insomnia relief, increased appetite, reduced stress, euphoria and the feeling of being "high."

The two receptors of interest to us include:

- **CB1 receptors** found in the central nervous system (i.e. brain and spinal cord). Can trigger the sensation of being "high."
- CB2 receptors found in the peripheral nervous system, immune cells, muscles, skin, and vital organs. When triggered, will not get you "high."

THC is the famous cannabinoid in cannabis that gets people high and it can bind with both CB1 and CB2 receptors.

What does this have anything to do with aromatherapy?

Well, because of *beta-caryophyllene*, the first known "dietary cannabinoid" that has been approved by the FDA as GRAS (Generally Recognized as Safe) to be used in food for its flavor.

It so also happens to be the primary sesquiterpene in black pepper, cloves, hops, rosemary, copaiba, and cannabis, which binds with CB2 receptors.

Meaning, when you use copaiba, black pepper or any essential oil that contain *beta-caryophyllene*, you activate the ECS without any psychotrophic effects (i.e. you won't get "high"). Kinda of like having your gluten-free, naturally-sweetened cake and eating it, too, huh?

So, to confirm, will using copaiba get you high like cannabis can? Of course not!

Can it help you in ways that CBD can? Yep!

7 Copaiba Essential Oil Benefits

This essential oil appears pale yellow in color and has a slightly bitter taste. The resin that makes the oil is extracted from has been used as a native folk remedy dating back to the 16th century. Although they seem almost limitless, I have found that these 7 copaiba essential oil uses top the charts.

1. ANTI-INFLAMMATORY & PAIN RELIEF HELP

A go-to natural pain solution for hundreds of years, the fact that copaiba oil heals has drawn a lot of attention to it in the American essential oil community. Copaiba essential oil uses in Brazil include both an anti-inflammatory and an anti-septic. In fact, Amazonian traditional medical practitioners often prescribed the oil for its anti-inflammatory properties. One study published in *The Journal of Ethnopharmacology* revealed that the main compound found in this oil was beta-caryophyllene. Beta-caryophyllene is an anti-inflammatory agent that also has analgesic, or pain killing properties.

Another study looked at the influence of copaiba essential oil uses on rats in the repair of abdominal defects that were corrected mesh. Researchers found that those treated with copaiba oil showed an improvement in the inflammatory response. While another study found that copaiba oils have a peripheral and central antinociceptive effect, meaning that the oil blocks the detection of painful or injurious stimulus. These studies suggest that the oil is not only useful as an anti-inflammatory, but can also be used as a natural pain reliever.

2. PROTECT THE LIVER

Not only does copaiba act as a pain killer itself, but it can also help reduce liver tissue damage that is caused by acetaminophens like Tylenol. One study measured the effect of copaiba oil in liver damage that was induced by acetaminophen in rats. In the study, researchers administered copaiba oil to the rats for 7 days. The study found that the oil reduced liver damage caused by paracetamol, or acetaminophen.

It is important to note, that if you are interested in copaiba essential oil uses for pain relief or to protect your liver due to routine acetaminophen use, it is vital that you follow safety guidelines. Taking too much of the oil can actually cause harm. In fact, in the rat study, large oral doses were shown to increase bilirubin, which is a sign of liver disease. Be sure to limit to 1-2 drops each dose and spread doses out to every 4 hours. The safest way to consume is in a gel capsule filled with olive oil, or you can dilute with some coconut oil and sweetened it up with a little honey. Like any essential oil that you take orally, it is vital that you consult with your physician and never take more than the recommended dose.

3. PROTECTING THE BRAIN

In addition to the oil itself, copaiba oil-resin has also been shown to work as a natural healing solution. Oleoresins are naturally occurring mixtures of oil and resin that are extracted from plants like the copaiba tree. These mixtures have been used in traditional healing and Brazilian folk medicine for years. However, recent studies have also shown that oleoresin treatment works as a neuroprotective (protects the brain).

A research study published in Evidence-Based Complementary and Alternative Medicine looked at how copaiba oil-resin (COR) could possibly be used as an anti-inflammatory and neuroprotective after neural disorders. The study used adult rats to investigate the anti-inflammatory and neuroprotective effects of COR after acute damage to the motor cortex. The results of the study suggested that "COR treatment induces neuroprotection by modulating inflammatory response following an acute damage to the central nervous system."

4. ACNE

Many essential oils can be used to reduce the appearance of appearance of acne or help clear up other skin irritations. Copaiba oil is no exception. It's anti-inflammatory and antiseptic properties make it an ideal natural solution for those who suffer from acne. When extracted from the oil resin, copaiba essential oil can be used to effectively treat surface acne.

After distilling the essential oil through steam distillation and purifying it through freezing to remove remnant water, researchers then incorporated the essential oil into a gel to use for testing. The gel was applied to the areas affected by acne. The results showed that there was a highly significant decrease in the surface affected with acne in the areas that were treated with 1.0% copaiba essential oil preparation.

5. AUTOIMMUNE CONDITIONS

The research on the use of copaiba oil for autoimmune conditions is still very new and experimental. However, it is interesting to note that research is being done to see how this essential oil might provide a natural treatment option for those who suffer from autoimmune diseases like multiple sclerosis.

In a recent study, researchers investigated how copaiba oil effected the immune system response in cultured cells from mice with experimental autoimmune encephalomyelitis (EAE). EAE is an autoimmune disease found in rodents that is used to study multiple sclerosis. The results of this study suggest that copaiba oil acts on the mechanism of development of EAE by modulating the immune response.

Again, this research is still very experimental, and more studies will need to be conducted to determine how the oil might impact immune system response in humans with autoimmune conditions. However, it is promising to see these results, which suggest the oil might also help those suffering from diseases like multiple sclerosis.

6. ORAL HEALTH CARE

Copaiba essential oil uses have also shown to be effective in oral health care. Though most essential oils can often be used safely on the skin when mixed with a carrier oil, many of these oils are not safe for use orally. However, copaiba oil is safe if used properly. A study that aimed to evaluate the cytotoxic effect of a Copaiba oil-based root canal sealer determined that the oil is not cytotoxic, meaning it is safe and useful as a root canal sealer.

Furthermore, another study showed that copaiba oil was a bacteriostatic agent when used against Streptococcus mutans, a bacteria commonly found in the human mouth that is a significant contributor to tooth decay. This means that it was able to stop bacteria from reproducing, suggesting that copaiba oil may be useful in preventing cavities. Consider adding a drop to your oil pulling mixture to improve the health of your mouth.

7. INFECTION

We have already looked at how copaiba essential oil uses can be used to treat different kinds of infections such as skin issues like acne and oral health problems like tooth decay. However, there is even more research out there regarding other types of infection that suggests copaiba oil may also be helpful in acting as a natural healing agent.

One such study looked at copaiba essential oil uses as a prophylactic or preventative approach for those with fecal peritonitis leading to severe sepsis. This study tested rats and measured their survival rates, comparing animals who were injected with copaiba before being infected with those who were infected afterwards. Interestingly, those animals that were treated with copaiba before getting sick, survived considerably than those who were treated afterwards. Of course, more research needs to be conducted to make a hard conclusion, but this suggests that people prone to infection – for example, pre-surgery, prechemo and etc – could benefit from safe, internal use of copaiba oil.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 14 Frankincense

Frankincense essential oil benefits are so profound that it's not only known as the "King of Oils", it is one the most popular natural remedies on the market today. And for good reason! It's anti-inflammatory and anti-cancer power has been on the radar of researchers around the globe for several years now, and science is starting to catch up to traditional folk medicine regarding frankincense essential oil benefits!

How was Frankincense Used in History?

Interestingly, frankincense has always been in high demand and history tells us many fascinating things about how ancient cultures used it.

Tradition tells us that, in Babylon, nearly 60,000 pounds of frankincense resin burned annually for its aromatics and its role in rituals. Later, we see the Magi bringing frankincense along with gold and myrrh to the infant Jesus. More than a costly, fragrant gift, frankincense essential oil benefits are well documented and have made this tree resin famous today.

Ayurvedic medicine, in practice for centuries, uses frankincense (referred to as "dhoop" and it use as "dhoopan") for wound healing, female hormonal issues, arthritis, and air purification. In many cultures – including Somali, Ethiopian, Arabian, and Indian – frankincense essential oil benefits have daily uses. Burning it in the house is said to bring good health, and burning it in the evening is meant to purify the home and the residents' clothing.

The Properties of Frankincense Essential Oil

Frankincense (*Boswellia carterii*, *Boswellia serrata*, and the other Boswellia species), as with all plants and their essential oils, carries many different molecules with different purposes. Some stand out as prominent in certain substances, as is the case with *boswellic acids* (*BAs*) in frankincense.

However, ask any chemist and they will tell you that BAs are too large to pass the steam distillation process. Oddly enough, there are still bad essential oil studies

that claim they are indeed part of frankincense oil. Subsequently, the jury is still out as to the exact mechanism(s) explaining why frankincense essential oil is so beneficial to cancer patients.

Nonetheless, the healing benefits of frankincense resin has traditionally centered on disease prevention and anti-inflammatory properties, and researchers have been able to confirm in vitro that *boswellic acids* contain a potent ability to modify the immune system as well. Part of having a more efficient immune system is the regulation of inflammation, as well, which can have effects topically or systemically.

This is why it's important to supplement with Boswellia resins. Formulated by my friend Sunil Pai, MD Integrative Medicine expert and medical director of Sanjevani Integrative Medicine Health & Lifestyle Center, Bosmeric-SR™ is the strongest natural supplement for pain and inflammation support. Here are the specs:

- Clinically tested, this unique sustained release formulation of patented ingredients delivers superior absorption and release over an 8 hour period.
- Each bi-layered caplet delivers the highest dosages available of Curcumin C3 Complex® (curcumin longa) [250 mg]; Boswellin® PS (Polysal) 35% boswellic acids + 10% AKBBA + 35% Polysal™ (boswellia serrata); and Ginger Extract (zingiber officinale) 20% Gingerols. In addition BioPerine® (piper nigrum) is added to further enhance bio-availability.
- These ingredients support inflammatory physiological response mechanisms which are critical to the health of the entire body and have been shown to play a crucial role in supporting cardiovascular, immune, neurological, gastrointestinal, joint and connective tissue systems.
- Research now suggest that most, if not all disease, begins with inflammation.

Check it out for yourself HERE!

At this point, I'm sure you've heard of the so-called "frankincense cancer cure" that has gone viral the past few years. Why? Because several studies claim that frankincense essential oil benefits have demonstrated anti-cancer properties and the ability to mitigate many different kinds of cancer cells. As more studies are conducted, the implications of this ability will be exciting to watch unfold!

The jury is still out as to the exact mechanism(s) explaining why frankincense essential oil benefits are so helpful to cancer patients. However, advances in

recent research suggest that Beta-elemene – a cancer fighting terpene found in frankincense and myrrh with the ability to cross the blood brain barrier – may be partly responsible.

As stated by the Memorial Sloan Kettering Cancer Center,

"Beta-elemene is a compound found in plants such as celery, mint, and in many others used in traditional medicine. Although the pure form is not used as dietary supplement, some cancer patients use herbs high in beta-elemene as treatment. Beta-elemene was shown to prevent growth of cancer cells in laboratory cells by different mechanisms. A few poorly designed studies done in humans showed that it may improve quality of life in cancer patients. It is unclear if raw herbs containing beta-elemene have the same effects in humans. More research is needed."

Some even suggest that the amount of β -elemene that frankincense and myrrh contain could very well explain why so many people claim that both oils have been instrumental to them beating cancer God's way.

At the end of the day, once we know the basic properties of an herb, root and resin we are able to determine the best ways to utilize it. Let's take a closer look at what the components of frankincense essential oil benefits mean for our daily lives...

1. Boosting the Immune System

The immune system is intricate and amazing, interacting with every system of the body to prevent and fight disease. One of the primary mechanisms of the immune system is the influx of white blood cells, or lymphocytes, the main defense method that the body has. Inflammation is another component of the immune system, but in an unhealthy body, it goes overboard and becomes problematic.

By studying the way that frankincense essential oil benefits the immune system in mice, we have an idea of its interaction with our own immune response. In *Phytotherapy Research*, the results of this study were noted to include:

- Cytokine production
- Slowed hypersensitivity
- Increased immunoglobins
- Improved T-cell interactions

The bottom line is that multiple areas of the immune system are potentially influenced by frankincense.

2. Fighting Pain and Inflammation

The beauty of immunomodulators is that they can stimulate an underproductive immune system that allows illness to creep in, while also relaxing an over-productive immune system that attacks itself or benign substances with inflammation, often becoming painful, chronic, and debilitating.

By regulating inflammation, frankincense oil is a powerful tool not only for acute illness but for chronic and autoimmune disorders such as Crohn's disease, rheumatoid arthritis, ulcerative colitis, and bronchial asthma. Weight and other metabolic issues are tied to inflammation as well, so even when these chronic conditions are not an issue, inflammatory illness is still a concern to monitor and prevent.

While inflammatory conditions are often painful, frankincense essential oil benefits can help with other pain relief as well. In Omani culture, it is traditionally used for pain in muscles, intestinal discomfort, and arthritic pain.

In 2014, researchers local to Oman tested frankincense essential oil and extracts to validate this practice compared with aspirin. Of the various preparations tested, frankincense oil showed the strongest pain inhibiting results with over 50% in both early and late phase pain. Researchers concluded that,

"The present study provided the scientific justification about the analgesic properties of the essential oils, extract, and various sub-fractions obtained from the resin of B. sacra, thus validating its use in traditional folk medicines and other products; and hence supporting the development in the analgesic properties of bioactive natural substances."

3. Preventing & Treating Cancer

While we do know that the various forms of frankincense (essential oils, extracts, pure resin, etc.) have the potential to fight cancer, much is left to be understood, making this a controversial topic in the natural health and research world.

Studies continue to emerge, however, demonstrating the anti-cancer effects on bladder, breast, and skin cancers. For example, a recent research article was published that addressed frankincense oil benefits for people suffering from melanoma, a deadly form of malignancy. Due to the tendency of melanoma drug treatments to be associated with liver injuries, the researchers evaluated how high doses of frankincense impacted animals with acetaminophen-induced liver damage, and discovered that it not only "significantly reduced the tumor burden related to the melanoma," but frankincense essential oil helped reverse the liver damage that the animals developed.

For those who have added frankincense to their cancer care plan, the benefits may go beyond anti-tumor effects. Conventional treatment is often still required, but can be more painful and difficult than the symptoms of cancer itself. Brain cancer patients, for example, sometimes experience swelling in the head called *cerebral edema* after their tumors have been removed. Steroid treatment is common but also associated with difficult side effects and complications.

Frankincense on the other hand, has shown remarkable effects against this particular problem. In 2011, a clinical trial evaluating 44 individuals monitored frankincense as a remedy for cerebral edema. In 60% of the patients, the swelling was reduced by 75% or more. The concluding remarks called for frankincense to be prescribed for cerebral edema in these circumstances, avoiding the struggles of steroid therapy.

For a similar call for a shift in treatment protocol, much more research must be done. Unfortunately, because cancer is such a deadly disease with a limited opportunity to administer effective treatments, testing the efficacy of alternative treatments, administering control studies, and adjusting administration and dosage all pose ethical roadblocks. So while specific answers may come slowly, it's plain to see that the potential and properties exist. With little to no side effects associated with frankincense essential oil benefits, we have little to lose and much to gain when adding it to our daily routines or pairing it with cancer protocols. The resin, extracts, and even the essential il should all be considered as options to work in conjunction with an oncological approach.



Recommendations: In spite of the "frankincense oil cancer cure" controversy, the powerful role that frankincense essential oil benefits play in immunity, inflammatory control, pain relief, and anti-cancer potential makes it a necessary supplement to have around the house "just in case." Vaporizors, salves, supplementation and diffusion are all beneficial ways to use it.

Some effective personal uses are to:

- Mix 10 drops of frankincense per 1 tablespoon of carrier oil of your choice, and apply over the tumor directly.
- Take 1 drop of frankincense with ½ teaspoon honey, maple syrup, or coconut oil.
- Put 3 drops into a gel capsule filled with olive oil and take with food.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 15 Lemongrass

Lemongrass essential oil benefits are potent, top the charts for its antimicrobial capacity, and is one of the most "medicinal" natural remedies available. That's why learning how to properly incorporate lemongrass into your natural health regimen is so important!

Lemongrass History & Properties

Originating in the East, lemongrass and its oils have been part of local traditions and medicine for centuries. With the resurgence of essential oils worldwide and increasing popularity in the US, lemongrass essential oil uses has become one of the more popular choices in aromatherapy, and science is beginning to verify traditional uses and uncover its mechanisms of benefit – and uses for lemongrass essential oil has a wide range of uses, from muscle pain to cosmetics.

In gardening circles, lemongrass is a beautiful ornamental grass that helps repel mosquitoes. In fact, whole "grass gardens" of intentionally grown grass meant for aesthetics are popping up, and lemongrass is a favorite. Outside of trendy garden spaces, lemongrass is a culinary staple in Thai cuisine as an herb with the intense flavor of – you guessed it! – lemons.

Distilled from the dried blades of grass, Cymbopogon flexuosus has many chemical components that contribute to its beneficial actions. They include alcohols, ketones, terpenes, aldehyde, and esters. Many of these categories of chemicals are known for therapeutic effects on the body, but citral is one of the benefits of lemongrass essential oil to really pay attention to.

We see that strength play out in its many beneficial actions. To list a few, lemongrass essential oil uses have been studied for the following actions:

- Anti-inflammatory
- Antifungal
- Antimutagenic
- Antimalarial

- Antioxidant
- Antiparasitic
- Detoxification
- Neurobehavioral
- Pain relief
- Lowering cholesterol

One of the first capabilities I look for is that it's an antioxidant, because that indicates an active healing effect. Antiodixants are often described as scavengers, searching for free radicals to stop and damage to reverse. Lemongrass stands among the antioxidant scavengers, making it an ally in all kinds of metabolic, chronic, and even cancerous illness.

Since research has shown antioxidants to have a positive impact on reducing the impact of carcinogens in the body, it's exciting to explore the possibility of essential oils expressing antioxidant activity may have in the fight against cancer. The compound citral is the perfect example because it can increase the activity of a key phase II detoxification enzyme known as glutathione-S-transferase, and researchers suggest it has a possible role in skin cancer prevention. Next to lemon myrtle (90-98% citral) lemongrass essential oil contains one of the richest amounts of citral (upwards of 85%) and has proven to be a potent detoxifying agent.

8 Healing Properties of Lemongrass Oil

In addition to the potential impact of antioxidant activity we've seen above, lemongrass essential oil may help heal the body primarily because it is comprised of geranial and neral, both found in other citrus-like essential oils. It exhibits a few properties pretty strongly, with a range of applications that extend from those benefits. Here are 8 actions that underscore lemongrass essential oil's strengths.

1. ANTI-INFLAMMATORY

Inflammation can rear its ugly head in chronic illness, pain, skin conditions and more. It's one of the reasons researchers in Algeria took the time to evaluate lemongrass in 2014. They evaluated the results of a topical lemongrass essential oil preparation on mice for anti-inflammatory effects as well as antifungal effects (but we'll get to that in a minute). The results were clear enough that they noted lemongrass "clearly...inhibits the skin inflammatory response."

2. ANTIFUNGAL

In the same study, antifungal properties were examined as well, against multiple fungal enemies including the dreaded *Candida albicans*. With what may be a surprising twist, inhalation seemed to be the strongest application against candida. Final results were that lemongrass exhibits "noteworthy potential for the development of drugs for the treatment of fungal infections." In another study conducted a few years ago, in 2008, lemongrass showed "a potent in vitro activity against Candida."

3. ANTIMICROBIAL

To take lemongrass from an antifungal for the body to a super-cleaning oil as well, lemongrass does in fact have antimicrobial benefits. For example, food scientists have been monitoring lemongrass for its ability to inhibit *Staph* and improve food preservation. In a study and a review, published in separate journals over the course of a year, lemongrass was viewed favorably as an option for food safety applications.

For you and I, this means lemongrass is a powerhouse in the cleaning department, especially in the kitchen and bathrooms where mold and microbes really take hold. The study above used a 4% dilution amount.

4. COMBAT AIRBORNE PATHOGENS

Diffuse lemongrass with geranium to replicate 2009 efforts to mitigate airborne and surface bacteria in a UK study. They were able to reduce bacteria like MRSA and strains of resistant bacteria by as much as 89% through diffusion and sprays, declaring the oils to be successful disinfectants.

Add lemongrass to DIY spray cleaners for kitchen counters to limit surface microbes and bacteria and for bathrooms to inhibit the growth of mold. Diffuse in the car and home for airborne disinfectant properties.

5. ANXIOLYTIC (ANXIETY RELIEF)

Folk use of lemongrass includes anti-anxiety treatments, and in 2011, scientists worked to confirm these effects. By evaluating neurotransmitters in mice and their response to lemongrass exposure, they were able to track the way the body processes the oil. Their findings centered around the GABA receptors in the brain and confirmed an anti-anxiety reaction.

Diffusion and inhalation are typically the best methods of administration for anxiety, providing an immediate access to the oil's properties. Add a drop to diffusers, air vents, or clothing for a steady stream of aroma, or make an inhaler of sorts by placing a drop on a handkerchief and breathing deeply when necessary.

6. LOWERS CHOLESTEROL

In 2011, The journal *Food and Chemical Toxicology* published an article that resurfaced a 30 year debate whether or not lemongrass oil can reduce elevated cholesterol levels and whether or not it's safe.

- "...one of the three experimental groups receiving lemongrass EO (1, 10 or 100mg/kg). No significant changes in gross pathology, body weight, absolute or relative organ weights, histology (brain, heart, kidneys, liver, lungs, stomach, spleen and urinary bladder), urinalysis or clinical biochemistry were observed in EO-treated mice relative to the control groups.
- Additionally, blood cholesterol was reduced after EO-treatment at the highest dose tested [~2 drops]. Similarly, data from the comet assay in peripheral blood cells showed no genotoxic effect from the EO. In conclusion, our findings verified the safety of lemongrass intake at the doses used in folk medicine and indicated the beneficial effect of reducing the blood cholesterol level."

This shows promise in the potential for using lemongrass essential oil as a simple approach to supporting balance for your cholesterol levels!

7. CANCER KILLER

To date, 7 studies have evaluated the potential lemongrass cancer cure. In 2009, a study was published that evaluated the essential oil from a lemon grass variety of *Cymbopogon flexuosus* for its in vitro cytotoxicity against twelve human cancer cell lines; as well as in vivo anticancer effects on mice. The results were quite promising, as researchers discovered various mechanisms of how the oil killed the cancer lines. "Our results indicate that the oil has a promising anticancer activity and causes loss in tumor cell viability by activating the apoptotic process as identified by electron microscopy."

8. BUG REPELLENT

The lemongrass plant itself is often grown for bug repellent benefits, but the essential oil is much more portable! In trials just this year (2015), lemongrass with ylang ylang matched DEET's performance for mosquito repellent, without all

of those nasty chemical risks and side effects. Add lemongrass to a spritz bottle filled with 190 proof alcohol, shake, then spritz onto clothing for a DIY mosquito repellent.

As a side note, isn't it incredible that a plant native to the tropics of eastern Asia is also an effective antimalarial and mosquito repellent? The design inherent in nature and especially in the plant kingdom never ceases to amaze me – undoubtedly an indication of whose Kingdom we are really living in!

Lemongrass Essential Oil Safety Note

As always, common sense and further education are always important when utilizing medicinal remedies and new topical treatments. Lemongrass is usually safe, but sensitive skin might react with discomfort and even a rash. Carrier oils can help to mitigate this, but always test (in a carrier oil) on a small area of skin first before going right to a massage. Also, while internal consumption has a time and a place, lemongrass has the potential to be harder on the body than some other oils. To avoid complications and digestive tract irritation, take only 1-2 drops daily in a gel capsule with carrier oil.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 16 Lime

Like many citrus oils, lime essential oil benefits your body in a myriad of ways. From reducing belly fat and preventing dental cavities to helping your anxious child get a good night's sleep there's a lot to know about its therapeutic efficacy!

Maybe you're like me, and you love the bright, sweet scent of lime essential oil. It's wonder it's a popular addition to many aromatherapy blends and air freshening sprays. But, most people don't know the benefits of using it far excel your sense of smell!

Historical Uses of Lime

Lime oil can only be found in its rind, so many of the traditional uses for lime fruit and juice are not applicable when we discuss how to use the essential oil. Nonetheless, it's interesting to look back and see how the benefits of lime essential oil were *hinted* at throughout historic uses.

The original vitamin C supplement? British explorers frequently carried limes aboard ship to prevent scurvy. All citrus fruits are well known to protect against this unpleasant, but completely preventable disease. Some captains are said to have felt so strongly about the necessity of preventing scurvy that they ordered every crew member to eat a lime, including a bite of the peel on a fixed schedule. Most of a lime's volatile oils and vitamin C are in the peel, so this was a wise practice.

1. DRIED LIME

People in semi-tropical climates have long relied upon this food preservative and flavoring to help prevent food borne pathogens long before refrigeration was available. Whole limes were kiln- or oven- dried, then broken and crumbled onto meat as needed.

Dried lime has also been simmered in oil warmers for house blessing—this may have been the ancient precursor to modern essential oil diffusers. Lime is still used effectively to preserve food and to brighten the energy in our homes.

2. PRESERVED LIME

Crushed in a jar with salt and left to naturally ferment, or pickle itself, lactic acid preserved limes and lemons were probably the first foods ever cultured specifically for their probiotic benefits. When traditionally prepared by this method, limes (and lemons) and their peels lose their sharp bitter bite.

The flavors meld with the fruit into a slightly salty, mellow, sweet-tart condiment that is still popular worldwide today. Who knew citrus fruit could provide your daily dose of good bacteria?

3. NATURAL INSECTICIDE

Lime essence makes a note-worthy insecticide —it successfully kills the vermin responsible for grain damage among others, such as mosquitoes. When properly diluted and applied, steam distilled lime essential oil may be a good tool in your insect repellent arsenal.

Properties of Lime Oil

Referred to in the scientific community as *Citrus aurantifolia*, lime oil is technically not an essential oil, but a "cold-pressed" oil similar to olive oil.

Primarily reserved for citrus peels, mechanical pressing (aka cold pressing) literally squeezes the volatile and non-volatile organic compounds out of the rind of the fruit. At one point in history, this was done by hand using a sponge to collect the oil, but those days are long gone. Citrus oils can also be steam distilled, but because of the extreme heat required to vaporize water and the plant matter, the aroma and chemical structures changes considerably and the therapeutic properties are much different than.

Lime oil is also becoming more popular as a CO2 extract. CO2 extracts are still experimental as few clinical trials have been conducted evaluating their safety and efficacy. That said, they are quite popular now in the aromatherapy community because, unlike with steam distillation, many more (medicinal) plant compounds are extracted during the process, no potentially harmful solvents are required, the oils are sometimes gentler to use on the skin, and their aromas are truer to the original plant than those of steam-distilled essential oils.

So, depending on the type lime oil you get, the chemical compounds will include a mixture of: alpha-pinene, beta-pinene, borneol, citral, cineole, d-limonene, geranyl acetate, linalool, myrcene, neral acetate and terpinolene.

6 Lime Essential Oil Benefits

Lime oil is safe to be use via inhalation, topically and ingestion if dosed and diluted properly. Try some of the recommendations below and be sure to consult with your physician if you're being treated for a medical condition or are currently taking pharmaceuticals.

1. REDUCE STRESS

Unless you live in a sequestered non-technological community, you have probably heard again and again about the importance of putting away all the electronics. Not only to avoid constant EMF exposure, but to learn to be present in the moment with your family, friends, and co-workers... and you probably read that apt reminder on a social media app while gazing at your electronic device!

We all know we desire more downtime; we want our children's lives to be at least a little more like our own internet-free childhood years. The screen-drain is real—we may feel frequently fatigued, even exhausted. But ironically, we may also feel too stressed or anxious to sleep well.

Lime essential oil can help! It has the amazing ability to reduce feelings of distress, and promote better sleep. Even better, it's an appropriate essential oil for use with children.

Lime essential oil is known to be high in the d-limonene compounds that rat studies show can help with stress. It is difficult to be in the moment when the cares of the day will not leave your mind and body. We hold onto concerns and tensions, unfortunately, ending up with less connection and more stress- related health concerns.

Lime essential oil eases stressful transitions. Studies show pressed oil reduces muscle spasms so it's worth asking what benefits the essential oil may show in future studies on this topic.

All citrus oils are beneficial for mood and stress relief because of the d-limonene. While orange essential oil usually has the highest levels, lime essential oil should not be overlooked as a d-limonene rich option. This compound seems to protects us from stress at a cellular level, helping relieve the harm of stress on us physically.

Application: Try putting 10 drops of lime, 5 drops of ylang ylang, and 5 drops of frank-incense into an aromatherapy inhaler for instant, stress-reduction.

2. BOOST MOOD & ENERGY

These affects and benefits of lime essential oil extend into mental health and mood support as well!

Lime Essential Oil is Extremely Energizing

Lime essential oil is an energizing essential oil, like many of the citrus family. In fact, you could combine lime and peppermint essential oils into a room spray to boost mood, energy, and concentration. Try mixing 10 drops of each in a 2 oz. spray bottle and top off the rest with 190-proof alcohol. The perfect afternoon pick-me-up spray!

This study shows the benefits of lime juice in energizing you, and we look forward to more studies on the benefits of lime essential oil. It may also improve energy and focus without the jittery feelings caused by drinking too much caffeinated coffee, tea, or soda. In fact, some people like to add a drop of high-quality essential oils (safe to take internally) like lime or key lime solubilized in a refreshing drink to replace caffeinated drinks while driving.

Lime Supports Mental Health During Depression

Depression effects many lives in ways that can be devastating, and not everyone finds relief in pharmaceuticals. Some people do find relief but suffer greatly from the dangerous side effects of prescription antidepressants. To support your self care efforts at home, try lime essential oil.

All citrus oils are great at combating depression, and lime is no exception. Lime and other citrus essential oils provide relief from acute feelings of anxiety, dread, and hopelessness. Obviously, if you have thoughts of self harm, contact your medical professional immediately, but for day to day dealing with depressive feelings, essential oil therapy is very effective. It is shown to work on brain chemistry directly to help address the cause, and not only the symptoms of depression.

Other Citrus Oils Also Boost Mood

Have you ever returned from work in a funk, only to find a sulky teen or grouchy grade schooler—maybe even an irritable spouse? This study shows how citrus

oils can have a positive impact on mood overall. Diffuse some lime essential oil, and bring the family together for some revitalizing family time.

If your family practices "good morning do over", this is a perfect oil to diffuse in the family room to set the cheerful tone while everyone goes back to their rooms and comes out again to restart the day with a new perspective.

Application: Try 3 drops of each of lime and bergamot into your diffuser to change the environment in the air and enhance your mood!

3. KILLS BACTERIA, FUNGI & VIRUSES

Lime essential oil kills the big three types of pathogens- bacterial, fungal, and viral, and it is an antiparasitic as well.

Dental caries or cavities are caused by a specific group of oral bacteria that are difficult to control—even with great dental hygiene practices. Researchers found that the best anti-cavity preparation they tested, including several fluoride products and even chlorhexidine (which is too toxic for daily use) was a garlic and lime juice solution. You know how much we love garlic here!

Lime essential oil is extremely effective at fighting bacteria in general and oral bacteria, specifically. We recommend it in our essential oil oral health mouthwash for this reason!

Immune protection is another benefit of using lime essential oil. Lemon is not the only citrus fruit that helps boost your immune system during cold and flu season. Add lime to your homemade hand soaps, gels, or lotions, and add it to your spray cleaners whenever the latest bug is going around. Lime essential oil is one of the best to add to your bathroom cleaner as it protects your immune system and fights so many pathogens.

Much mainstream research shows that lime and other citrus essential oils are highly antibacterial. Lime is proven to kill many gram-positive organisms (staph and enterococcus), gram-negative organisms (e. coli, salmonella, citrobacter, serratia, shigella, klebsiella pneumoniae, pseudomonas aeruginosa), fungi (candida, aspergilus), and anaerobic bacteria (bacteroides, clostridium, porphyromonas).

Research show citrus preparations such as lime essential oil to be especially powerful against fungal infections. Many parents use lime as a safe treatment for fungal skin overgrowths such as ringworm or athlete's foot for the entire family—always dilute for use on skin, especially for children. You may wish to consult an aromatherapist when using essential oils with an infant.

Because of lime's reliability as an antimicrobial, combined with its safety for human consumption, lime is considered to be one of the best food-safe antibacterial preparations available. In addition, it imparts great flavor when used as a marinade or added to salsa. Yum!

Application: trying mixing 6 drops of lime oil & 6 drops of geranium with 1 ounce of shea butter to make a body butter and apply on infected areas.

4. BURNS FAT & REDUCES CRAVINGS

Weight loss is an ongoing battle for an ever-growing number of American men and women. It is distressing that even our children are increasingly struggling to control their weight in a healthy, nurturing way. In addition to healthy eating habits, using essential oils can help.

You've probably seen the recommendations to drink fresh lemon or lime beverages to help lose weight. But lime essential oil is an even more concentrated, and, though it has a different chemical profile than the juice, may contribute to weight-loss efforts as well. It's one of my seven top essential oils for weight loss support!

Lime essential oil has been proven to help prevent weight gain in this murine study. In another study, subjects were given capsules with lime essential oil before lunch and dinner, and capsules of coriander seed after lunch and dinner. Even with no additional lifestyle changes, they showed significant weight loss in just a few weeks. Those who were given higher doses lost the most weight on average.

D-limonene was shown in this study to help prevent and treat high triglyceride (fat) levels, high cholesterol levels and in this murine study, helped balance high blood sugar levels. This was true even in subjects consuming a terrible diet and who already carried excessive weight.

This information obviously is not meant to encourage poor food choices, but rather to offer hope that essential oil therapy for weight loss can offer great results. Starting from where you are, even if you feel you haven't completely fixed your diet yet, is important. Make simple switches in your sweeteners, your meat, and look for healthy recipes your family will enjoy.

Application: from The Essential Oils Diet, make our fat-burning roll-on...

 Add 4 drops lime, 3 drops peppermint,3 drops grapefruit, 2 drops cypress, 1 drop eucalyptus, 1 drop cinnamon bark into a 10 ml roller bottle. Fill with fractionated coconut oil and apply on your abdomen or problem areas twice daily for one month.

SOOTHES INFLAMMATION

Inflammation is a necessary part of healing, in fact, your body cannot heal without a degree of inflammation. However, chronic or excessive inflammation can cause numerous very serious inflammatory conditions, including:

- asthma
- atherosclerosis
- certain cancers
- Crohn's disease
- hay fever
- active hepatitis
- rheumatoid arthritis
- chronic peptic ulcer
- periodontitis
- sinusitis
- tuberculosis
- ulcerative colitis

Citrus oils such as lime essential oil are proven by peer- reviewed studies in mice to be active, safe, and effective anti-inflammatory agents. They seem to specifically address inflammation at its cellular source.

If you or a loved one suffers from an inflammatory condition, add lime essential oil to your daily diffuser blend, uplifting room spray, or pillow sachet to support healing.

Application: trying mixing 2 drops of lime oil, 2 drops orange, 2 drops lemon, 2 drops grapefruit, 2 drops petitgrain and 2 drops of vanilla absolute with 1 ounce of a carrier oil and apply over your body after getting out of the shower for total body inflammation-soothing properties.

6. ANTI-AGING & RICH IN ANTIOXIDANTS

Lime essential oil prevents and treats signs of aging such as dark skin spots, deep wrinkles, fine skin lines, skin dryness, and lack of elasticity. The high levels of antioxidants even help with brain fog and memory lapses. While no essential oil can turn back the clock two decades overnight, specific components in lime essential oil (such as limonene) are among the best sources of antioxidants safe for regular use.

This means, one of our our favorite essential oil roll-ons not only treats visible signs of aging, but some of the physical deterioration as well if it is caused by oxidative stress. And of course the antimicrobial benefits makes it great for healthy homemade deodorants and other body-care recipes!

Application: Make Mama Z's anti-aging, skin healing serum and add 5 drops of lime oil!

Other Health Benefits (Including Cancer)

Lime essential oil doesn't just benefit sleep concerns and mild anxiety. Studies are showing health benefits and healing support for major medical issues too! Isn't God amazing?

Cancer fighting. Lime essential oil has been shown to fight cancer cells in general. Lime juice has also been shown in vitro to specifically target pancreatic cancer cells — among the most painful and difficult cancers to treat. Breast cancer cells are also destroyed by components present in lime essential oil.

Fatty liver disease (even the type caused by stress) is greatly improved by taking limonene found in lime essential oil and other citrus oils. Research confirms that limonene helps insulin resistance and liver injury that is caused by stress and an unhealthy diet.

Alzheimer's Disease. This is a devastating diagnosis as the personality of the patient slowly fades away. It's something that has touched our family personally. Essential oils for Alzheimer's patients provide promising treatment options. Lime essential oil may help by inhibiting cholinesterase, an enzyme responsible for damaging neurotransmitters in the brain and with it's high antioxidant levels.

Heart Disease. Citrus consumption, including lime, may also have a direct impact on the incidence of heart disease. How much of this benefit translates to lime

essential oil is something future studies will need to show, but lime essential oil shouldn't be ruled out. When dietary and lifestyle changes can protect your heart, why take chances—try to add some citrus, whether from diffused oil, fresh fruit, or refreshing citrus water, every day.

Gallstones. The limonene present in lime essential oil is responsible for an impressive 48% success rate when used to dissolve gallstones in this trial. Others found partial dissolution. While gallstones may not seem as life threatening as heart disease or cancer, they are reportedly among the most painful of medical disorders, and if they cause a rupture, are just as dangerous.

Some European countries report similar success with peppermint essential oil, and European doctors rarely remove a gallbladder from an otherwise healthy patient. The trial above injected the oil directly so it's not the same as topical application but the results are interesting.

Risks & Contraindications

With all the remarkable and almost unbelievable applications for lime essential oil to improve your health, home, and life, you may rightly wonder whether there is any downside to using lime oil.

There is a lot of buzz in the essential oil world regarding photosensitivity of skin after using citrus oils. It is true that *expressed* citrus oils can cause you to be very susceptible to sunburn for hours after application, and they are really only appropriate for products that are well diluted, used in the evening, and washed off in the morning (or that are used on completely unexposed skin).

However, steam distilled citrus oils do not cause ultraviolet light sensitivity. Even pressed oils are typically safe if they are used in appropriate concentrations and diluted with care and common sense. See more about citrus essential oils and photosensity here!

So, there is no downside at all? Actually, there is one caveat. Here, kitty, kitty.

Some cats may be extremely sensitive to essential oils—especially citrus essential oils such as lime or key lime. See more about our recommendations for using essential oils for animals in this post with Dr Janet Roark.

The GRAS is always greener... the GRAS designation means that upon inspection for safety, a product or ingredient is Generally Recognized As Safe. Steam

distilled, fresh lime essential oil received the GRAS designation. Remember, we recommend diluting essential oils appropriately for maximum safety.

Additionally, most carrier oils help the essential oil penetrate and stick to skin for more effective use. Citrus oils like lime may deteriorate with time, ultra violet light exposure, and oxygen exposure. It's best to buy smaller quantities you will use up fairly quickly. Lime essential oil makes a great gift, especially if you include a card with fun and healthy ideas for how to use it!

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 17 Marjoram

Warming & sweet, marjoram essential oil benefits pack a wonderful, curative punch. We think of it as a culinary herb, but there are powerful health benefits as well.

The History of Marjoram Essential Oil Uses

If you recall, oregano essential oil is derived from the *Origanum vulgaris* culinary herb. Sweet marjoram – *Origanum majorana* – is a close cousin. Also a culinary herb, marjoram shares similarities with oregano, but also has some marked differences.

Both plants are native to the Mediterranean, and marjoram quickly stood out for its restorative benefits. In Greek history, marjoram was a symbol of happiness, called "the joy of the mountains." It was used in momentous ceremonies during life, such as weddings, as well as during death, such as a sign of post-life happiness when found growing on a grave.

The whole herb was used extensively for healing, body pain and headache relief, and digestive relief. If each plant and oil has a theme – citrus for energy and revitalization, tea tree for microbes, peppermint for healing the gut – marjoram's is that of relief.

Because marjoram essential oil benefits can include being used as an emmenagogue, stimulating blood flow in the pelvic area, historic cautions say it should be used when pregnant with caution. In various other stages of life, however, marjoram essential oil uses make it a must-have for its soothing and curative effects.

4 Marjoram Essential Oil Benefits

There are actually two oils referred to as marjoram – sweet marjoram (*Origanum majorana*) and Spanish marjoram (*Thymus mastichina*). It's sweet marjoram essential oil uses that we'll focus on today. Here are four ways marjoram oil has surprised me.

1. PAIN RELIEF

Long known to be a pain reliever, marjoram has traditionally been a go to for muscle aches and pains or other generalized soreness. The essential oil makes this especially accessible, easily added to massages or baths, improving their already-soothing effects.

To test the oil on a more specific kind of pain, marjoram oil was added to a small blend of oils and diluted into a cream to be tested via randomized, double blind, clinical trial. The control group used a synthetic scent. When massaged onto the abdomen during a painful bout of dysmenorrhea, the analgesic effects of the oils combined together to help the test group find relief.

The oils used for the trial were simply lavender, clary sage, and marjoram.

Application: Dilute into a carrier or DIY cream blend with other soothing oils, or simply dilute and use as a single. Massage onto areas experiencing pain.

2. INTERNAL PROTECTIVE

The internal effects of essential oils are of great interest for researchers, wondering just how they work and what they do after we inhale, apply, or ingest an oil. Because the research process exists in steps – from exploring the validity of an idea before even bringing it to the lab to testing *in vitro* in petri dishes and mice and rats to finally observing controlled groups of people.

It was an *in vitro* study on marjoram essential oil that found a potential for the protective benefits of the oil.

The study in question observed the effects of diluted, internal marjoram against outwardly-unseen damage inflicted by a strong medication. After 28 days, the internal system showed a great deal of improvement both restorative and protective.

While marjoram isn't used extensively as an internal oil beyond culinary use, its potential protective effects can certainly be maximized when used in times of need.

Application: Use in culinary preparations and sparingly in diluted internal preparations. Work with an aromatherapist and your doctor to use marjoram oil and potentially other essential oils as a protective measure when taking potentially toxic medications, working around toxic fumes and chemicals, or other cases that put an extra load of work on the liver.

3. CANCER PREVENTIVE

This may sound like a repeat of the previous benefit, but there is a significant difference between protection from medicinal damage and protection or prevention against a specific illness. The chemopreventive potential that marjoram displays fits nicely with our understanding of other protective culinary herbs.

It makes you think – God must have made all of these herbs to taste and smell so good that we would use them to guard our bodies against harsh meals!

Marjoram joins a long line of essential oils stepping forward in the literature with promising anti-cancer results. As with all cases of cancer prevention, we must realize that the research is still in development and that we can't know what hard and fast rule there is to making sure we don't get cancer.

Still, we can include them as part of our daily routines and know that we're doing all we can to make our bodies uninhabitable for cancer!

Application: A drop or two diluted and mixed into recipes for a flavorful and restorative meal.

4. ANTIOXIDANT HEALER

When searching for a curative or healing essential oil, the action antioxidant is one to prioritize. The way that an antioxidant literally seeks out damaged cells for restoration is endlessly fascinating and can be incredibly curative.

Marjoram essential oil's antioxidant abilities have been studied with very promising results. In a 2011 publication, the researchers said that we can "conclude that the marjoram EO has a significant potential to be used as a natural antioxidant and anti-AChE."

That last term refers to neurotransmission linked with Alzheimer's disease – much like the benefits we see with lemon balm essential oil – and opens another group of exciting questions about marjoram for further study.

Application: Aside from the benefits of diffusion and inhalation, antioxidants are excellent skin healers. Include in DIY body care products to battle the effects of time and sun damage.

Marjoram Blends & Companion Oils

As a fresh, herbaceous scent, marjoram essential oil uses include pairing it with citrus, mints, and just about anything you can think of. Experiment with blends like these to enjoy complementary benefits – not to mention create one of a kind aromas!

- Topical: Dilute into a rich carrier oil and blend with oils like bergamot, lavender, rosemary, peppermint, and chamomile.
- Diffusion: Add a drop of marjoram with a drop each of orange, lemon, and cypress.
- Culinary: Cook with a drop of essential oil to flavor a full recipe try with other culinary flavors like oregano, thyme, and basil.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 18 Neroli

Distilled from the blossoms of orange trees, sweet-smelling neroli essential oil has benefits that many natural remedies cannot match!

Bitter Orange Blossom

In our grocery store society, we are used to seeing just one part of a plant as edible – the vegetable or fruit. But our flowers, vegetables, trees, and shrubs have so much more to offer!

We know that essential oils can be taken from multiple parts of some plants, and neroli essential oil is an excellent example – it comes from *Citrus aurantium*, just as bitter, or sweet orange essential oil, but the chemical composition is quite different.

In fact, an analysis of each found that there were more than twice as many compounds in the essential oil found in orange blossoms than there were in the peel. One of the reasons for this is because orange oil is cold pressed from the peel, whereas neroli essential oil is distilled from the blossoms.

The blossoms that are harvested to create neroli essential oil would otherwise have become oranges, and it takes a significant amount of them to make the oil (the supplier Mountain Rose Herbs indicates 100 lbs. of blossoms to make 1 lb. of oil!). These factors alone justify neroli essential oil as a rather pricey oil. But demand for essential oils is high, so adulteration is a common problem.

It is difficult to know whether an oil has been cut with cheaper oils, additives, or scents. The best we can do is choose reputable manufacturers who are willing to be transparent about their production methods, batch analyses, and sourcing.

5 Benefits of Neroli Essential Oil

When you see *Citrus* on a bottle of neroli essential oil, don't mistake it for the same old orange oil. I love orange oil as much as the next person, but when you pay a pretty penny to enjoy the luxury of neroli essential oil, you treat it like something special!

1. PAIN & INFLAMMATION

There's a reason people go through the trouble of harvesting specific blossoms at a specific time to make an oil – traditionally infused or hydrosol, more recently distilled for concentrated essential oils. It's completely worth the effort!

Neroli oil was recently tested in the lab to isolate its compounds and determine why it has been used to combat painful inflammation. Although not every traditional use is verified in the lab, we have seen over and over again that many of them are. In this case, researchers came to the following conclusion:

The results suggest that neroli possesses biologically active constituent(s) that have significant activity against acute and especially chronic inflammation, and have central and peripheral antinociceptive effects which support the ethnomedicinal claims of the use of the plant in the management of pain and inflammation.

Some of the compounds in neroli are able to target the inflammatory process, so neroli would be worth the investment if you are struggling against chronic inflammation and painful conditions.

Applications: Massage oil, topical pain ointment.

2. MENOPAUSE

Not every woman struggles heavily with menopause, but for those who do, the effects can be debilitating. For others, it can be disruptive and unpleasant – and who has time for that?

According to the ACOG, most women will spend 40% of their lives in menopause or post-menopausal, and while the slight majority of women do nothing for symptoms, an estimated 38 million hormone replacement drugs were prescribed in 2010.

In 2014, Korean researchers focused on neroli essential oil's impact on the symptoms of menopause, with good results. Just by inhalation, neroli was found to have a positive impact on:

- Stress relief
- Sexual desire
- Blood pressure

Personal inhalers are simple and use very little oil, making neroli a worthwhile investment for anyone dealing with unpleasant symptoms of menopause. While hormone replacement therapy is sometimes necessary, some symptoms may be controlled with the simple addition of this invaluable essential oil.

Applications: Room diffusion and personal inhalers.

3. STRESS REDUCTION

It seems menopausal and post-menopausal women aren't the only ones who benefit from neroli's antihypertensive effects. In another study conducted by Korean scientists, neroli was combined with other calming essential oils for evaluation in control groups.

There were 83 participants, all of whom had high blood pressure or pre-high blood pressure, and the group was divided into three sections: no treatment; a placebo fragrance; and a blend of lavender, neroli, ylang ylang, and marjoram. After inhalation only, the test group had improved cortisol (stress) markers as well as lower blood pressure.

High blood pressure is a potentially dangerous condition that should be treated promptly upon discovery, but for most cases, lifestyle changes will come first. Especially when stress has contributed to elevated blood pressure, including stress relieving oils like neroli can be an important and effective lifestyle change.

4. BRAIN HEALTH

Such prominent effects on stress indicate some kind of action in the brain. Traditional uses of the blossom include anticonvulsants and anti-seizure treatments, so researchers in 2014 analyzed whether the essential oil itself had any of these actions.

The studies were conducted on mice, so the results are preliminary and don't indicate any kind of replacement for current treatments. However, they were able to trace and replicate anticonvulsant activity in neroli essential oil.

Until we know more about how this might impact future approaches in medicine, we can acknowledge the overall protective effect that neroli seems to have for brain and mental health and wellness.

Applications: Diffusion, inclusion in calming blends.

5. GUT HEALTH

A few years age, eight essential oils for stomach health were analyzed for their effects on gut dysbiosis (bacterial imbalance). The findings included caraway, lavender, and neroli as stand-out examples of essential oils that would harmonize well with the beneficial bacteria in the body. These studies demonstrate the excellent ability that these essential oils have to affect detrimental bacteria while remaining gentle on the body and beneficial strains. In addition, neroli is superbly helpful for a number of health conditions.

Applications: Massage oil, topical ointment.

Calming Oils to Blend with Neroli

The best application for neroli seems to be diffusion or inhalation. It's a light, floral fragrance that blends well in many preparations. Try it with other relaxing, focus, or anti-anxiety oils to create a calming, enjoyable fragrance:

- Lavender
- Orange
- Geranium
- Chamomile
- Rose
- Clary Sage

Choose 2-4 oils and blend 1-2 drops of each into a carrier oil, or one drop each into an ultrasonic diffuser or personal inhaler.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 19 Palo Santo

Palo santo essential oil benefits have have a long history as a central component of rituals and purifying ceremonies, dating back to the time of the Incan Empire in South America. Still commonly used in traditional medicine in modern-day Peru, it is said to relax the mind and, when used in incense, for "treatment of evil wind or colds." These uses gave rise to the name "palo santo," which literally means "holy stick."

The aroma of palo santo essential oil is earthy, warm, and woody. It blends well with other resin oils, such as frankincense and myrrh, and with the citrus oils. It is a venerable essential oil steeped in tradition and ancient health practices supported by modern research. Try it today for its many soothing, clarifying, and cleansing benefits!

Derived from the Bursera graveolens tree, palo santo essential oil is a relative to frankincense and myrrh. This aromatic tree is found in Mexico and along the Pacific South American coastline.

To ensure the highest quality standard, the wood for this particular oil has to be harvested properly. The female tree is the most commonly used source – these trees are golden yellow and far denser than their male counterparts.

The harvesting process is fascinating. Only dead wood is used for the essential oil and that wood must remain decaying on the forest floor for 4 to 10 years! This allows the resin of the tree to fully develop a pure and potent version of palo santo oil, which is obtained by steam distillation of the resulting wood chips. When harvested, every part of the wood is used and harvesters are careful not to harm the surrounding tree parts or fallen branches.

Is Palo Santo Endangered?

There is plenty of confusion on this topic because of the name "palo santo," which can refer to the essential oil of two separate trees. The species *Bulnesia sarmientoi* is the type that is endangered, although laws have been enacted over a decade ago to try and halt deforestation of this plant. The oil from this tree has been used commercially.

For home use, palo santo essential oil should be derived from the *Bursera graveolens* tree, which is technically not endangered. However, according to the New York Times, the country controlling the region gets to determine whether or not a plant is endangered, as Peru did for *B. graveolens* back in 2005.

Therefore, you may see this tree or oil listed as "endangered" in certain regions. Then in December 2019, the International Union for Conservation of Nature declared *B. graveolens's* conservation status "of least concern."

Confusing? Yep...

It basically comes down to making sure you are buying the right form of palo santo essential oil. Don't just trust the label! Adriana Ayales, a rainforest herbalist, says, "Look for companies where they themselves have gone to the area where the trees are from, met the farmers, know their names, know the area and regularly return to the area."

As always, it's important to know you are buying from ethical brands. They should be transparent and provide the details of their sourcing and processes. Learn how to choose the best essential oil brand.

Palo Santo Essential Oil Components

The major constituents of palo santo essential oil include the following:

- Limonene (largest constituent, up to over 80% of oil)
- Alpha-Terpineol
- Menthoruan
- Carvone
- Germacrene D

Because limonene is such a potent antioxidant with the ability to fight disease, damage, bacteria, fungus, and more, palo santo essential oil is an excellent choice if you want to stay healthy and fit.

10 Benefits of Palo Santo Essential Oil

Palo santo essential oil has a long history, true, but there are also numerous applications that modern science supports. Most of these studies were done on cell cultures but the implications for the benefits of this oil are profound.

1. FIGHTS CANCER

A 2012 study of palo santo essential oil demonstrated that this oil:

- Inhibited the growth of a certain line of breast cancer tumors
- The elements of palo santo oil have been shown to kill cells from leukemia, ovarian cancer, and breast carcinoma.
- In other research, the extract of palo santo has been shown to have "important" activity inhibiting and killing cancer cells in malignant tumors.
- And a study out of Japan showed that palo santo was especially effective in inhibiting lung, breast, and colon cancer cells.

Additionally, palo santo contains a high concentration of limonene, which is known for its anti-inflammatory and cancer-fighting properties. Research has also shown that the stems of the *Bursera graveolens* tree can be toxic to tumorous tissue cells.

While much more research needs to be done on the potential of essential oils to inhibit cancer and tumor cells, palo santo holds promise for the development of future treatments to combat this disease.

Application: Talk to your cancer support team about adding palo santo essential oil to your treatment regimen.

2. SOOTHES INFLAMMATION

Palo santo has been traditionally used for muscle, bone, and joint pain relief as well as a medicine for headaches. Laboratory research shows that *Bursera* graveolens extract inhibits inflammation, however more rigorous studies are needed.

This may be due to its high concentration of limonene, a powerful constituent with anti-inflammatory capabilities, as well as a-terpineol. That said, the long history of this oil in relieving pain makes it an indispensable part of your natural medicine cabinet.

Application: Make a 5% dilution and apply to achy joints by mixing 30 drops of palo santo with 1 ounce of your favorite carrier oil.

3. KILLS MICROBES

According to the Tisserand Institute, alpha-terpineol has antiviral, antibacterial, anti-biofilm, and anti-inflammatory properties. As a major constituent of palo santo oil, that makes it very useful for cleaning and disinfecting purposes.

Additionally, it has shown "strong antimicrobial activity" when tested on several microorganisms, including E. coli and Candida albicans!

No wonder it has been used in traditional cultures in "smudging" or ritual cleansing. While we don't believe that burning plants can clear your air, we do think that diffusing palo santo can help clear your air from harmful microbes!

Application: Add 10 drops of palo santo per one once of your homemade cleaning solutions.

4. USEFUL ANTIOXIDANT

While palo santo is not the most potent antioxidant available, its prowess has been shown to be powerful enough to justify its long history in traditional medicine. Antioxidants help us to fight the free radicals that cause aging and disease. Once again, limonene plays a role here since it is an important antioxidant as are the other main constituents of this oil.

Application: Diffuse 2 drops palo santo with 2 drops frankincense and 2 drops orange oil.

5. FIGHT RESPIRATORY ISSUES & COMMON COLD

Palo santo has been commonly used in traditional Peruvian culture to address cough, flu, bronchitis and cold. Even today, the locals ingest one drop of palo santo essential oil in warm water to boost their immunity.

While there is no peer-reviewed data behind this use of palo santo essential oil, try it with diffusion before attempting to ingest it to ensure that you can tolerate it well.

Application: Properly dilute 2-3 drop of palo santo into a carrier oil in a vegetarian capsule. See our article on ingesting essential oils for details on how to make an essential oil gel capsule.

6. RELAXING

While there are no studies on the benefits of palo santo oil on stress and relaxation, it does have a reputation for improving mental clarity and boosting mood, and is used as a tool for relaxation, reducing tension and stress. It's commonly diffused to support meditation. No doubt its antioxidant powers reinforce these abilities!

Application: Add 3 drops each amounts of palo santo and bergamot essential oils to your diffuser for an uplifting boost to your day!

7. INSECT REPELLENT

The resin of Bursera graveolens has been traditionally used as a mosquito repellent thanks to its aroma. Today, data from a 2019 study from the University of Cartagena indicates that palo santo essential oil is effective as a safer "alternative to new natural repellents and biocides."

Palo santo has also been successfully used to reduce tick populations so this is a handy tool for your outdoor and indoor pest control solutions!

Application: Add 3-5 drops of palo santo in our Homemade Bug Repellent recipe.

8. DEODORIZER

The composition of palo santo essential oil makes it useful as a powerful deodorizer. This may be due to the fact that it is a resin oil or because of its high limonene content. Either way, you can use this peppery aroma to remove unpleasant smells from your laundry, washing machine, or gym gear!

Application: In a 2 oz. spray bottle, add 5 drops of 2 different citrus oils plus 5 drops of palo santo oil to ½ oz. 190 proof alcohol. Fill the rest with distilled water. Use as a a spray to detox your smelly gym gear!

9. USEFUL FOR GARDENING

It's becoming more popular in this day and age for families to create their own food-bearing organic gardens. If you're looking for good alternatives to toxic pest control for your garden, data shows that palo santo essential oil is active against certain destructive plant-eating pests such as aphids.

Palo santo oil has also shown promise as a tool for sustainable agriculture with composting abilities that include stabilizing organic matter and organic vitamin C in the plants. If you are interested in learning more about growing your own plants and foods, sign up for Mama Z's Organic Gardening course.

Application: Add 5-10 drops to your natural weed killer recipes like our Homemade Weed Killer.

10. SCENTED SOAPS

Because of its pleasant and rich aroma, palo santo essential oil is frequently used in commercial production of soaps and perfumes. It has a "rose and violet fragrance" that makes it a popular choice.

Why worry about buying perfume or soaps laden with toxic chemicals when you can use palo santo oil to create your own safe version right at home? You can also create homemade gifts for your friends and family on birthdays and holidays with this edifying scent!

Application: Add palo santo to a complementary blend of citrus oils in our Homemade Liquid Hand Soap Recipe.

Palo Santo Essential Oil & Safety

It's wise to take caution when using these oils on the skin however, with the proper dilution, you should be safe. Tisserand and Young recommend a dermal maximum of 3.4%. We have found that going up to 5% is OK for acute pain and joint issues, as long as you're not applying more than once per day.

Remember these common-sense tips for using palo santo essential oil:

- At present, there is no clinically safe level of dosage for children, but this
 doesn't mean that you cannot give it to them. You should start off small
 with "culinary doses," that is, no more than 1 drop per dish. Palo santo
 essential oil is safe to use in your diffuser and topical applications if you
 keep it to 1% or less for children.
- Don't consume straight out of the bottle, and don't drink with water (remember oil and water do not mix).

- Tisserand and Young write that the maximum adult oral dose is about 3 drops per day. You can consume safely by adding 1 drop of palo santo essential oil into a veggie gel capsule and fill it with olive oil. Consume with food.
- Do not stay on palo santo oil for an extended length of time. Ideally, you should rotate your oils every few weeks.
- Stop using it immediately if you experience any side effects.
- Use with caution if you take medications. Check with your healthcare provider first.

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 20 Patchouli

The many patchouli essential oil benefits have been heralded by millions of people across the globe for centuries. Although part of the mint family, the deep musky aroma makes for a complex addition to some of the provocative blends.

History & Chemical Components

Patchouli essential oil has a rich aroma that has been associated with the so-called hippie culture here in the U.S. since the 1960s. Its roots run deep in the culture and traditional medicinal practices of the people of India. In the early 1800s, patchouli-scented fabrics made their way to Europe from there, sparking great interest.

Women of high society during that period wore imported shawls made of cashmere that was packed with the leaves of the patchouli plant to protect against damage by moths. Soon, inhaling patchouli became a popular trend and was considered an elegant indulgence in Victorian high society.

Today, the distinctive scent of patchouli has been called "indispensable" to the fragrance industry as the basis of many perfumes and cosmetics. Most patchouli oil available today comes from Indonesia. It is commonly derived through either steam distillation or hydrodistillation of the leaves of the Pogostemo cablin plant that hails from the mint family.

In the 60s, patchouli became associated with the "hippie trail." American and European college-aged tourists would hitchhike or bike this route from Western Europe through the middle east into India, Nepal, and Southeast Asia. Many hikers brought patchouli incense back home. Although the trail was abandoned largely in the 1970s, the connection between patchouli and so-called "hippie culture" remains to this day.

The major constituents of patchouli essential oil include the following:

- patchouli alcohol
- α-guaiene
- β-guaiene

- caryophyllene
- eicosene

Of these, the primary constituent is patchouli alcohol, a sesquiterpene that makes up about 30% of the oil only found in patchouli. That could be why this scent is so highly desired in the perfume industry!

Now that we know some of the history and traditions of this sought-after scent, let's learn some practical benefits and uses for patchouli essential oil in your home.

9 Benefits Of Patchouli Essential Oil

1. INFLUENZA

Influenza can be a harmful and even devastating virus, especially if you have a compromised immune system. While we recommend taking steps with your doctor to improve your health and immunity, you can still catch viruses like influenza A.

Fortunately, research has been done on the power of patchouli oil on this particular virus. A review of the effect of essential oils in stemming the spread of influenza A from the Tisserand Institute shows that:

- Patchouli oil prevented "influenza A virus-induced lung inflammation and damage" in mice who ingested it, and
- It also "blocks the spread of influenza."

We are not suggesting that patchouli oil cures or prevents the flu but it can provide much-needed support while fighting infection.

Application: Diffuse 2-3 drops of patchouli oil with lavender oil while sleeping when you are sick with the flu or other respiratory issues.

2. OBESITY

Obesity is a dangerous condition that has been on the rise in the U.S. for years, contributing to health challenges like high blood pressure, heart disease, and type 2 diabetes. While it's important to eat right and exercise, essential oils can support your weight loss journey.

A just-published research study shows that patchouli oil may help. Rats who were fed a high-fat diet and doses of patchouli oil had less fat accumulation and lower triglycerides than those on the same diet who did not consume the oil.

Application: Add patchouli essential oil to our essential oil gel capsule recipe to support your weight loss efforts!

3. ANXIETY, MOOD, AND MENTAL CLARITY

Modern research supports patchouli oil's traditional uses for anxiety, stress, mental clarity, and more. A 2015 review of the literature available showed that it had soothing powers on the body and was found to boost mood and mental clarity in dementia patients. It's also calming and uplifting especially when blended with other oils.

Application: When you need to focus, diffuse a blend of equal amounts of patchouli, jasmine, ylang-ylang, sandalwood, rose, and vetiver oils.

4. ANTIMICROBIAL

While not all bacteria are unhealthy, those that are can cause infections. Patchouli essential oil might be just the ticket for fighting those harmful strains. A 2010 study from India showed that extracts of patchouli were effective at inhibiting several infectious strains, including two from the Staph family and one from the Salmonella family.

Patchouli oil has also been shown to be effective against several other microbes including harmful fungi. This uplifting scent can be a powerful tool in your cleaning regimen to protect from dangerous microbes!

Application: Add 5 drops of patchouli oil to your DIY surface cleaning recipes.

5. PAIN AND SWELLING

Patchouli oil may also help relieve pain, thanks to its anti-inflammatory properties. Studies have shown that it relieved swelling and reduced pain in mice. Its main constituent, patchouli alcohol, has also been evaluated for its anti-inflammatory effects as well, leading researchers to suggest that it may "be a potential chemical agent for the treatment of inflammatory diseases."

While more research needs to be done, this potent oil can go a long way to helping ease your pain.

Application: Add 5-10 drops to our natural pain relief massage oil recipe.

6. INFLAMMATORY BOWEL DISEASE

Can patchouli oil help relieve the symptoms of inflammatory bowel disease? We've already seen that it may ease pain caused by inflammation and also has antimicrobial properties. In a 2017 study, rats that were given patchouli oil had some symptoms of colitis mitigated compared to those who did not receive the oil.

While this is a relatively limited amount of data, people suffering from inflammatory diseases can benefit from applying patchouli oil.

Application: Create a capsule as shown in our essential oil gel capsule recipe above for the symptoms of IBD.

7. ANTI-AGING

It should be no surprise that patchouli oil's antioxidant abilities can help protect you against oxidative stress and outside attacks on your health, such as exposure to the sun's rays. Its power to protect the skin from UV radiation was tested by scientists in China. They exposed rats to UV radiation and then treated some with patchouli oil. The group that received the oil treatments had increased collagen and smoother skin than the control group.

This makes patchouli oil an ideal addition for your skincare and sun care regimens!

Application: Dilute at a 1% solution with a carrier oil that is best suited for your skin type. Test on your arm before applying to your face.

8. INSECTICIDE AND BUG REPELLENT

Research has proven that patchouli is effective on different common pests depending on how it is applied, including:

- Insecticide for house flies
- Repellent for urban ants and mosquitoes
- Both a repellent and insecticide for termites

The sharp scent of this oil is either deadly or unattractive for pests, making it a safer alternative to chemical-laden pesticides.

Application: Add 2-3 drops of patchouli oil to your bug repellent recipes.

9. GARDENING AIDE

When scientists at Contech Enterprises in Canada studied the effect of 17 different essential oils in eliminating plant-eating moths, patchouli oil was a clear top winner in targeting two common pests. Integrating essential oil into your gardening practices is a wise choice.

Learn more at our new class, *Organic Gardening Made Easy With Mama Z* today!

Application: Add 3 drops of patchouli oil to your favorite homemade weed killer recipes.

Patchouli Essential Oil & Safety

Patchouli essential oil is safe to consume according to the FDA, "in conjunction with flavors."

According to the *Tisserand Institute*, "Heavier essential oils, such as Vetiver, Sandalwood and Patchouli, are the slowest to oxidize and may not need refrigeration," meaning it will have a longer shelf life than those that oxidize easily like citrus oils.

They also state that there is no known risk of skin sensitization, or adult oral or dermal dose limits, however, it may inhibit blood clotting. If you take blood-thinning medication, or recently had major surgery or suffer from bleeding disorders or peptic ulcers, avoid internal ingestion and use with care, consulting with your physician first.

It's wise to take caution when using these oils on the skin. With proper dilution, you should be safe.

Use these common-sense tips when working with patchouli essential oil:

- At present, there is no clinically safe level of dosage for children, but this doesn't mean that you cannot use it around them. Water diffusion should be perfectly fine and topical application under 1% dilution for children under 10.
- Don't consume straight out of the bottle, and don't drink with water (remember oil and water do not mix).

- You can consume safely by adding 2-3 drops of patchouli essential oil into a veggie gel capsule and fill it with olive oil. Consume with food.
- Do not stay on patchouli oil for an extended length of time. Ideally, you should rotate your oils every few weeks.
- Stop using it immediately if you experience any side effects.
- Use with caution if you take medications. Check with your healthcare provider first.

Patchouli essential oil blends well with other resins such as frankincense, but it also works well with floral oils such as jasmine and rose.

From its traditional origins in India to its modern association with health and wellness, this aromatic fragrance brings to mind peace and a calming effect. Patchouli oil is a perfect addition to your essential oil collection!

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 21 Turmeric

Turmeric essential oil benefits are profound. This ancient spice has been used for thousands of years for healing and we are literally just now discovering the wide spectrum of health benefits of this amazing oil.

One Plant, Two Extraction Methods

Turmeric spice has long been used in Eastern cooking and has historically played a prominent role in Ayurveda, Chinese medicine, and traditional home treatments. As millions of consumers use it for everything from pain to mental health (it is being touted as the most versatile natural remedy in the world next to CBD oil), the demand for *stronger*, more *medicinal* grades of turmeric has reached the marketplace. *Enter turmeric essential oil and CO2 extract*.

The most potent and bioavailable (i.e. ability of the body to absorb and assimilate chemicals and nutrients) forms of turmeric available in the world, as the demand for *turmeric CO2 extract* and *essential oil* increases, the need for researchers to substantiate their potential therapeutic efficacy has reached an all-time high.

The *proven* benefits turmeric can have on your body have been heralded by experts across the globe as "the most effective nutritional supplement in existence." Thousands upon thousands of research studies exist evaluating the therapeutic efficacy of turmeric (and its primary healing component *curcumin* – the orange/yellow compound that colors mustard and curry) showing it has potent anti-inflammatory, anti-cancer, and immune-stimulating properties to name a few. It benefits your brain, heart, immune system and everything in between!

Though, not all of the research on turmeric and curcumin is applicable to the essential oil, and it all starts with how the *plant* has been extracted There are several processes used to extract essential oils from plants, and turmeric is one of a many plants that will derive very different products, depending on the process chosen.

TURMERIC ESSENTIAL OIL

Derived from the *Curcuma longa* plant, which comes from the *Zingiberaceae* family – the same as ginger, turmeric essential oil can be extracted is through traditional steam distillation, which loosens up the essential oils from the plant along with plant components. This is commonly done with the turmeric plant's rhizome, the underground stem of the plant that sends out roots and shoots.

It is important to note the *curcumin* has not been reported in turmeric essential as it has with oleoresin & CO2 extracts.

TURMERIC CO2 EXTRACT

Another extraction method requires a solvent to "dissolve" the different compounds and components of the plant. CO2 extraction uses carbon dioxide as a nontoxic solvent to extract the oil. The CO2 completely returns to a gaseous state, leaving no traces behind, unlike other, less eco-friendly solvents.

The end result? Two very different products! The CO2 extraction contains curcumin as one of its major components, a widely researched compound with a long list of health benefits and also contains turmerones. The steam distilled essential oil, on the other hand, does not contain curcumin. Instead, turmerones are its major components and are the cause of the distinctive spicy aroma of many turmeric products.

It's important to know which version you are purchasing, however, the CO2 extract is what most companies sell under the generic term "turmeric essential oil." If you are ever in doubt, turmeric oil that is yellow in color comes from the CO2 extract – curcumin gives both the spice and the oil its bright pigmentation!

Turmeric Essential Oil Compounds

As mentioned above, turmeric essential oil is predominantly derived from the rhizome and roots of the turmeric plant, although sometimes its leaves flowers are used as well.

The major constituents of this essential oil include the following:

- Turmerone
- ar-Turmerone

- Zingiberene
- Alpha-Phellandrene
- Beta-Sesquiphellandrene
- ar-Curcumene

ar-Turmerone, has been shown to have powerful cardiovascular effects (antiplatelet aggregation and hypoglycemic activity), as well as antimutagenic properties and anti-carcinogenic properties.

Some derivations also contain cineole, a compound found in ginger, helichrysum, rosemary, tea tree, and peppermint oils.

However, it's important to note that these are just a handful of the constituents in turmeric essential oil. Turmeric oils and extractions have been found to contain up to over 50 different components!

There is no doubt that the synergy between all these compounds contributes to its awesome healing potential.

10 Turmeric Essential Oil Uses

Turmeric oil is safe to be used via inhalation, topically and ingestion if dosed and diluted properly. Try some of the recommendations below and be sure to consult with your physician if you're being treated for a medical condition or are currently taking pharmaceuticals.

1. CANCER-FIGHTING PROPERTIES

One of the most promising areas of research for turmeric oil is in the field of cancer prevention and management. Traditional treatments for cancer can have very damaging side effects to your overall health that make the process difficult and exhausting.

However, adding a holistic component, such as essential oils, to your treatment plan may ease or reduce symptoms, and can alleviate the stress of your healing journey.

Compounds in turmeric oil have been shown to impact cancer. Current laboratory research performed on cells or on animals demonstrate the following benefits of turmeric oil for cancer:

- Curcumin and turmerones inhibited the spread of breast cancer cells.
- Additionally, the turmerones in this study were shown to have "immunostimulating effects," that is, they kickstarted the immune system into action.
- Turmeric oil killed pancreatic cancer cells.
- Ar-turmeric, one of the turmerone compounds, induced cell death in two separate human leukemia cell lines. Turmeric oil has been tested on other leukemia cell lines as well with similar results.
- Turmeric essential oil demonstrated anticarcinogenic effects in a 2014 study. It also displayed antimutagenic effects, meaning it might help prevent cells from mutating into a more serious problem.

These demonstrate the ancient healing potential of this turmeric essential oil for treating cancer and relieving treatment symptoms.

Application: Add 1-2 drops of turmeric essential oil to your curries, soups, stir-frys, stews, and other entrees to enjoy a safe, culinary dose. Be sure to discuss different methods of adding this oil to your treatment plan with your doctor.

2. PROTECTS BRAIN CELLS

Neurological diseases impact over 100 million Americans every year and costs are expected to skyrocket to \$600 million by 2030 for dementia and stroke. The potent medications that are used to treat these diseases are difficult to manage if a patient has multiple conditions and some have devastating side effects. And for some conditions, like Alzheimer's, there is currently no cure available at all.

Fortunately, research is looking to turmeric essential oil for its promise in healing and preventing neurological disorders. In the lab, one study of turmerone suggested that inhaling it could help regenerate stem cells in the brain. This is exciting news! And scientists from China and the U.S. also demonstrated that this compound may reduce neuroinflammation and the memory impairment it can cause.

Researchers have also been examining the impact of turmeric extracts on Alzheimer's disease. Current science suggests that plaque buildup on the brain

caused by amino acids likely contributes to this disease. Turmeric oil extracts were shown to inhibit the buildup of these amino acids.

More research is needed, but the neuroprotective qualities of turmeric essential oil on the brain make it an important tool that may be able to help you stave off brain deterioration and damage caused by neurodegenerative diseases – or even prevent them!

Application: Use a personal aromatherapy inhaler with 10 drops turmeric, 5 drops frankincense and 5 drops lime essential oil.

3. FIGHTS PAIN AND INFLAMMATION

A little pain is not always a bad thing. Inflammation causes pain but it's part of your body's normal, healing response to injury and other harmful agents. That said, prolonged inflammation can lead to chronic pain, disorders, and even serious diseases. When inflammation doesn't heal, turmeric essential oil can be a powerful ally to alleviate your pain.

Arthritis is one such disease. It has numerous causes and encompasses over a hundred diseases but they all have one thing in common: inflammation that causes pain. This occurs in joints and bones as well as the tissues that surround them. The most common forms are:

- Osteoarthritis, which is caused by aging or physical wear and tear on the bones over time, and
- Rheumatoid arthritis, an autoimmune disease.

While the root cause of your inflammation should be addressed with your healthcare provider, turmeric essential oil may be able to ease your symptoms.

Research from 2011 shows that turmerones are more effective in reducing certain types of inflammation in cells while curcumin inhibits other types of inflammation. Another study from 2006 demonstrated that curcumin from turmeric extract prevented experiential rheumatoid arthritis in mice.

It's also been demonstrated that high doses of turmeric essential oil had an antiinflammatory effect on joints when tested on rats. This suggests that this oil may be helpful for arthritis, however, more research is needed.

However, for continued pain, it can't hurt to add turmeric essential oil to your routine to get some much-needed relief!

Application: Make a homemade pain relief cream by adding 12 drops of turmeric to 1 ounce of Mama Z's DIY Salve Base & Lotion Bar Recipe.

4. POWERFUL ANTIOXIDANT CAPABILITIES

Over time, our bodies are exposed to a host of natural – and unnatural – compounds, chemicals, and toxins. These are called free radicals, and they increase oxidative stress. This can damage different cells that are overexposed to it, leading to disease and the ravages of aging.

Antioxidants, on the other hand, are chemicals that help prevent free radicals from causing too much damage. These compounds, found in many essential oils, serve many functions and are necessary for your body's optimal well-being.

Turmeric is an oil that is widely known for its antioxidant abilities. In lab studies, turmeric oil appeared to remove free radicals that cause oxidative stress. It was also shown to reduce certain types of oxidative stress that are responsible for causing high cholesterol. A healthy diet and regimen full of antioxidants is a recipe for anti-aging and good health!

Application: Take advantage of the antioxidants in turmeric oil by consuming 2-3 drops of turmeric in a gel capsule filled with olive oil once daily during cold/flu season. Be sure to discuss adding this oil to your treatment plan if you're currently being treated for a disease by a doctor.

5. ANTIMICROBIAL BENEFITS - FUNGUS AND BACTERIA

Turmeric essential oil is also useful for killing fungal and bacterial pathogens. Candida albicans is a type of fungal yeast infection that is very difficult to fight – ask anyone who's dealt with it!

Candida overgrowth wreaks havoc in the gastrointestinal tract, causing an imbalance in bacteria in the gut. It's been linked to chronic fatigue, sinus allergies, bloating, constipation, eczema, and more! It is particularly harmful to people who are immunocompromised and is a common infection for those in treatment for cancer or HIV.

Researchers tested the impact of turmeric essential oil on candida cells and found that it was *twice* as *powerful* as the commonly prescribed antifungal medication, Nystatin, to combat this fungus. Other studies have shown that it can combat other forms of bacteria, making this an effective and useful oil for both clearing the gut and adding to your homemade cleaning formulas!

Turmeric essential oil was also one of four oils tested for its efficacy in combating the *P. Gingivalis* bacteria, which primarily lives in the oral cavity and may cause certain periodontal diseases. All the oils tested were effective in combating this bacteria, including turmeric.

If you are battling candida overgrowth, a clean eating regimen along with adding turmeric oil to your culinary dishes can help. Check out our book, *The Essential Oil Diet Book*, to discover a sustainable way to enjoy food while living your healthiest life ever!

Application: Try adding a drop of turmeric to your oil pulling routine if you are fighting gingivitis or to promote oral health.

6. USE TURMERIC OIL TO HELP MANAGE OR PREVENT DIABETES

Diabetes requires a change in eating habits, however, using essential oils for diabetes can be a healthy part of combating – or preventing – this disease. In the lab, food scientists studied turmeric essential oil and found that it inhibited important enzymes that are linked to the development of type 2 diabetes.

Animal research from 2006 also showed that the compounds in both turmeric essential oil and the CO2 extract may be able to reduce blood sugars in rats, particularly curcumin. Additionally, turmeric oil without curcumin and turmeric oleoresin inhibited abdominal fat in the subjects. This does not replace the benefits of a healthy diet low in sugar along with regular exercise but it can assist you in healing your body.

Application: Add 1-2 drops of turmeric essential oil to your favorite dishes to enjoy a safe, culinary dose. Be sure to discuss different methods of adding this oil to your treatment plan with your doctor.

7. POTENTIAL ANTI-SEIZURE APPLICATIONS

According to the CDC, epilepsy is common and it's more frequently seen in children than adults. All seizure disorders are life-threatening and are usually treated with medication. Unfortunately, finding the right medication and dosage is tricky, and side effects can have a heavy impact on patients.

In fact, some 30% of epilepsy patients don't respond to treatment. That is why in 2013, scientists researched one of the components of turmeric oil, ar-turmerone, as a potential future drug candidate to treat epilepsy by testing it on zebrafish and mice embryos. Their results indicate that ar-turmerone is a safe candidate as a drug for some forms of epilepsy.

Hopefully, research will develop proven solutions for epilepsy with turmeric oil but for now, you can use this amazing elixir in your home to discover its benefits.

Application: Enjoy a diffuser blend with 2 drops each of turmeric, lavender and Roman chamomile Be sure to consult with your physican and discontinue use immediately if any adverse reactions occur.

8. AIDE FOR GASTROINTESTINAL HEALTH

Turmeric essential oil might also have protective benefits for digestive health. A 2014 study compared turmeric and ginger essential oils for inhibiting ulcers in rats. The animals were given different doses of each oil in different groups. Both oils appeared to inhibit ulcers by over 80%! They also reduced lesions and stomach injuries.

Turmeric root extract has been shown to improve the symptoms of irritable bowel syndrome (IBS). Scientists randomly tested 207 otherwise healthy adults before and after treatment with the extract and surveyed the subjects. About two-thirds of the subjects reported improvements in symptoms after the treatment, including pain and discomfort demonstrating that turmeric oil may be beneficial in addressing IBS.

Application: Consume 2-3 drops of turmeric in a gel capsule filled with olive oil once daily for 3-4 weeks and monitor symptoms. Be sure to discuss adding this oil to your treatment plan if you're currently being treated for a disease by a doctor.

9. SAFE FOR BACKYARD GARDENING

Is turmeric essential oil a safe tool to use in your backyard garden? Research shows that you can! Food scientists in China studied the benefits of turmeric essential oil in combating *Aspergillus flavus*, a fungus known for harming maize, grains, and legumes, and found it to be both effective and eco-friendly.

Turmeric essential oil, along with ginger oil, was also found to be to useful as an herbicide on maize plants. Turmeric was most effective after the weeds started to emerge and caused no damage to the crops. Learn more about organic backyard gardening from Mama Z!

Application: Add 20-30 drops of turmeric oil to 16 oz of your natural weed killer recipes.

10. BUG REPELLENT

Many essential oils have been studied for their effectiveness as a bug repellant. Turmeric essential oil and CO2 extract are both safer choices for bug repellent than most brand name pesticides, which commonly contain malathion, DEET, and permethrin. All these chemicals are linked to a variety of health concerns and you'd be wise to avoid them.

In fact, essential oils can work even better than these harmful products, including turmeric! Research showed that it was more effective than DEET for reducing mosquito bites and killing mosquito larvae. Essential oils are an excellent choice to keep your family safe from warm-weather outdoor pests.

Application: Add 10 drops of turmeric oil per 1 ounce of your favorite DIY bug repellent recipes.

Turmeric Oil and Safety

Yes, as seen in the recommendations above, turmeric oil is safe to consume.

One of the peer-reviewed studies done on inflammation and arthritis raised concerns about the toxicity of ingesting turmeric essential oil because it proved fatal to mice that were given very high doses. However, this conflicts with another animal study performed in 2013 that showed no toxicity from the oil.

In earlier research from India, nine healthy volunteers were given 0.6ml of turmeric essential oil three times a day for one month and 1ml/day divided into 3 doses for the following two months. While two subjects had a mild reaction, this dose of turmeric oil had no effect on weight, blood pressure, or symptoms of the subjects for up to 12 weeks, and no additional toxicity at three months. This size of the study, however, is far too small to be conclusive.

Turmeric essential oil has powerful benefits but there are some common-sense precautions you should take when using this essential oil, including:

- At present, there is no clinically safe level of dosage for children, but this doesn't mean that you cannot give it to them. Start off small and in "culinary doses" – no more than 1 drop per dish. Also safe to use in your diffuser and topical applications (1% or less for children).
- Don't consume straight out of the bottle, and don't drink with water (remember oil and water do not mix).

- Try adding in some turmeric essential oil in your food (culinary doses), replace 1 teaspoon turmeric spice with 1-2 drops of essential oils in your curries and favorite recipes.
- Consume safely by adding 2-3 drops of turmeric essential oil into a veggie gel capsule, and fill capsule with olive oil. Consume with food.
- Do not stay on turmeric oil for an extended length of time. Ideally, you should rotate your oils every few weeks.
- Stop using it immediately if you experience any side effects.
- Use with caution if you take medications, especially aspirin, warfarin, or other blood thinners. Turmeric oil can also interact with anti-inflammatory drugs. Check with your healthcare provider first.

Turmeric essential oil abounds in health and wellness applications, and in keeping your home and body fungus-free. It blends well with citrus oils, as well as ginger essential oil – not surprising since they share the same family!

With such a great number of wonderful healing properties, don't miss out on this lesser-known oil. It's a great addition to your home, even if you regularly cook with turmeric spice!

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

CHAPTER 22 Ylang Ylang

If frankincense is the *King of Essential Oils*, then ylang ylang essential oil benefits make this his Queen! Simply put, the healing efficacy of this potent remedy is absolutely remarkable and the research supporting therapeutic claims is impressive. Ylang ylang oil is widely known and you will commonly find it in food, body care and cleaning products.

Grades of Ylang Ylang Essential Oil

Scientifically referred to as *Cananga odorata*, this evergreen produces the wonderfully fragrant blossoms that we distill to get the essential oil. Also known as the "perfume tree," it is native to tropical Asia – Philippines, Malaysia, Indonesia, and islands of Indian Ocean.

Although steam distilled, the process required to extract ylang ylang oil is interestingly similar to pressing olives for oil in that the essential oil is collected at various stages of the process and graded. Through a method known as *fractional distillation* (the separation of volatile components of different boiling points in a mixture by the gradual increase of temperature and the separate collection of each component) each successive collection of oil produces varying grades containing a wide array of chemical constituents. This is something of an anomaly in essential oil manufacturing, therefore, ylang ylang essential oil is sold in various grades: Extra, 1, 2, 3, Complete.

- Extra Grade: Regarded by many as containing the finest notes from the distillation process, the first collection after an hour or two of steam distillation. Contains roughly 30 different chemical constituents, it is usually the most expensive.
- Grade I III: As the steam distillation process continues, essential oil
 collections are taken every few hours, which make up less potent (and
 expensive) oils in descending order: Grade I, then II and finally III.
- Complete: Represents the whole distillate encompassing all the collections from the entire distillation process. This synergy oil offers maximum fragrance potency.

7 Ylang Ylang Essential Oil Benefits

Ylang ylang has had many uses in traditional medicine ranging from a skin tonic to help relieve insect bite irritation to treating more serious health concerns like malaria, asthma, gout, and digestive issues. Here are 7 that stand out:

1. SOOTHES INFLAMMATION

This is a big one.

Inflammation is arguably one of the most destructive processes that can destroy your health known today, and nonsteroidal anti-inflammatory drugs (NSAIDs) have been introduced as the answer. Unfortunately, prolonged use has been linked to, "Renal problems, gastrointestinal irritation, and even myocardial infarction and strokes have been reported due to the prolonged use!"

Is there a solution?

Yes!

- Eating an anti-inflammatory diet
- Practicing anti-inflammatory activities like deep breathing and meditation
- Exercising regularly
- Getting sound sleep
- And using natural remedies like essential oils!

In a study evaluating the antioxidant properties of essential oils, ylang ylang interestingly stood out as containing substantial anti-inflammatory properties. Most likely due to its ability to calm the senses and stop anxiety in its tracks, regular topical use is key to enjoying the anti-inflammatory therapeutic benefits as is inhaling the volatile organic compounds via diffusion.

2. DECREASES BLOOD PRESSURE & HEART RATE

In a comprehensive study that appeared in the *Journal of Exercise Rehabilitation* researchers evaluated whether inhaling ylang ylang essential oil in a closed room for 20 minutes is an effective tool to lower blood pressure in healthy men. The results were not only tested using the traditional blood pressure cuff but also tested using a 12-lead EKG. The results show that there was a marked difference between the control group and the test group.

More specifically, the ylang ylang oil group had significant decreases to both their systolic and diastolic blood pressure. Further, the results of the 12-lead EKG showed that the test subjects who inhaled ylang ylang oil experienced a slower heart rate following the application.

If you'd like to take advantage of the heart healthy properties of ylang ylang, but do not enjoy the aroma, don't worry!

Research suggests that you'd be well served by blending ylang ylang oil with others like lavender and lemon. Evidently, mixing with key oils help produce a synergistic effect that produces reduced systolic blood pressure and sympathetic nerve system activity via heart rate variability.

Application: To enjoy heart healthy benefits, add 3 drops ylang ylang, with 2 drops of lavender and lemon into your diffuser and enjoy for at least 30 minutes!

3. CALMING APPLIED TOPICALLY

In addition to the sedative properties mentioned above via inhalation, studies also suggest that topical application is exceptionally calming as well. The results of one 2006 study uncovered that simply massaging a 20% solution of ylang ylang oil in sweet almond oil over the abdomen for 5 minutes resulted in a "significant decrease of blood pressure and a significant increase of skin temperature." A rise in skin temperature, by the way, is an indication of muscle relaxation and, therefore, a decrease in sympathetic nervous system function.

It is interesting to note that the study participants had their abdomen wrapped with plastic film to prevent evaporation. In addition to these physical measures, ylang ylang oil had a direct effect on their feelings and emotions: participants reported more "calm," "relaxed,"

Application: To enjoy the calming effects and to start your day on a stress-free note, mix 2 drops of ylang ylang essential oils with 1 tablespoon of sweet almond oil and massage over abdomen first thing in the morning. Use just enough to cover the skin and store until used completely. Note that while the study above used a higher concentration, we recommend observing the dermal limit of 0.8%.

4. ANTI-DIABETIC

It has been well-established that terpenoid derivatives and flavonoids isolated from the flower buds of *C. odorata* can reduce the effects of aldose reductase; an enzyme that changes glucose to sorbitol. This is important because the accumulation of intracellular sorbitol can lead to diabetes complications such as:

- Cataracts
- Diabetic neuropathy
- Retinopathy
- Nephropathy

Application: Try applying a 0.8% dilution over the abdomen twice a day for 2 weeks and monitor results with physician.

5. INSECT REPELLENT & INSECTICIDAL

Traditionally, ylang ylang has been used to treat bites, repel biting insects (like mosquitos) and can also kill their eggs. One study revealed that a 10% dilution serves as a potent egg control agent against these types of mosquitos: *Aedes aegypti, Anopheles dirus, and Culex quinquefasciatus*.

That is significant as Aedes aegypti is a known carrier for the Zika virus. Hopefully, essential oils will one day be on the forefront of the public health eye as humanity faces emerging diseases spread by insects such as the Zika virus where the best course of action is prevention. Note, the study did not mention that ylang ylang oil could treat the Zika virus, simply that it kills the mosquito eggs that spreads it.

Application: Apply ylang ylang oil to your homemade insect repellant and into your DIY floor cleaner to proactively kill mosquito eggs.

6. AS A SURFACE TREATMENT

Along with oregano, eucalyptus, tea tree oil, cinnamon oil and lemongrass, ylang ylang essential oils has been shown to exhibit potent anti-biofilm activities. Biofilm, the slimy film of bacteria that adheres to slick surfaces is becoming more of a public health concern because of its role in infectious disease and importance in a variety of device-related infections.

Biofilm formation of *Staphylococcus aureus* is also a mechanism of drug resistance. Of 83 essential oils that were evaluated in a 2014 study published in *Applied Microbiology and Biotechnology*, ylang ylang oil was a Top 3 performer, destroying upwards of 80 % of the biofilm produced by *S. aureus*. The implication is that ylang ylang may make a good home-based topical oil for protecting against certain types of bacteria and potentially virus and other microbial organisms.

Application: Add ylang ylang to your favorite homemade dusting spray and all-purpose cleaners!

7. AN APHRODISIAC (OR IS IT?)

Ending on a passionate note, you most likely know of ylang ylang as an aphrodiasiac. But is this true?

Actually not really. Traditionally used to enhance sexual function, inhaling ylang ylang oil is actually proven to reduce the anxiety related to sex. This is not to say that our ancestors were misled in using it for sexual enhancement, but just that there is little modern research to substantiate it.

Either way, using ylang oil can help enhance your sexual experience, so I give it a thumbs up!

Side Effects of Ylang Ylang

When 140 people were evaluated after smelling peppermint and ylang ylang aroma, something interesting was discovered.

- Peppermint was found to enhance memory
- Ylang ylang impaired memory and lengthened processing speed.
- Peppermint increased alertness
- Ylang ylang decreased alertness
- Additionally ylang ylang significantly increased calmness

What does this mean?

Well, the effects are not long-lasting so ylang ylang essential oil uses aren't going to make you stupid. However, I wouldn't want it around me before taking an important exam or when I'm about to speak in public!

SPECIAL PRICE FOR NATURAL LIVING FAMILY READERS!

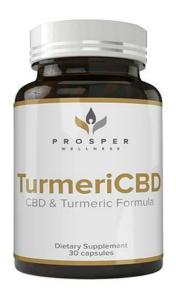
Like essential oils, there are ways to make sure that the CBD that you're using is the real deal, and has the inflammation-soothing properties that you need to enjoy a pain free life. In fact, there are 4 ways to identify junk CBD before you buy. --> Learn More About Identifying Fake CBD Here!

PART THREE Easy Quick-Start Recipes

A Better Pain-Relieving CBD

The industry changes nearly every day, and scientists have discovered a shocking new pain-relieving & inflammation-soothing formula that can yield 7x better results for patients.

It involves combining CBD with two related cannabinoids called CBG and CBC.



- CBG+CBC have been clinically shown to double the results of CBD.
- Plus, there's an ancient spice that can make CBD+CBG 6x more absorbable: turmeric (a natural painkiller and cancer-fighter).

This means that - by adding CBC, CBG, and turmeric - you can get 7x better results than just plain old CBD.

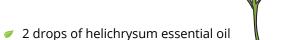
The product is called TurmeriCBD, and with our Natural Living Family "Group Buy" discount, you get an additional 10% off their already discounted price.



BRUISE HEALING ROLL-ON

Ingredients

- 10 ml. glass roller bottle
- 2 drops of cypress essential oil
- 2 drops of lavender essential oil



Arnica infused carrier oil

Instructions

- Add essential oils to roller bottle, then top off with the arnica infused carrier oil. Insert roller ball, close cap, and turn back and forth gently to combine.
- > Roll gently on bruise for relief.

Notes: No matter what allergies you may have, there's a carrier oil that's right for you. You can use any, or a combination of these: Argan, Coconut, Jojoba, Sweet Almond.

BRUISE HEALING ROLL-ON

Ingredients

- 10 ml. glass roller bottle
- 2 drops of cypress essential oil
- 2 drops of lavender essential oil
- 2 drops of helichrysum essential oil
- Arnica infused carrier oil

Instructions

- Add essential oils to roller bottle, then top off with the arnica infused carrier oil. Insert roller ball, close cap, and turn back and forth gently to combine.
- > Roll gently on bruise for relief.

Notes: No matter what allergies you may have, there's a carrier oil that's right for you. You can use any, or a combination of these: Argan, Coconut, Jojoba, Sweet Almond.



HOMEMADE BURN RELIEF CREAM



- ¼ cup olive oil
- ¼ cup coconut oil
- 1 Tbl. turmeric paste
- 8 tsps. of dried comfrey



- Approx 15 drops of essential oils*
- A second essential oil is optional

- Use a double boiler, or make one by setting a glass jar or measuring cup in a medium pot with 1-2 inches of water. Bring the water to boil then turn down to med/med-high.
- Add the olive oil, coconut oil, and beeswax.
- When those are melted together add the turmeric and comfrey and let simmer for 2 hours.
- > Stir occasionally.
- > Remove from heat, strain the mixture, and add essential oils.
- Store in a glass container.
- * Essential oils known to help soothe and heal burns include: helichrysum, lavender, peppermint, Roman chamomile, and tea tree.

BURN-NO-MORE SKIN SOOTHING ROLL-ON

Ingredients

- 10 ml. glass roller bottle
- 3 drops of lavender essential oil
- 2 drops of peppermint essential oil
- 2 drops of tea tree essential oil
- Carrier Oil*



Instructions

- Add your essential oils to the glass roller bottle.
- > Fill the remaining space in the roller bottle with your carrier oil of choice.
- > Shake well.
- > Apply to the burn area when needed for relief.

Notes: *No matter what allergies you may have, there's a carrier oil that's right for you. You can use any, or a combination of these: Avocado, Fractionated Coconut, Grapeseed, Jojoba, Sweet Almond.

BURN-NO-MORE SKIN SOOTHING ROLL-ON

Ingredients

- 10 ml. glass roller bottle
- 3 drops of lavender essential oil
- 2 drops of peppermint essential oil
- 2 drops of tea tree essential oil
- Carrier Oil*



Instructions

- Add your essential oils to the glass roller bottle.
- Fill the remaining space in the roller bottle with your carrier oil of choice.
- > Shake well.
- Apply to the burn area when needed for relief.

Notes: *No matter what allergies you may have, there's a carrier oil that's right for you. You can use any, or a combination of these: Avocado, Fractionated Coconut, Grapeseed, Jojoba, Sweet Almond.

FIBROMYALGIA MASSAGE OIL BLEND

Ingredients

- 3 oz. of Mama Z's oil base
- 2 drops of bergamot essential oil
- 2 drops of camphor essential oil
- 2 drops of lemon essential oil
- 2 drops of peppermint essential oil
- 2 drops of rosemary essential oil
- 4 oz. glass jar

Instructions

- Once you have your Mama Z's oil base ready, mix in the aloe and essential oils until well blended.
- > Store in a glass jar in the refrigerator and use every four hours as needed.
- > Shake before each use as the ingredients may separate.

Notes: *One ounce of oil base = 2 tablespoons

FIBROMYALGIA MASSAGE OIL BLEND

Ingredients

- 3 oz. of Mama Z's oil base
- 2 drops of bergamot essential oil
- 2 drops of camphor essential oil
- 2 drops of lemon essential oil
- 2 drops of peppermint essential oil
- 2 drops of rosemary essential oil
- 4 oz. glass jar

Instructions

- Once you have your Mama Z's oil base ready, mix in the aloe and essential oils until well blended.
- > Store in a glass jar in the refrigerator and use every four hours as needed.
- > Shake before each use as the ingredients may separate.

Notes: *One ounce of oil base = 2 tablespoons





HOMEMADE MAGNESIUM OIL SPRAY

Ingredients

- 1 cup distilled water
- 1 cup magnesium chloride flakes
- 5 drops lavender essential oil (optional)*
 - 5 drops Roman chamomile (optional)*

Instructions

- **)** Boil the water.
- **>** Pour the water over the magnesium flakes in a glass container.
- > Stir until the flakes are dissolved.
- Add essential oils and stir.
- > Does not need to be refrigerated.
- > Can last up to 6 months.
- * NOTE: the essential oils are optional but if you need some muscle-soothing or help relaxing, especially at night, lavender and Roman chamomile make a great addition to this recipe!

HOMEMADE MAGNESIUM OIL SPRAY

Ingredients

- 1 cup distilled water
- 1 cup magnesium chloride flakes
- 5 drops lavender essential oil (optional)*
- 5 drops Roman chamomile (optional)*

- **>** Boil the water.
- **>** Pour the water over the magnesium flakes in a glass container.
- > Stir until the flakes are dissolved.
- > Add essential oils and stir.
- Does not need to be refrigerated.
- > Can last up to 6 months.
- * NOTE: the essential oils are optional but if you need some muscle-soothing or help relaxing, especially at night, lavender and Roman chamomile make a great addition to this recipe!







NATURAL MUSCLE RUB

Ingredients

- 2 oz. Glass Salve Jar
- 2 oz. Mama Z's Salve Base OR Mama Z's Oil Base
- 22 drops White Fir Essential Oil
- 20 drops Wintergreen Essential Oil
- 10 drops Peppermint Essential Oil
- 8 drops Lemongrass Essential Oil OR Roman Chamomile Essential Oil



Mix essential oils into the base of your choice and store finished product in a glass jar.

Note: This is a 4.8% dilution rate so you wouldn't want to use this for a full-body application or massage oil, rather to spot treat specific muscles that were strained and sore. If you find this is too strong for your skin or you prefer a lower dilution simply add an additional ounce of carrier oil.

NATURAL MUSCLE RUB

Ingredients

- 2 oz. Glass Salve Jar
- 2 oz. Mama Z's Salve Base OR Mama Z's Oil Base
- 22 drops White Fir Essential Oil
- 20 drops Wintergreen Essential Oil
- 10 drops Peppermint Essential Oil
- 8 drops Lemongrass Essential Oil OR Roman Chamomile Essential Oil

Instructions

Mix essential oils into the base of your choice and store finished product in a glass jar.

Note: This is a 4.8% dilution rate so you wouldn't want to use this for a full-body application or massage oil, rather to spot treat specific muscles that were strained and sore. If you find this is too strong for your skin or you prefer a lower dilution simply add an additional ounce of carrier oil.





NERVE PAIN RELIEF MASSAGE OIL

Ingredients

- 1 ounce carrier oil (we use Mama Z's Base)
- 3 drops geranium (Pelargonium graveolens)
- 3 drops lavender (Lavandula angustifolia)
- 2 drops bergamot (Citrus aurantium)
- 2 drops eucalyptus oil (Eucalyptus globulus).
- 2 drops tea tree oil (Melaleuca alternifolia)
- Glass bottle

Instructions

- Mix essential oils into lotion bottle.
- Fill bottle with Mama Z's oil base or your carrier oil of choice.
- > Shake well.
- Massage into sore muscles and joints twice daily.

NERVE PAIN RELIEF MASSAGE OIL

Ingredients

- 1 ounce carrier oil (we use Mama Z's Base)
- 3 drops geranium (Pelargonium graveolens)
- 3 drops lavender (Lavandula angustifolia)
- 2 drops bergamot (Citrus aurantium)
- 2 drops eucalyptus oil (Eucalyptus globulus).
- 2 drops tea tree oil (Melaleuca alternifolia)
- Glass bottle

- Mix essential oils into lotion bottle.
- > Fill bottle with Mama Z's oil base or your carrier oil of choice.
- > Shake well.
- Massage into sore muscles and joints twice daily.





PAIN AWAY ROLL-ON

Ingredients

- 10 ml. roller bottle
- 5 drops copaiba
- 3 drops sweet marjoram
- 3 drops basil (linalool chemotype)
- 3 drops frankincense
- Carrier oil (jojoba and fractionated coconut oil absorb quickly and work best)

Instructions

- > Add essential oils to the glass roller bottle.
- > Fill the remaining space in the roller bottle with your carrier oil of choice and shake well.
- > Apply over problem areas up to 2x daily at the onset of pain.

PAIN AWAY ROLL-ON

Ingredients

- 10 ml. roller bottle
- 5 drops copaiba
- 3 drops sweet marjoram
- 3 drops basil (linalool chemotype)
- 3 drops frankincense
- Carrier oil (jojoba and fractionated coconut oil absorb quickly and work best)

- > Add essential oils to the glass roller bottle.
- Fill the remaining space in the roller bottle with your carrier oil of choice and shake well.
- > Apply over problem areas up to 2x daily at the onset of pain.







Cut-Out Recipe Card

NATURAL PAIN RELIEF MASSAGE OIL

Ingredients

- Glass lotion bottle
- 2 oz. carrier oil of choice
- 20 drops orange essential oil
- 10 drops copaiba essential oil
- 10 drops frankincense essential oil
- 10 drops peppermint essential oil
- 5 drops wintergreen essential oil

Instructions

- Mix essential oils into lotion bottle.
- > Fill bottle with Mama Z's oil base or your carrier oil of choice.
- Shake well.
- Massage into sore muscles and joints twice daily.

NATURAL PAIN RELIEF MASSAGE OIL

Ingredients

- Glass lotion bottle
- 2 oz. carrier oil of choice
- 20 drops orange essential oil
- 10 drops copaiba essential oil
- 10 drops frankincense essential oil
- 10 drops peppermint essential oil
- 5 drops wintergreen essential oil

- Mix essential oils into lotion bottle.
- Fill bottle with Mama Z's oil base or your carrier oil of choice.
- > Shake well.
- Massage into sore muscles and joints twice daily.







ROLL AWAY THE ITCH REMEDY

Ingredients

- 10 ml. glass roller bottle
- 4 drops of lavender essential oil
- 3 drops of peppermint essential oil
- Carrier oil*

Instructions

- > Add your essential oils to the glass roller bottle.
- > Fill the remaining space in the roller bottle with your carrier oil of choice.
- > Shake well.
- > Apply to the bug bite to relieve itch and sting.

ROLL AWAY THE ITCH REMEDY

Ingredients

- 10 ml. glass roller bottle
- 4 drops of lavender essential oil
- 3 drops of peppermint essential oil
- ✓ Carrier oil*

- > Add your essential oils to the glass roller bottle.
- > Fill the remaining space in the roller bottle with your carrier oil of choice.
- > Shake well.
- Apply to the bug bite to relieve itch and sting.





^{*} No matter what allergies you may have, there's a carrier oil that's right for you. You can use any, or a combination of these: Avocado, Fractionated Coconut, Grapeseed, Jojoba, Sweet Almond.

^{*} No matter what allergies you may have, there's a carrier oil that's right for you. You can use any, or a combination of these: Avocado, Fractionated Coconut, Grapeseed, Jojoba, Sweet Almond.

References

Chapter 1 - Bioactive Foods

https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/bioactive-compound

https://doi.org/10.1007/s00394-013-0503-0

https://ebrary.net/18009/environment/health_benefits_bioactive_compounds

http://cancerpreventionresearch.aacrjournals.org/content/2/3/200

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4488002/

https://link.springer.com/article/10.1007/s10681-004-4811-6

https://doi.org/10.1186/1752-153x-6-122

https://www.ncbi.nlm.nih.gov/pubmed/15723738

https://doi.org/10.1007/s00394-013-0510-1

https://doi.org/10.3305/ nh.2015.31.3.8242

https://doi.org/10.1111/obr.12550

https://doi.org/10.1186/1743-7075-9-8

https://freshpressedoliveoil.com/c/APNLF005_O_REF_LE_Q220/tj/858656b476674

f549dabad0b93738838

https://ujido.com/pages/dr-z?aff=3

Chapter 2 - Exercise

http://www.today.com/health/running-farther-faster-longer-can-kill-you-1C7388868

http://www.who.int/dietphysicalactivity/factsheet_adults/en/

https://www.escardio.org/

https://www.sciencedaily.com/releases/2013/10/131015191405.htm

https://www.ncbi.nlm.nih.gov/pubmed/14515011

https://www.ncbi.nlm.nih.gov/pubmed/20472480

https://www.ncbi.nlm.nih.gov/pubmed/20837645

Chapter 3 - Arnica

http://www.britishhomeopathic.org/bha-charity/how-we-can-help/medicine-a-z/arnica-montana/

http://www.ncbi.nlm.nih.gov/pubmed/25171757

http://www.ncbi.nlm.nih.gov/pubmed/22958433

http://www.ncbi.nlm.nih.gov/pubmed/23947690

Chapter 4 - Calendula

https://www.ncbi.nlm.nih.gov/pubmed/23738472/

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3270572/

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3768360/

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3326776/

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3834722/

Chapter 5 - Echinacea

http://cms.herbalgram.org/press/2014/2013_Herb_Market_Report.html

http://www.nutritionaloutlook.com/articles/us-herbal-supplement-sales-growth-reaches-highest-level-1990s

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1193558/

http://umm.edu/health/medical/altmed/herb/echinacea#ixzz3SeBYTZt5

http://news.uconn.edu/2007/June/rel07056.html

http://plants.usda.gov/plantguide/pdf/cs_ecpu.pdf

http://www.hindawi.com/journals/ecam/2012/841315/

http://www.webmd.com/vitamins-supplements/ingredientmono-981-echinacea.

aspx?activeingredientid=981&activeingredientname=echinacea

https://www.ncbi.nlm.nih.gov/pubmed/10496642

http://www.webmd.com/vitamins-supplements/ingredientmono-981-echinacea.

aspx?activeingredientid=981&activeingredientname=echinacea

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2262947/

http://www.ncbi.nlm.nih.gov/pubmed/19107735

http://medherb.com/Materia_Medica/Echinacea_-_Effects_on_white_blood_cells.
htm

https://www.utep.edu/herbal-safety/herbal-facts/herbal%20facts%20sheet/echinacea.html

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2668539/

https://www.utep.edu/herbal-safety/herbal-facts/herbal%20facts%20sheet/echinacea.html



http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1193558/ http://www.webmd.com/vitamins-and-supplements/lifestyle-guide-11/echinacea http://umm.edu/health/medical/altmed/herb/echinacea#ixzz3SeBnWSgd

Chapter 6 - Magnesium

https://pubmed.ncbi.nlm.nih.gov/15930481/

https://www.nap.edu/read/5776/chapter/8

http://whfoods.com/genpage.php?tname=nutrient&dbid=75

https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/#h5

https://pubmed.ncbi.nlm.nih.gov/1591145/

https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/#h2

https://pubmed.ncbi.nlm.nih.gov/15930481/

https://www.lifeextension.com/magazine/2005/9/americans-magnesium-deficient

https://lpi.oregonstate.edu/mic/minerals/magnesium

https://www.researchgate.net/publication/258054170_Oral_magnesium_

supplements_decrease_high_blood_pressure_SBP_155mmHg_in_hypertensive_

subjects_on_anti-hypertensive_medications_A_targeted_meta-analysis

https://lpi.oregonstate.edu/mic/glossary#bone-mineral-density

https://pubmed.ncbi.nlm.nih.gov/9523054/

https://americanmigrainefoundation.org/resource-library/magnesium/

https://pubmed.ncbi.nlm.nih.gov/22683887/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3650510/

https://pubmed.ncbi.nlm.nih.gov/21868780/

https://pubmed.ncbi.nlm.nih.gov/17645588/

https://www.karger.com/Article/FullText/485212

https://pubmed.ncbi.nlm.nih.gov/12057549/

https://www.ahajournals.org/doi/10.1161/01.HYP.13.3.227

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4488002/

https://pubmed.ncbi.nlm.nih.gov/16542786/

https://www.ncbi.nlm.nih.gov/pubmed/16183794

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4586582/

Chapter 7 - Turmeric

https://pubmed.ncbi.nlm.nih.gov/?term=curcumin

https://pubmed.ncbi.nlm.nih.gov/25159739/

https://pubmed.ncbi.nlm.nih.gov/25164566/

https://pubmed.ncbi.nlm.nih.gov/25169542/

https://pubmed.ncbi.nlm.nih.gov/25170806/

https://pubmed.ncbi.nlm.nih.gov/25172633/

https://pubmed.ncbi.nlm.nih.gov/25173461/

https://pubmed.ncbi.nlm.nih.gov/25169090/

https://pubmed.ncbi.nlm.nih.gov/25173182/

https://www.nccih.nih.gov/health/turmeric

https://pubmed.ncbi.nlm.nih.gov/15489888/?from_single_

result=Nonsteroidal+anti-inflammatory+agents+differ+in+their+ability+to+supp ress+NF-kappaB+activation%2C+inhibition+of+expression+of+cyclooxygenase-

2+and+cyclin+D1%2C+and+abrogation+of+tumor+cell+proliferation

https://pubmed.ncbi.nlm.nih.gov/24513290/

https://pubmed.ncbi.nlm.nih.gov/23832433/

Banafshe HR, et al. Effect of curcumin on diabetic peripheral neuropathic pain: Possible involvement of opioid system. Eur J Pharmacol 2013; [Epub ahead of print].

Cheppudira B, et al. Curcumin: a novel therapeutic for burn pain and wound healing. Expert Opin Investig Drugs 2013; 22(10): 1295-303.

Kuncha M, et al. Curcumin potentiates the anti-arthritic effect of prednisolone in Freund's complete adjuvant-induced arthritic rats. J Pharm Pharmacol 2014; 66(1): 133-44.

Lal B, et al. Efficacy of curcumin in the management of chronic anterior uveitis. Phytother Res 1999; 13(4): 318-22.

Ng SC, et al. Therapeutic strategies for the management of ulcerative colitis. Inflamm Bowel Dis 2009; 15(6): 935-50.

R Srivastava, et al. Effect of curcumin on platelet aggregation and vascular prostacyclin synthesis. Arzneimittelforschung 1986; 36(4): 715-7.

Sanmukhani J, et al. Efficacy and Safety of Curcumin in Major Depressive Disorder: A Randomized Controlled Trial. Phytother Res 2013; [Epub ahead of print].

Sun J, et al. Preventive effects of curcumin and dexamethasone on lung transplantation-associated lung injury in rats. Crit Care Med 2008; 36(4): 1205-13.

Taylor RA, et al. Curcumin for inflammatory bowel disease: a review of human studies. Altern Med Rev 2011; 16(2): 152-6.

Teayoun K, et al. Curcumin activates AMPK and suppresses gluconeogenic gene expression in hepatoma cells. Biochem Biophys Res Commun 2009; 388(2): 377-82.

Usharani P, et al. Effect of NCB-02, atorvastatin and placebo on endothelial function, oxidative stress and inflammatory markers in patients with type 2 diabetes mellitus: a randomized, parallel-group, placebo-controlled, 8-week study. Drugs R D. 2008; 9(4): 243-50.

Yasunari Takada, et al. Nonsteroidal anti-inflammatory agents differ in their ability to suppress NF-kappaB activation, inhibition of expression of cyclooxygenase-2 and cyclin D1, and abrogation of tumor cell proliferation. Oncogene 2004; 23(57): 9247-58.

Chapter 8 - ArcticBlast

https://www.ncbi.nlm.nih.gov/books/NBK92525/

https://www.health.harvard.edu/blog/painkillers-and-drug-addiction-an-ongoing-dilemma-20101027677

https://www.verywellmind.com/ten-most-addictive-pain-killers-22506

These are direct quotes from Oxycontin's advertising... https://www.slideshare.net/StephanieBonaccorsi/steph-bonacorsi-oxycontin-epidemc

https://www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis

https://www.asam.org/docs/default-source/advocacy/opioid-addiction-disease-facts-figures.pdf

https://www.huffingtonpost.com/entry/government-crackdown-opioid-prescriptions-pain-patients_us_5b51ec57e4b0fd5c73c4a42e https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3268359/

https://pubmed.ncbi.nlm.nih.gov/14960499/

Chapter 9 - EOs for Pain Relief

https://www.mdpi.com/1420-3049/21/1/20/htm

https://www.cdc.gov/arthritis/basics/fibromyalgia.htm

https://www.ncbi.nlm.nih.gov/pubmed/23551212

https://www.ncbi.nlm.nih.gov/pubmed/25238714

https://www.ncbi.nlm.nih.gov/pubmed/22517298

https://www.ncbi.nlm.nih.gov/pubmed/15778570

https://www.ncbi.nlm.nih.gov/pubmed/26247152

https://www.ncbi.nlm.nih.gov/pubmed/24381585

https://www.ncbi.nlm.nih.gov/pubmed/23296806

https://www.ncbi.nlm.nih.gov/pubmed/18753801

https://www.ncbi.nlm.nih.gov/pubmed/26247152

https://naha.org/index.php/explore-aromatherapy/about-aromatherapy/most-commonly-used-essential-oils/

http://ayurvedicoils.com/tag/ayurvedic-health-benefits-of-yarrow-essential-oil

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3995208/https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3687718/

Chapter 10 - EOs for Fibromyalgia

https://www.cdc.gov/arthritis/basics/fibromyalgia.htm

Chapter 11 - Basil

http://www.ncbi.nlm.nih.gov/pubmed/10641155

http://www.sciencedirect.com/science/article/pii/S0167701203000125

http://www.ncbi.nlm.nih.gov/pubmed/12744290

https://www.ncbi.nlm.nih.gov/pubmed/19783520

http://www.ncbi.nlm.nih.gov/pubmed/26620574

http://www.ncbi.nlm.nih.gov/pubmed/23195886

http://www.ncbi.nlm.nih.gov/pubmed/23847081

http://www.ema.europa.eu/docs/en_GB/document_library/Public_

statement/2014/12/WC500179557.pdf

Chapter 12 - Black Pepper

https://www.sciencedirect.com/science/article/pii/

B978012814625500011X?via%3Dihub

https://www.cdc.gov/tobacco/data statistics/index.htm

https://www.hhs.gov/sites/default/files/2020-cessation-sgr-executive-summary.pdf

https://www.liebertpub.com/doi/full/10.1089/acm.2012.0537

https://www.cdc.gov/diabetes/basics/type2.html

https://www.hindawi.com/journals/aps/2013/926047/

https://www.cdc.gov/bloodpressure/facts.htm

https://www.hindawi.com/journals/ecam/2020/8035301/

https://pubmed.ncbi.nlm.nih.gov/25027570/

https://www.mdpi.com/2304-8158/9/2/141/htm

https://www.cdc.gov/parasites/babesiosis/gen_info/faqs.html

https://www.cdc.gov/parasites/babesiosis/disease.html

https://www.mdpi.com/2076-0817/9/6/466/htm

https://www.sciencedirect.com/science/article/pii/S0141813019400408

https://tisserandinstitute.org/safety/irritation-allergic-reactions/

Chapter 13 - Copaiba

https://www.ncbi.nlm.nih.gov/pubmed/17446019

https://pubchem.ncbi.nlm.nih.gov/compound/beta-caryophyllene

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4737359/

https://www.ncbi.nlm.nih.gov/pubmed/17029841

https://www.ncbi.nlm.nih.gov/pubmed/23842934

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3291111/

https://www.ncbi.nlm.nih.gov/pubmed/22502624

https://www.ncbi.nlm.nih.gov/pubmed/25153880

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4387623/

http://dx.doi.org/10.1590/S0103-64402012000100006

https://www.ncbi.nlm.nih.gov/pubmed/26352337

Chapter 14 - Frankincense

http://www.hindujagruti.org/hinduism/knowledge/article/why-do-we-light-lamp-in-front-of-deities-in-the-evening.html#11

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3538159/

http://www.ncbi.nlm.nih.gov/pmc/articles/pmc1112084/

http://www.ncbi.nlm.nih.gov/pubmed/?term=frankincense+essential+oil+cancer

https://www.mskcc.org/cancer-care/integrative-medicine/herbs/beta-elemene

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3796379/

http://www.ncbi.nlm.nih.gov/pubmed/18167047

http://www.ncbi.nlm.nih.gov/pubmed/25312172

http://www.biomedcentral.com/1472-6882/9/6

http://www.ncbi.nlm.nih.gov/pubmed/22171782

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5783593/

http://www.oapublishinglondon.com/article/656

http://www.ncbi.nlm.nih.gov/pubmed/21287538

Chapter 15 - Lemongrass

http://www.ncbi.nlm.nih.gov/pmc/articles/pmc3217679/

http://www.ncbi.nlm.nih.gov/pubmed/15796587

http://www.ncbi.nlm.nih.gov/pubmed/12615076

http://www.aromaticplantproject.com/articles_archive/citral_essential_oils.html

https://www.ncbi.nlm.nih.gov/pubmed/25242268

http://www.ncbi.nlm.nih.gov/pubmed/18553017

http://www.ncbi.nlm.nih.gov/pubmed/26147358



http://www.ncbi.nlm.nih.gov/pubmed/25280938

http://www.ncbi.nlm.nih.gov/pubmed/19292822

http://www.ncbi.nlm.nih.gov/pubmed/21767622

http://www.ncbi.nlm.nih.gov/pubmed/21693164

http://www.ncbi.nlm.nih.gov/pubmed/?term=lemongrass+essential+oil+cancer

http://www.ncbi.nlm.nih.gov/pubmed/19121295

http://www.ncbi.nlm.nih.gov/pubmed/25438256

Chapter 16 - Lime

https://www.ncbi.nlm.nih.gov/pubmed/24125633

https://www.ncbi.nlm.nih.gov/pubmed/23285822

https://www.ncbi.nlm.nih.gov/pubmed/24586096

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5334235/

https://www.ncbi.nlm.nih.gov/pubmed/29565630

https://www.ncbi.nlm.nih.gov/pubmed/24742226

http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0001-

37652018000401285&lng=en&nrm=iso&tlng=en

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5302327/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2816438/

https://link.springer.com/article/10.1007%2Fs11947-010-0507-1

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3265747/

https://www.ncbi.nlm.nih.gov/pubmed/20623616/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5065707/

https://www.ncbi.nlm.nih.gov/pubmed/23838456/

https://www.ncbi.nlm.nih.gov/pubmed/28923438/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4835072/

https://www.ncbi.nlm.nih.gov/pubmed/22260108

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5214556/

https://www.ncbi.nlm.nih.gov/pubmed/19919125/

https://www.ncbi.nlm.nih.gov/pubmed/12222671/

https://www.ncbi.nlm.nih.gov/pubmed/1988264

https://www.sciencedirect.com/science/article/pii/

S0022474X1730200X?via%3Dihub

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6073409/

Chapter 17 - Marjoram

https://www.botanical.com/botanical/mgmh/m/marwil20.html

http://www.ncbi.nlm.nih.gov/pubmed/22435409

http://www.ncbi.nlm.nih.gov/pubmed/24381944

http://www.ncbi.nlm.nih.gov/pubmed/24195751

http://www.ncbi.nlm.nih.gov/pubmed/21239482

Chapter 18 - Neroli

http://www.ncbi.nlm.nih.gov/pubmed/24002139

http://www.ncbi.nlm.nih.gov/pubmed/25762161

http://www.acog.org/-/media/NewsRoom/MediaKit.pdf

http://www.ncbi.nlm.nih.gov/pubmed/25024731

http://www.ncbi.nlm.nih.gov/pubmed/23259002

http://www.ncbi.nlm.nih.gov/pubmed/25532295

Chapter 19 - Palo Santo

https://tisserandinstitute.org/aromatherapy-and-plant-medicine-in-peru/

https://sciencetrends.com/what-is-palo-santo/

https://www.nytimes.com/2019/12/16/style/self-care/palo-santo-woodendangered.html

https://journals.sagepub.com/doi/10.1177/1934578X1200701130

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6222726/

https://www.academia.edu/6275577/A_New_and_Known_Cytotoxic_Aryltetralin-

Type_Lignans_from_Stems_of_Bursera_graveolens

https://www.ncbi.nlm.nih.gov/pubmed/23665426

http://scielo.sld.cu/scielo.php?pid=S1028-47962009000300007&script=sci_arttext&tlng=pt

https://tisserandinstitute.org/learn-more/alpha-terpineol/

https://www.researchgate.net/profile/Mary_Cesare_Coral/

publication/320247305_Chemical_Composition_Antimicrobial_and_Antioxidant_ Activities_of_the_Essential_Oil_of_Bursera_graveolens_Burseraceae_From_Peru/ links/59e6df3ea6fdcc0e88249956/Chemical-Composition-Antimicrobial-and-Antioxidant-Activities-of-the-Essential-Oil-of-Bursera-graveolens-Burseraceae-

From-Peru.pdf

https://agris.fao.org/agris-search/search.do?recordID=US201900204674

http://nopr.niscair.res.in/bitstream/123456789/10330/1/IJTK%209%284%29%20742-753.pdf

https://www.kellyablard.com/essential-oils/exploring-aromatherapy-as-a-form-of-traditional-aromatic-plant-medicine-in-peru/

https://www.academia.edu/2120881/Conservation_of_the_Palo_Santo_tree_ Bulnesia_sarmientoi_Lorentz_ex_Griseb_in_the_South_American_Chaco_ Region?email_work_card=title

http://www.periodicos.uem.br/ojs/index.php/ActaSciBiolSci/article/view/46822 https://www.tandfonline.com/doi/full/10.1080/10412905.2016.1278405?src=recsys&

https://www.tandfonline.com/doi/abs/10.1080/10412905.2009.9700199?utm_medium=75238

https://www.researchgate.net/publication/288839079_Insecticidal_effects_ of_essential_oils_against_woolly_beech_aphid_Phyllaphis_fagi_Hemiptera_ Aphididae_and_rice_weevil_Sitophilus_oryzae_Coleoptera_Curculionidae https://www.academia.edu/2120881/Conservation_of_the_Palo_Santo_tree_ Bulnesia_sarmientoi_Lorentz_ex_Griseb_in_the_South_American_Chaco_ Region?email_work_card=title

Chapter 20 - Patchouli

https://www.researchgate.net/publication/279905001_Origin_of_the_name_'patchouli'_and_its_history

https://www.earth.com/news/patchouli-origins/

https://onlinelibrary.wiley.com/doi/full/10.1002/ffj.3418

https://www.tandfonline.com/doi/abs/10.1080/14786419.2011.633082

https://tisserandinstitute.org/essential-oils-flu/

https://www.liebertpub.com/doi/10.1089/jmf.2019.0182

https://www.mdpi.com/1420-3049/20/5/8521

http://sphinxsai.com/sphinxsaivol_2no.1/pharmtech_vol_2no.1/PharmTech_Vol_2No.1PDF/PT=69%20%28438-442%29.pdf

https://pubmed.ncbi.nlm.nih.gov/8893526/

https://www.researchgate.net/publication/318694181_Patchoulene_Epoxide_ Isolated_from_Patchouli_Oil_Suppresses_Acute_Inflammation_through_ Inhibition of NF- k B and Downregulation of COX-2iNOS

https://www.spandidos-publications.com/10.3892/etm.2011.233

https://www.spandidos-publications.com/10.3892/etm.2017.4577

https://www.sciencedirect.com/science/article/abs/pii/

S0378874114002955?via%3Dihub

https://onlinelibrary.wiley.com/doi/abs/10.1002/ptr.2300

https://www.sciencedirect.com/science/article/abs/pii/

S0001706X13001095?via%3Dihub

https://onlinelibrary.wiley.com/doi/abs/10.1002/ptr.1637

https://pubmed.ncbi.nlm.nih.gov/14705881/ https://pubmed.ncbi.nlm.nih.gov/20628993/ https://www.fda.gov/food/food-additives-petitions/food-additive-status-list https://tisserandinstitute.org/learn-more/keep-essential-oils-cool/

Chapter 21 - Turmeric

https://www.healthline.com/nutrition/top-10-evidence-based-health-benefits-of-turmeric

https://www.britannica.com/science/rhizome/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6164907/

https://www.researchgate.net/profile/Aldo Tava/publication/285887735

Chemical_composition_of_essential_oils_of_turmeric_Curcuma_longa_L/

links/567c0c0208ae051f9ae14426.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2910176/

https://journals.sagepub.com/doi/abs/10.1177/1934578X1300800633

https://www.ncbi.nlm.nih.gov/pubmed/11956652

https://www.ncbi.nlm.nih.gov/pubmed/15254774

https://pdfs.semanticscholar.org/a9b6/67bd9e68be8219d43612bcdd5feacfdaa6 1a.pdf

https://myana.org/publications/news/us-burden-neurological-disease-nearly-800-billionyear-according-new-american

https://www.ncbi.nlm.nih.gov/pubmed/25928248

https://www.ncbi.nlm.nih.gov/pubmed/28849618

https://www.researchgate.net/profile/Ryan_Fink/publication/26775368_

Optimized_Turmeric_Extracts_have_Potent_Anti-Amyloidogenic_Effects/

links/0046351fbb33dad7f5000000/Optimized-Turmeric-Extracts-have-Potent-

Anti-Amyloidogenic-Effects.pdf

https://www.ncbi.nlm.nih.gov/pubmed/16008121/

https://www.ncbi.nlm.nih.gov/pubmed/16562833

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2834817/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3195121/

https://www.sciencedirect.com/science/article/pii/S0308814611010004

http://www.tf.ni.ac.rs/images/casopisi/sveska4vol2/c4-2-3.pdf

https://pubs.acs.org/doi/10.1021/jf990308d

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5072072/

https://www.ncbi.nlm.nih.gov/pubmed/22385048

https://www.ncbi.nlm.nih.gov/pubmed/17117790

https://www.cdc.gov/dotw/epilepsy/

https://www.sciencedirect.com/science/article/abs/pii/S1756464615001383

https://www.degruyter.com/view/j/jbcpp.2015.26.issue-1/jbcpp-2013-0165/

jbcpp-2013-0165.xml

https://www.liebertpub.com/doi/abs/10.1089/acm.2004.10.1015
https://www.sciencedirect.com/science/article/pii/S0308814616315783
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6473496/
https://www.researchgate.net/profile/Nipuni_Ranasinghe/
publication/324952875_DEVELOPMENT_OF_HERBAL_MOSQUITO_REPELLENT_
FORMULATIONS/links/5aec9878a6fdcc8508b7d98a/DEVELOPMENT-OF-HERBALMOSQUITO-REPELLENT-FORMULATIONS.pdf
https://www.ncbi.nlm.nih.gov/pubmed/26336212
https://www.ncbi.nlm.nih.gov/pubmed/23201370
https://www.ncbi.nlm.nih.gov/pubmed/15260388

Chapter 22 - Ylang Ylang

http://www.dictionary.com/browse/fractional-distillation https://www.hindawi.com/journals/ecam/2015/896314/#B88 https://www.ncbi.nlm.nih.gov/pubmed/20499917 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3836517/ https://www.ncbi.nlm.nih.gov/pubmed/21157172/ https://www.ncbi.nlm.nih.gov/pubmed/16807875 https://www.ncbi.nlm.nih.gov/pubmed/24816646 https://www.ncbi.nlm.nih.gov/pubmed/19114390 https://www.ncbi.nlm.nih.gov/pubmed/22543614 http://www.cdc.gov/zika/vector/range.html https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2732559/ https://www.ncbi.nlm.nih.gov/pubmed/25027570 https://online.liebertpub.com/doi/abs/10.1089/act.1999.5.279 https://www.ncbi.nlm.nih.gov/pubmed/18041606

About the Author



ERIC ZIELINSKI, D.C. has pioneered natural living and biblical health education since 2003. Trained as an aromatherapist, public health researcher, and chiropractor, Dr. Z started NaturalLivingFamily.com alongside his wife Sabrina Ann in 2014 to help people learn how to use natural remedies like essential oils safely and effectively. Now visited by more than six million natural health seekers every year, it has rapidly become the #1 source for Biblical Health and non-branded essential oils education online.

Dr. Z is an accomplished researcher with several publications, conference proceedings and is committed to sharing the healing power of natural therapies at churches and events across the globe.

The Essential Oils Apothecary

Alzheimer's, Cancer, Fatty Liver, Heart Disease & More... 150+ Soothing Remedies for Managing the Treatment & Symptoms of Chronic Illness!

Get Your Copy Here!

The Healing Power of Essential Oils

150+ Healing Recipes & Remedies to Soothe Inflammation, Boost Mood, Prevent Autoimmunity, and Feel Great in Every Way!

Get Your Copy Here!