



Gut Health Guide & **ESSENTIAL OILS PROTOCOL**

BEAT LEAKY GUT, SOOTHE REFLUX
& REGAIN CONTROL OF
YOUR DIGESTIVE HEALTH

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The Healing Power of Essential Oils
& *The Essential Oils Diet*



Gut Health Guide & Essential Oils Protocol

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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.

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

Introduction	4
Section 1	Nutrition & Supplements
Chapter 1	Digestive Health Trifecta 11
Chapter 2	Low Stomach Acid Symptoms & Acid Reflux Relief 15
Chapter 3	Leaky Gut Signs, Symptoms & Strategies 21
Chapter 4	Probiotics & Importance of Soil Based Organisms 26
Chapter 5	Probiotics & the Truth About Weight Loss 31
Chapter 6	Bioactive Foods & Why You Need Them 36
Chapter 7	Digestive Enzymes & Key Benefits 46
Section 2	Essential Oils
Chapter 8	Getting You Started with Aromatherapy 53
Chapter 9	Using Carrier Oils for Double Benefits 65
Chapter 10	Culinary Dosing & Cooking with Essential Oils 72
Chapter 11	Top Essential Oils for Gut Health 79
Chapter 12	Gut Health Protocol 83
Chapter 13	101 Additional Uses 87
References	95
About the Author	100

Introduction

There's a reason we shorten the Standard American Diet to S-A-D. Never has a more fitting abbreviation been seen in the health industry. Our food, and the way our body processes that food, impacts our health in profound ways.

And, it all starts in the gut.

Put simply, when our gut isn't healthy and happy, nothing about our bodies is healthy and happy. Gut health and digestive issues are one of the most common concerns shared by our Natural Living Family and most of them ask me about ways essential oils can help.

This book is a direct result of those queries, and the research I've done on the topic.

Getting the Most Out of this Book

Before you dive in, though, let me remind you that continuing a S-A-D lifestyle and using essential oils is like taking one step forward, and two steps back. The only way to truly heal the gut, regain control of your health and feel like you want to again is by taking a holistic approach.

- Diet
- Exercise
- Prayer & meditation
- Stress reduction & mood balancing
- Positive thinking & fruitful relationships
- Using natural remedies like essential oils

These are all part of the equation.

As you start your journey, my recommendation is that you first treat the symptoms related to your gut health issues. For example, using lavender to help you sleep better, or peppermint to reduce bloating. Something (anything) to get you on the road to victory!

This will give you some "quick wins" and will help motivate and encourage you for the long haul. Then, once you start to feel a little better (this should happen

within days of following the various protocols and recipes in this book), tackle the root cause. If you're not sure where to start, then contact a local functional medicine practitioner who understands how natural therapies like essential oils work with the body and you try to discover the "WHY" behind your health issues.

A Note About Faith

As I share below, my personal health journey has included gut issues since as far as I can remember and I credit God for showing me how to heal myself from the inside-out.

Jehovah Rapha: The Lord, Our Healer. There are dozens of Bible verses about healing and I have come to take solace in these over the years as my loved ones and I have battle health conditions. They have brought up comfort, hope and have built up our most holy faith to believe our Lord for a miracle!

With that said, there is a practical application to all of this. The Lord has gifted your body with the remarkable ability to heal itself under the right conditions. You need to feed it wholesome food, drink clean water and breathe pure air.

Sadly, finding these things is all but impossible in our fallen world as toxic chemicals have overtaken our soil and atmosphere. In spite of our efforts (and great expense) to purchase essential products for a healthy home, we still get sick and God is here to bless you with His healing touch when you need it. My prayer is that you find this precious gift, and these Healing Scriptures encourage you along the way!

Old Testament Healing Scriptures

He said, "If you will diligently listen to the voice of the Lord your God, and do that which is right in His eyes, and give ear to His commandments and keep all His statutes, I will put none of the diseases on you that I put on the Egyptians, for I am the Lord, your healer."

~ **Exodus 15:26**

Worship the LORD your God, and His blessing will be on your food and water. I will take away sickness from among you.

~ **Exodus 23:25**

The Lord will keep you free from every disease. He will not inflict on you the horrible diseases you knew in Egypt.

~ **Deuteronomy 7:15**

See now that I, even I, am He, and there is no God beside me; I kill and I make alive; I wound and I heal; and there is none that can deliver out of my hand.

~ **Deuteronomy 32:39**

If My people who are called by My name humble themselves, and pray and seek My face and turn from their wicked ways, then I will hear from heaven and will forgive their sin and heal their land.

~ **2 Chronicles 7:14**

Have compassion on me, LORD, for I am weak. Heal me, LORD, for my bones are in agony.

~ **Psalms 6:2**

For the LORD protects the bones of the righteous; not one of them is broken!

~ **Psalms 34:20**

The LORD will sustain him upon his sickbed; In his illness, You restore him to health.

~ **Psalms 41:3**

As for me, I said, "O Lord, be gracious to me; heal me, for I have sinned against You!"

~ **Psalms 41:4**

Praise the Lord, my soul; all my inmost being, praise His holy name. Praise the Lord, my soul, and forget not all His benefits—who forgives all your sins and heals all your diseases, who redeems your life from the pit and crowns you with love and compassion, who satisfies your desires with good things, so that your youth is renewed like the eagle's.

~ **Psalms 103:1-5**

He sent out His word and healed them, and delivered them from their destruction.

~ **Psalms 107:20**

He heals the brokenhearted and binds up their wounds.

~ **Psalms 147:3**

Gracious words are like a honeycomb, sweetness to the soul and health to the body.

~ **Proverbs 16:24**

My son, be attentive to my words; incline your ear to my sayings. Let them not escape from your sight; keep them within your heart. For they are life to those who find them, and healing to all their flesh.

~ **Proverbs 4:20-22**

A joyful heart is good medicine, but a crushed spirit dries up the bones.

~ **Proverbs 17:22**

For everything there is a season, and a time for every matter under heaven: a time to be born, and a time to die; a time to plant, and a time to pluck up what is planted; a time to kill, and a time to heal; a time to break down, and a time to build up.

~ **Ecclesiastes 3:1-3**

And the Lord will strike Egypt, striking and healing, and they will return to the Lord, and He will listen to their pleas for mercy and heal them.

~ **Isaiah 19:22**

Lord, Your discipline is good, for it leads to life and health. You restore my health and allow me to live!

~ **Isaiah 38:16**

But He was pierced for our transgressions, He was crushed for our iniquities; the punishment that brought us peace was on Him, and by His wounds we are healed.

~ **Isaiah 53:5**

'I have seen what they do, but I will heal them anyway! I will lead them. I will comfort those who mourn, bringing words of praise to their lips. May they have abundant peace, both near and far,' says the Lord, who heals them.

~ **Isaiah 57: 18-19**

Then your light will break forth like the dawn, and your healing will quickly appear; then your righteousness will go before you, and the glory of the LORD will be your rear guard.

~ **Isaiah 58:8**

Heal me, O Lord, and I shall be healed; save me, and I shall be saved, for you are my praise.

~ **Jeremiah 17:14**

For I will restore health to you, and your wounds I will heal, declares the Lord.

~ **Jeremiah 30:17**

Behold, I will bring to it health and healing, and I will heal them and reveal to them abundance of prosperity and security.

~ **Jeremiah 33:6**

New Testament Healing Scriptures

And He went throughout all Galilee, teaching in their synagogues and proclaiming the gospel of the kingdom and healing every disease and every affliction among the people.

~ **Matthew 4:23**

And He called to Him His twelve disciples and gave them authority over unclean spirits, to cast them out, and to heal every disease and every affliction.

~ **Matthew 10:1**

Heal the sick, raise the dead, cleanse those who have leprosy, drive out demons. Freely you have received; freely give.

~ **Matthew 10:8**

It is not the healthy who need a doctor, but the sick. I have not come to call the righteous, but sinners.

~ **Mark 2:17**

He [Jesus] said to her, "Daughter, your faith has healed you. Go in peace and be freed from your suffering."

~ **Mark 5:34**

And the power of the Lord was with Him to heal.

~ **Luke 5:17**

Heal the sick in it and say to them, 'The kingdom of God has come near to you.'

~ **Luke 10:9**

And He laid His hands on her, and immediately she was made straight, and she glorified God.

~ **Luke 13:13**

But they remained silent. Then He took him and healed him and sent him away.

~ **Luke 14:4**

"He has blinded their eyes and hardened their heart, lest they see with their eyes, and understand with their heart, and turn, and I would heal them."

~ **John 12:40**

While you stretch out your hand to heal, and signs and wonders are performed through the name of your holy servant Jesus.

~ Acts 4:30

And Peter said to him, "Aeneas, Jesus Christ heals you; rise and make your bed." And immediately he rose.

~ Acts 9:34

How God anointed Jesus of Nazareth with the Holy Spirit and with power. He went about doing good and healing all who were oppressed by the devil, for God was with him.

~ Acts 10:38

Our bodies are buried in brokenness, but they will be raised in glory. They are buried in weakness, but they will be raised in strength.

~ 1 Corinthians 15:43

Is anyone among you sick? Let him call for the elders of the church, and let them pray over him, anointing him with oil in the name of the Lord. And the prayer of faith will save the one who is sick, and the Lord will raise him up.

~ James 5:14-15

Therefore, confess your sins to one another and pray for one another, that you may be healed. The effectual fervent prayer of a righteous man availeth much.

~ James 5:16

He personally bore our sins in His [own] body on the tree [as on an altar and offered Himself on it], that we might die (cease to exist) to sin and live to righteousness. By His wounds you have been healed.

~ 1 Peter 2:24

Dear friend, I pray that you may enjoy good health and that all may go well with you, even as your soul is getting along well.

~ 3 John 1:2

Which of these 40 Bible verses about healing Scriptures speaks to your heart?

Send me an email at Support@NaturalLivingFamily.com and let me know!

May you be blessed with an abundant life for you and your family.

~ Dr. Z

SECTION 1

Nutrition & Supplements

Chapter 1

Digestive Health Trifecta

I never really had the chance to become healthy as a child because my parents were receiving misguided medical advice that led us right into a medical trap that I refer to as the Digestive Health Trifecta:

1. Gut-Brain-Skin Axis
2. Antibiotics
3. Standard American Diet (SAD)

If the foundation isn't set, then the building will fall. It's as simple as that.

Don't discount the importance of digestive health. It is responsible for up to 80% of your immune function!

Gut-Brain-Skin Axis for Digestive Health

Digestive health is intricately connected to virtually every aspect of your health. It's been nearly 80 years since dermatologists Donald M. Pillsbury and John H. Stokes first proposed the link between digestive health, depression, anxiety, and skin conditions such as acne. Known as the "Gut-Brain-Skin Axis" theory, this connection is understood to be a two-way street: emotional states can alter your normal intestinal microflora, which can increase intestinal permeability (leaky gut) and contribute to systemic inflammation. And vice versa—your microflora can influence your emotional states because these vitally important "good" bacteria produce neurotransmitters, or chemical messengers that play a role in mood and cognitive function.

In my case, lacking the antibody- and probiotic-rich colostrum and breast milk in my diet as a baby, research supports my suspicion that being formula fed was the primary cause of my poor digestive health. According to the *Proceedings of the National Academy of Sciences of the United States of America*,

"We found that breast milk-derived SIgA [antibodies] promoted intestinal epithelial barrier function in suckling neonates, preventing systemic infection by potential pathogens. Long-term benefits of early exposure to SIgA included maintenance of a healthy gut microbiota and regulation of gene expression in intestinal epithelial cells. These findings suggest that maternal antibodies provide benefits to the intestinal immune system of the breast-fed infant, which persist into adulthood."

Couple that with the Standard American Diet (SAD) that I consumed being low in naturally fermented foods, my poor digestive health can, thus, be linked to the multitude of maladies that plagued me in my youth:

- Acne,
- Anxiety,
- Childhood dental cavities,
- Depression,
- Gut permeability (leaky gut),
- Stammering (associated with anxiety),
- Suicide ideation (associated with acne),
- and Tonsillitis.

The key takeaway here is that consuming a probiotic-rich diet and breastfeeding are both critical to our physical, mental and emotional health. Eating fermented foods like kimchi, sauerkraut, pickles, natto and yogurt are easy to incorporate into your health regimen. When you slip and don't eat them for a while, that's where probiotic supplements are helpful.

Interestingly, when essential oils are taken with probiotics (beneficial bacteria in supplement form) and probiotic-rich foods they have a synergistic effect! In 2012, a study analyzing the development of a probiotic found that essential oils work well with the formula, creating a synergistic effect of increased benefits. According to the study, "The probiotics retard the growth of the microorganisms, while essential oil kills them. Combining the effect of medicinal plant extract and probiotics may be a new approach due to their complementary antimicrobial effects and practically no side effects. The synergistic effect of the essential oil and probiotics will be necessarily higher than using them alone as health product."

Regarding nursing, it is important to note human breastmilk is the perfect food for infants. Somehow, this minor fact has been omitted by baby formula labels. The fastest growing packaged food source to date, the global infant nutrition industry is a \$50 billion market and their revenue growth is only expected to increase.

The advice that far too many moms-to-be receive—that breast milk isn't necessary and that you're putting your babies at risk of malnutrition if you decide to nurse—is simply not true.

If you're pregnant, want to be, or know someone who is, I implore you to consider these things and make a determined effort to nurse your baby for at least one full year.

Antibiotics

Whether intended to treat a urinary tract, strep, or staph infection, far too many antibiotics are being prescribed when essential oils could be used instead!

According to the Centers for Disease Control and Prevention, "Up to one-third to one-half of antibiotic use in humans is either unnecessary or inappropriate. Each year in the United States, 47 million unnecessary antibiotic prescriptions are written in doctor's offices, emergency rooms, and hospital-based clinics, which makes improving antibiotic prescribing and use a national priority."

Overuse of antibiotics has caused an outbreak of infection and is becoming a main cause of death. Each year in the United States alone, more than two million people become infected with bacteria that are resistant to antibiotics and more than 23,000 people die every year as a direct result of these infections.

If you're thinking of taking an antibiotic, consider using essential oils for all non-serious infections.

Cause of Digestion Problems: Standard American Diet

Eating processed and sugary foods every day and using essential oils is like taking one step forward and three steps back!

My challenge to you is to think, "What would Jesus eat?" If Christ were living on this planet today, would He eat or drink anything that could potentially cause His body harm? What do you honestly think?

As we see in the Bible 2,000 years ago, Christ's life purpose was to honor God in everything that He said, thought and did; even to point of dying on the cross. Although I won't be able to prove it on this side of Heaven, I cannot logically see any way that He would have consumed anything that could possibly have hindered His ministry. And don't mistake it, everything that we eat and drink directly affects our mental, emotional, social, and physical health.

Sadly, this revelation hasn't reached mainstream Christendom. As one of my preacher friends quipped, "Christians don't drink, they don't smoke, they eat!" An argument can be made that gluttony is the acceptable sin in the church. Or, at least it appears this way because I don't hear too many ministers preaching against it!

I have seen the lives of far too many pastors, missionaries, and church leaders cut short because of disease; many of which could have all but been prevented by lifestyle changes regarding digestive health. This, my friend, is the antithesis of Biblical health: seeing spiritual “giants” fall apart at the hands of poor lifestyle decisions.

Chapter 2

Low Stomach Acid Symptoms & Acid Reflux Relief

If you experience regular heartburn or other gastrointestinal issues, there's an excellent chance that your body does not create enough stomach acid which creates low stomach acid symptoms, according to Dr. Jonathon V. Wright.

I know this seems counterintuitive. We've always been told the cause of GERD, acid reflux and other GI problems are because of too much acid production. It is this theory that has prompted doctors to prescribe antacids in droves.

While these drugs can treat low stomach acid symptoms, they do not address the root cause of gut health issues. In fact, drugs such as Nexium, Pepcid, Prevacid, Prilosec, Zantac and others, can actually cause more damage than good over a period of extended use.

In his book, "Why Stomach Acid is Good for You," Dr. Wright goes into a detailed explanation. He says that 50 percent of Americans over 50 are not producing an adequate amount of stomach acid for proper food digestion.

The Inner Workings of the Stomach

The stomach is one of the more fascinating organs which is lined with mucus-secreting cells and two highly important glands:

GASTRIC GLAND

The gastric gland secretes pepsinogen, mucus, intrinsic factor, and hydrochloric acid.

PYLORIC GLAND

The pyloric gland secretes mucus and helps to protect the stomach from hydrochloric acid.

There are three stages to the method, which are under constant control of hormones and nervous system signals:

Intestinal Phase

The duodenum yields slight amounts of gastric juices when foods enter the small intestine.

Gastric Phase

Parietal cells in your stomach release extremely acidic hydrochloric acid (0.8 pH). This process is triggered by food in your stomach.

Cephalic Phase

Smelling or even just thinking about food can cause your stomach to begin producing gastric secretions. In fact, 20 percent of these acids are produced before food even enters your mouth.

In the end, the acids in our stomach break down proteins into the crucial nutrients and amino acids. This also explains why patients with reduced stomach acid are susceptible to insufficient neurotransmitter-related illnesses, such as Parkinson's disease, depression and anxiety. One study actually found that as many as 60 percent of Parkinson's sufferers had proven reduced levels of gastric acid production.

The Side Effects of Proton Pump Inhibitors

Keep in mind that several body systems govern this entire process, which can explain why patients using medication to fight acid indigestion can more times than not experience multiple low stomach acid symptoms that, on the surface, appear to be unrelated to stomach acid.

An excellent example is with prescription proton pump inhibitors (PPI). PPIs lower acid production in the stomach by blocking key enzymes that produce acid. We're told that PPIs can help stop ulcers and gastroesophageal reflux disease (GERD) including other low stomach acid symptoms.. We're also told that a reduction in stomach acid gives the body the opportunity to heal itself of these conditions. None of this is true.

Since nearly all GI problems can be attributed to reduced low stomach acid symptoms, Prevacid and other PPIs are virtually useless and have been associated with many side effects of low stomach acid symptoms, including:

- Seizures
- Muscle cramps and muscle weakness

- Spastic muscle movements
- Nausea and stomach pain
- Feelings of being “jittery”
- Headache
- Coughing and a choking sensation
- Constipation and diarrhea
- Confusion and dizziness

More over, patients prescribed PPIs to reduce stomach acid often see other health concerns:

- Leaky gut & food allergies
- Nutrient malabsorption
- Imbalanced gut flora
- Improper protein metabolism

How to Fix Low Stomach Acid – Acid Reflux: A True Story

The truth is that reduced stomach acid has nothing to do with acid reflux. The real culprit behind heartburn and GERD is a leaky valve, which lets acid enter the esophagus. Basically, the door between the esophagus and the stomach – the esophageal valve – cannot shut properly and stomach juices are able to sneak in. Common causes of this include:

TOO LITTLE ACID

Going against everything we’ve been taught over the years, reduced acid production in the stomach is behind a slew of gut health issues that contribute to or directly cause acid reflux.

SMOKING

Since smoking tobacco is known to damage mucus membranes, increase acid secretion, impair muscle reflexes and lower salivation, smoking is a major cause of acid reflux.

PREGNANCY

A growing fetus can sometimes put too much pressure on parts of the body, including the esophageal valve.

HIATAL HERNIA

We all have a diaphragm that helps prevent acid from entering the esophagus. However, if a hernia causes the upper area of the gut to move above the muscle, acid can get through.

Healing Low Stomach Acid Symptoms: A Step-by-Step Guide

Believe it or not, it's actually not too hard to heal conditions relating to reduced stomach acid, but it does require a little determination and work. Personal experience shows that this systematic guide is a great path to better GI health.

1. DIGESTIVE ENZYMES

Taking probiotics and digestive enzymes are a great idea for people suffering from GI-related issues. These two things can help digest food, which takes some of the pressure of the gut while it heals. Since our diets tend to be low in probiotics and high in antibiotics, people have found it to be beneficial to continue to supplement with probiotics and digestive enzymes after the GI system has healed.

2. APPLE CIDER VINEGAR

Raw apple cider vinegar (ACV) is my go-to natural remedy for boosting low stomach acid levels. Vinegar is naturally acidic; therefore, it will help to lower the pH in your system. Moreover, ACV can control the growth of candida, which is known to contribute to reduced levels of stomach acid. Start by taking two tablespoons of ACV in a glass of water three times a day.

3. HCL WITH PEPSIN

For patients with low stomach acid, try supplementing with hydrochloric acid and pepsin. This combination, in addition to the ACV protocol, works great. But I must warn you, do not combine HCL supplements with corticosteroids or anti-inflammatory drugs such as NSAIDS (Advil or Tylenol). These medications are notorious for damaging the GI lining and can increase your chances of developing stomach ulcers.

4. EAT BETTER FOOD

It is important to eat a quality diet when starting a GI healing plan and attempting to restore normal acid levels in the gut. If you want a recommendation, I would suggest the GAPS Diet (make sure to include sauerkraut juice and Manuka honey).

This particular diet was founded by Dr. Natasha Campbell and it was designed specifically to heal the gut, reduce inflammation and heal autoimmune and neurological issues. The diet consists of simple foods that are easy to digest, giving the gut the power it needs to heal completely.

5. CHEW

This could be the number-one culprit when it comes to GI problems and the cause of low stomach acid. Simply put, chewing your food sends neurogenic signals from your brain to your gut to begin the digestive process.

If you eat too quickly and don't chew your food thoroughly, you're cutting this process time in half, which can significantly reduce gastric secretions connected to the cephalic stages I mentioned earlier. While there is really no rule, per say, make sure you chew enough to the point in which the food in your mouth becomes soft and pasty.

This also helps prevent overeating and helps with weight loss. In fact, a recent article in *The Journal of the Academy of Nutrition and Dietetics* said that chewing slowly can not only reduce the amount of food you eat and the energy density, but "Eating slowly led to lower hunger ratings in both groups and increased fullness ratings in the normal-weight group at 60 minutes from when the meal began."

6. INTERMITTENT FASTING

We have witnessed the benefits of intermittent fasting since the beginning of time. Unlike it is today, food hasn't always been readily available 24/7. The majority of intermittent fasting routines center on fasting in the morning or evening and require that foods only be eaten during a 4-5 hour window.

Not only has new research been focusing on how fasting can help restore stomach acid levels and help heal acid reflux, but also promote weight loss and help cure a number of other diseases.

In fact, the *British Journal of Nutrition* published the results of a clinical trial in which 115 overweight women with a genetic predisposition to breast cancer

were placed on a diet that included intermittent fasting. These women showed greater improvements in insulin sensitivity and weight control than generic daily calorie restriction.

How to Fix Low Stomach Acid Problems

Here are a few other tips that can help restore proper levels of acid in the gut:

- Don't eat when you're stressed.
- Avoid highly allergenic foods.
- Stay away from foods high in fiber.
- Limit water consumption to prevent over-hydration.

If you follow these simple steps and are dedicated to healing your GI issues, you should see great results within days, if not a week or two.

Chapter 3

Leaky Gut Signs, Symptoms & Strategies

Leaky Gut Syndrome is a common gastrointestinal problem that has been gathering a lot of attention lately because research continues to link it to a number of other health issues and diseases. The SAD (Standard American Diet), stress, toxic overload and bacterial imbalance people battle has certainly contributed to the epidemic of leaky gut syndrome symptoms that now affects millions of people globally.

Medical Perspective on Leaky Gut Syndrome

Did you know that the existence of “leaky gut syndrome” has actually been denied by the medical community? *That’s no joke!*

This is particularly shocking because “intestinal permeability” is something that has been talked about in medical texts for more than 100 years. The online medical database WebMD calls leaky gut “*something of a medical mystery.*” Yeah, you think? That is because the diagnosis is not even taught in med school.

“From an MD’s standpoint, it’s a very gray area,” says gastroenterologist Donald Kirby, MD – Director of the Center for Human Nutrition at the Cleveland Clinic – *“Physicians don’t know enough about the gut, which is our biggest immune system organ.”*

Government agencies, to make matters worse, have helped contribute to the misconception. According to the United Kingdom’s National Health Service (NHS):

Still, the opinions are not unanimous. According to Linda A. Lee, MD – gastroenterologist and Director of the Johns Hopkins Integrative Medicine and Digestive Center – *“We don’t know a lot but we know that it exists.”* However, *“In the absence of evidence, we don’t know what it means or what therapies can directly address it.”*

Now, I want you to keep that important point in mind.

It's true that in the medical profession, when no standard criteria is assigned to diagnosing a disease, there are no official treatments either. Additionally, with no "proof" of an effective treatment model, many doctors have no choice but to treat the symptoms with drugs, which is often over-the-counter antacids such as Prevacid and Tums.

And since the vast majority of doctors and other medical professionals deny the very existence of leaky gut, it is important for you to understand what it is and how it can impact you or your loved ones. Arming yourself with the proper knowledge is key when your doctors fail to see the clues.

Causes of Leaky Gut Syndrome

Leaky gut ("intestinal hyperpermeability") disorder is caused by intestinal tight junction malfunction. According to the NHS, the following conditions and treatments can also damage your intestinal lining:

- Celiac disease
- Chemotherapy
- Chronic kidney disease
- Complicated surgery
- Cystic fibrosis
- HIV/AIDS
- Immunosuppressants
- Inflammatory bowel diseases – such as Crohn's disease
- Intestinal infection (salmonella, norovirus and giardiasis)
- Radiotherapy to the abdomen
- Sepsis
- Type 1 diabetes

Representing the chief obstacle within the paracellular pathways between intestinal epithelial cells, disturbance of the constricted junctions opens the door for pollutants to be released into the blood.

According to the Norwegian journal *Acta Paediatrica*, this process "is implicated in the pathogenesis of several acute and chronic pediatric disease entities that are likely to have their origin during infancy."

Leaky gut has specifically been linked to these childhood disorders:

- Cancer
- Autoimmunity

- Asthma
- Chronic inflammatory disorders
- Allergies
- Autism
- Type 1 diabetes

Signs of Leaky Gut Syndrome Symptoms

If you think you may have leaky gut syndrome, here are some warning signs to watch for.

SKIN DISORDERS

First defined more than 70 years ago, the connection between the gut and the skin points to a slew of skin irritations, including acne and psoriasis, in people with intestinal hyperpermeability. While many doctors lean on dangerous creams and other drugs to treat these disorders, they can usually be solved by fixing the gut.

MOOD DISORDERS (DEPRESSION)

Studies, such as one published in the journal *Neuro Endocrinology Letters*, show that leaky gut can lead to numerous mood disorders. For instance, intestinal hyperpermeability's inflammatory response features activate the release of pro-inflammatory cytokines and other chemicals that induce depression symptoms such as fatigue, gastrointestinal upset, and a variety of so-called "sickness behaviors."

DIGESTIVE DISORDERS

As you'd expect, if your intestines aren't properly functioning, your digestion will be affected. Such is the case with leaky gut as intestinal permeability has been linked to chronic constipation & microfloral imbalance, which are direct causes of impaired immune function. Researchers discovered that immune cells were disrupted and pathogenic bacteria were allowed to flourish upon prolonged constipation.

For people with intestinal hyperpermeability, the immune system can shift into overdrive when a poisonous assault of toxins is introduced on the bloodstream, dangerously increasing the production of antibodies. This makes them vulnerable to antigens in foods, such as dairy and gluten products.

Leaky gut can also cause various nutritional deficiencies, including deficiencies of vitamin B12, magnesium and other important enzymes that aid in food digestion.

INFLAMMATORY BOWEL DISEASE

Hungarian scientists recently found that people suffering from irritable bowel syndrome and ulcerative colitis have links to leaky gut syndrome. This is because higher gut permeability is usually localized to the colon.

Another study found that the majority of patients with Crohn's disease also had leaky gut. Furthermore, up to 10% – 20% of their “clinically healthy relatives,” also had leaky gut, which is a sign of genetic connection. Studies show that zinc is effective at tightening up intestinal junctions.

AUTOIMMUNE DISORDERS

Being an inflammatory disease by nature, it's no wonder that so many people with autoimmune conditions suffer from leaky gut syndrome. One specific autoimmune disease that researchers are connecting to gut disorders is Hashimoto's disease, or “chronic thyroiditis.” Thyroid disease can lead to a host of problems, including weight gain, fatigue, depression and impaired metabolism.

Research conducted on a protein called “zonulin” is key to understanding the link between leaky gut and autoimmune diseases. A 2011 paper published in the journal *Physiologic Reviews* says,

“Zonulin is the only physiological modulator of intercellular tight junctions described so far that is involved in trafficking of macromolecules and, therefore, in tolerance/immune response balance. When the finely tuned zonulin pathway is deregulated in genetically susceptible individuals, both intestinal and extraintestinal autoimmune, inflammatory, and neoplastic disorders can occur.”

This hazardous flow is often triggered by grain consumption. In fact, University of Maryland School of Medicine scholars have revealed that gluten “activates zonulin signaling irrespective of the genetic expression of autoimmunity, leading to increased intestinal permeability to macromolecules.”

Healing Leaky Gut Syndrome Symptoms

If you think you may have leaky gut syndrome, here are some warning signs to watch for.

If after reading this article you think leaky gut may be responsible for your health problems, I have two things to say:

1. Your suffering doesn't have to continue. There is hope.
2. Healing leaky gut syndrome is not only possible, but happens all the time.

I have discovered that there are some simple steps that you can start doing today to heal leaky gut syndrome including:

- Focus on stress-relieving tactics that help minimize chronic inflammation.
- Drop foods from your diet that can damage the gut.
- Add foods with soothing, healing properties.
- Take supplements like digestive enzymes and probiotics to repair your gut.
- Use essential oils to soothe inflammation and promote healing from the inside-out.

Research has actually shown that oral doses of oregano oil “promotes intestinal barrier integrity” in pigs, which means that it can possibly help repair leaky gut.

You can start off by taking 2-3 drops of oregano in an enteric-coated capsule filled with an edible carrier olive oil and take once a day for a week while you monitor your results. Be sure to work with your healthcare provider when doing this.

Granted, nothing in this world is guaranteed to work, but following these five steps are a surefire way to improve your leaky gut and get your gastrointestinal health back on track.

Chapter 4

Probiotics & Importance of Soil Based Organisms

Most people don't know this, but most of the cells that make up our bodies are actually bacterial cells. In fact, the bacterial cells in the human body outnumber your human cells 10 to 1! In scientific terms, this phenomenon is referred to as the "human microbiome" and the *NIH Human Microbiome Project* recently spent over \$20 million to determine just how necessary bacteria are to human life. After evaluating over 240 healthy U.S. volunteers, researchers discovered that more than 10,000 microbial species occupy the human ecosystem and 81% – 99% are seen in healthy adults. Here are some of the key findings about soil based organisms benefits from the study:

- Microbes contribute more genes than humans contribute for human survival.
- Human genome carries approximately 22,000 protein-coding genes.
- The human microbiome contributes upwards to 8 million unique protein-coding genes (360 times more bacterial genes than human genes).
- The bacterial genomic contribution is critical for human survival.
- Genes carried by bacteria in the gastro-intestinal tract, for example, enable humans to digest foods and absorb nutrients that otherwise would be unavailable.

I love this explanation from Lita Proctor, Ph.D:

Humans don't have all the enzymes we need to digest our own diet. Microbes in the gut break down many of the proteins, lipids and carbohydrates in our diet into nutrients that we can then absorb. Moreover, the microbes produce beneficial compounds, like vitamins and anti-inflammatories that our genome cannot produce."

Researchers have discovered that having a wide spectrum of soil based organisms benefits in our gut is also key to health. Stressing the importance of housing a variety of bacteria to properly digest the foods that we eat, Curtis Huttenhower, Ph.D. (Harvard School of Public Health) states, *"It appears that bacteria can pinch hit for each other. It matters whether the metabolic function is present, not which microbial species provides it."*

Soil Based Organisms Benefits: Get your Daily Dose of Dirt Every Meal

So, what's the best way to ensure that you maintain the right supply of bacteria in your GI tract?

Eating dirt!

No, I'm not kidding. To properly reestablish your gut ecosystem you need to regularly consume soil based organisms (SBO). These are the probiotics that you've never heard of before. Yet, people have eaten SBO's every meal since the beginning of time.

Eating dirt!

Soil Based Organisms Benefits

Soil based organisms benefits include probiotics ("good" bacteria) that normally live in dirt. They provide our GI tracts much needed support for digestion, food assimilation and nutrient absorption. To date, approximately 30 different strains that have been successfully isolated and are commonly put into the probiotic supplements that we see on the market today.

Some of the most beneficial SBOs include:

- *Lactobacillus acidophilus*
- *Lactobacillus casei*
- *Lactobacillus rhamnosus*
- *Lactobacillus salivarius*
- *Lactobacillus plantarum*
- *Lactobacillus paracasei*
- *Lactobacillus brevis*
- *Bifidobacterium bifidum*
- *Bifidobacterium breve*
- *Bifidobacterium lactis*
- *Bifidobacterium longum*
- *Bacillus subtilis*
- *Saccharomyces boulardii*

More than 800 research studies referencing soil based organisms exist in the scientific literature, which link SBO's (Soil based organisms benefits) to successfully treating a wide variety of health conditions:

- Allergies
- Asthma
- Irritable bowel syndrome
- Ulcerative colitis
- Flatulence
- Nausea
- Indigestion
- Malabsorption
- Nutrient deficiency
- Autoimmune disease
- Inflammatory disease
- Bacterial, fungal, and viral infections
- *And the list goes on and on...*

SBO Probiotics Research

From what I can tell from the research, 3 of the most critical SBOs for health are *bacillus subtilis*, *bacillus coagulans* and *saccharomyces boulardii*.

- ***Bacillus subtilis*** – An important component of the fermented food Natto, it has been reported that *subtilis* is completely harmless and cannot cause any adverse effect in people. This is actually quite interesting because it packs quite the punch against dangerous pathogens, according to a study published in the *Journal of Ganan Medical University*. I feel that this is a very important point because SBOs have an amazing God-given ability that's oftentimes overlooked: they were specifically designed to help heal and promote life in human, not cause sickness or death. Moreover, there doesn't seem to be any reason to restrict *B. subtilis* consumption because several studies confirm these findings.
- ***Bacillus coagulans*** – *Postgraduate Medicine* printed the results of a study in 2009 that highlighted *coagulans'* ability to increase immune function, particularly in response to viral respiratory tract infections. The data uncovered that the probiotic significantly increased T-cell production, in spite of inherent challenges these types of supplements must overcome

to reach the point in the GI tract to benefit the body (manufacturing conditions, harsh gastric conditions, etc.). Some even suggest that *B. coagulans* is unique in this ability. According to Ken Alibek, M.D., Ph.D., Sc.D.,

“No other probiotic has the ability like that of Bacillus coagulans to survive the challenges probiotics face in reaching the intestinal tract where they can do good” and added “once there, no other strain is as prolific in producing the beneficial by-products responsible for many of the benefits of probiotics.”

- ***Saccharomyces boulardii*** – In 2012, *Therapeutics Advances in Gastroenterology* highlighted an interesting fact about the live yeast *boulardii*; it reproduces protective effects of normal healthy gut flora and can help in chronic as well as acute GI diseases. This is possible because *S. boulardii* has been shown to:
 - Regulate intestinal microbial homeostasis.
 - Interfere with the ability of pathogens to colonize and infect the mucosa.
 - Modulate local and systemic immune responses.
 - Stabilize the gastrointestinal barrier function and induces enzymatic activity favoring absorption and nutrition.

When you get right down to it, this is quite spectacular because few substances on the planet can produce such profound physiological effects like this!

Importance of SBO probiotics

Here’s a question that has ran through my mind a few times.

Why do little children have a tendency to put everything into their mouths?

It’s actually downright disgusting to look at, but maybe I can’t help but think that there’s a reason why every baby on the planet instinctively puts everything that they can get their hands on into their mouths. I love this quote from a New York Times article that offers an unusual explanation:

Since all instinctive behaviors have an evolutionary advantage or they would not have been retained for millions of years, chances are that this one too has helped us survive as a species. And, indeed, accumulating evidence strongly suggests that eating dirt is good for you. In studies of what is called the hygiene hypothesis,

researchers are concluding that organisms like the millions of bacteria, viruses and especially worms that enter the body along with “dirt” spur the development of a healthy immune system. Several continuing studies suggest that worms may help to redirect an immune system that has gone awry.

As a whole, America's immunity is weak at best and inoperable at worst, and these studies provide some key insights as to why immune system disorders have steadily been on the rise the past several decades.

And eating dirt is the solution?

Maybe.

According to microbiology and immunology professor Mary Ruebush,

“What a child is doing when he puts things in his mouth is allowing his immune response to explore his environment, Not only does this allow for ‘practice’ of immune responses, which will be necessary for protection, but it also plays a critical role in teaching the immature immune response what is best ignored.”

Americans' obsession with living in sterile, clean environments veritably makes it impossible for this to happen. In the words of Dr. Joel V. Weinstock – Director of gastroenterology and hepatology at Tufts Medical Center in Boston – *“Children raised in an ultra clean environment are not being exposed to organisms that help them develop appropriate immune regulatory circuits.”*

And this, my friends, is why we need to supplement with SBO probiotics!

Not sure where to get SBO's? Personally, I highly recommend getting them through probiotics in a supplement form or from food at farmers market and your local garden. Try it out and see how your health shapes up!

Chapter 5

Probiotics & the Truth About Weight Loss

Almost since the beginning of time, people have been fermenting and pickling food. In doing this, our ancestors were simply planning to preserve their foods as fermentation and pickling were the primary ways in which people kept their food around longer than just a few days. But by pickling and preserving, they also unknowingly created many superfoods that are rich in some of the best nutrients known to man! These foods were jam-packed with probiotics for weight loss (healthy microorganisms). Because of this, they regularly enjoyed long and healthy lives.

But those wonderful days of longevity and health didn't last forever. Soon came the Industrial Revolution. And the Industrial Revolution also brought the "Industrial Society." During this time, food manufacturers were trying to figure out new ways to genetically modify foods to preserve them for even longer. Two great examples of what they came up with are white flour and white sugar. Naturally speaking, both white flour and white sugar are actually alive.

This means that they will naturally decompose over time (which is good), but it also means that they have a limited shelf life. In other words, they won't last very long. The problem is that to make these foods, they have to be bleached by dangerous chemicals like chlorine. And in going through with these processes, they become essentially dead. In turn, this means that they have almost no nutritional value.

So here's the point of all this: If your food won't decompose (rot), it is dead, and this means it has no nourishment.

On the other hand, those foods that are rich in probiotics are alive and full of helpful microorganisms and nutrition.

About Microflora (Microorganisms)

You may be surprised by this — as we live in a super clean culture — but humans were made to live in harmony with microorganisms. To see all the antibacterial soaps and antibiotics around, you'd think the opposite was true.

The point is this: when you destroy good microorganisms, harmful ones can enter the picture. Here's why:

An imbalance of your microflora can wreak havoc on your immune system because your immune system is almost entirely in your gut (80 percent is there). Your digestive system essentially houses billions and billions of good fungus and bacteria. Their biggest job is to find bad microorganisms and destroy them. Another one of their jobs is to help you metabolize your food. All of this keeps you healthy. This is why many people who are sick have issues in their digestive tract.

In fact, improper digestion and leaky gut have been linked to neurological issues like autism and many chronic diseases. In the end, the fact is that you need a proper probiotic balance within your gut so that you can fully absorb your food's nutrients. This will help your organs and body systems be adequately fed with good nutrients, and it will make you overall more healthy.

“How Will Probiotics Help Me Drop Excess Weight?”

Your body is designed to break down the food you eat into micro pieces. This allows your intestines to absorb the essential nutrients from your food. The rest is expelled as fecal matter. If you have the right balance of gut probiotics, your digestive tract will be able to absorb the nutrients your body needs or sort through what can be turned into waste. However, if you don't have the right balance, you will have waste accumulation, backed-up lines, infrequent bowel movements, body odor, bad breath, and an overload of toxins.

Can probiotics help you lose weight? Probiotics clean your colon, make sure it doesn't get backed up, and free it from obstructions. Your metabolism can almost shut down if you get “clogged pipes.” This is because your body will be trying to target and expel the waste instead of using its energy to break down calories. Those who don't have enough probiotics often gain weight.

Probiotics and Weight Loss According to Research

There has actually been only a small amount of research done in the area of probiotics for weight loss, and in fact, it didn't start to pique the interest of researchers until 2010. This is when a clinical trial (double-blind randomized) evaluated *Lactobacillus gasseri* effects on obesity.

The trial was in *The European Journal of Clinical Nutrition*. The results were profound because it was found that drinking 200 g of fermented milk every day over a course of 12 weeks brought about a decrease in abdominal fat of 4.6 percent, a decrease in BMI of 1.5 percent, a decrease in waist size of 2.8 percent, and a decrease in body weight of 1.4 percent. At first, that may not seem like too much, but remember that it doesn't include any other changes to exercise routines or diet.

More research on probiotics for weight loss shows that it can also help other areas of health. Last year, a study showed that, "Certain strains of *Lactobacillus* appear to have a reproducible effect on weight as a weight-gain effect in lean humans and animals or a weight-loss effect in overweight/obese humans and animals."

Can probiotics help you lose weight? When I'm asked how much someone should weigh, I always respond with: "Your body will know." In general, if you eat a diet that is rich in probiotics and superfoods, and you exercise regularly, your body will take care of the rest.

How to Start Eating More Probiotics for Weight Loss

Consuming probiotics for weight loss can easily be added to your diet through a soil-based organism supplement or with food from your own garden or a farmer's market. Here are a few of my favorite probiotics-rich foods that you should try!

KEFIR

When researching probiotics for weight loss, you'll find foods like kefir top the list. Made of a special combination of yeast (kefir grains), bacteria, and milk, the name comes from the word "keif," which means "good feeling" in Turkish. It was 3,000 years ago that kefir was first described in Russia in the Northern Caucasus Mountains.

Some studies also say that kefir can be helpful for those who are lactose intolerant. However, coconut milk from a health food store might be just as good of a dairy milk substitute.

KIMCHI AND SAUERKRAUT

Kimchi comes from Korea, and sauerkraut comes from Germany. Kimchi is bok choy, cabbage, and other veggies that are fermented, and sauerkraut is only fermented cabbage. Both of these foods are rich in enzymes digestion and probiotics for weight loss. They also support good bacteria growth because of their high amount of sour tasting organic acids.

KOMBUCHA

Kombucha is a blend of cane sugar and black tea that is carbonated. It is rich in probiotics, enzymes, and B vitamins. The *Journal of Medicinal Food* says that kombucha “harmonizes and balances metabolism in general and abolishes or limits fat accumulation.” It’s been popular in the Far East for over 2,000 years. Who knew this trendy healthy drink was loaded with probiotics for weight loss?
Coconut Oil

Coconut oil is rich in capric-acid as well. In 1985, the *Journal of Toxicology and Environmental Health* found that one injection of capric acid in rats ended in an “initially rapid, then a gradual decrease in food consumption and a parallel loss of body weight.” Additionally, some research has shown that to maintain a healthy weight, you also need healthy oils that have lots of medium chain fatty acids in them.

NATTO

This is a dish of fermented soybeans that is popular in Japan. It contains a strong probiotic for weight loss called *Bacillus subtilis*. This has been known to enhance your body’s digestion of vitamin K2, improve your immune system, and support heart health. It also contains nattokinase, an enzyme with anti-inflammatory powers that can also help cancer.

APPLE CIDER VINEGAR (ACV)

An honorable mention, technically not a probiotics for weight loss, apple cider vinegar is great metabolism booster. It’s also been known to control diabetes, blood pressure, and cholesterol. To start drinking this, mix one cup of ACV with organic raw honey and a squeezed fresh lemon. You can mix it with another fat burner, coconut oil, as well. It makes a great vinaigrette.

A Test of Trustworthiness

Remember that you should have a minimum of one bowel movement every day. In fact, if you were firing on all cylinders, you'd be going to the bathroom about 10 minutes after each meal. You could be lacking probiotics if you don't, and you probably have toxemia. Try adding probiotics to your diet, and you'll hopefully see changes in your restroom habits. You should see these changes within a month. If you don't, talk to a natural health care provider.

Chapter 6

Bioactive Foods & Why You Need Them

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 multi-vitamin 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.

This is why my family has turned to bioactive-rich foods and we consider them one of the biggest keys to unlocking health. But, if you're like most people, you've never heard of bioactive compounds, so let's start there...

What Are Bioactive Foods?

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:

- **Essential Nutrition** - nutrients that are necessary for life that your body cannot make: carbs, fats, proteins, water, certain vitamins & minerals.
- **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.
- **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 detoxifiers. 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 reduced levels of bioactive compounds.

- Bok choy contains sulforaphane, which improves blood pressure and kidney function. It also has lutein and other anti-inflammatory cancer-protective 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 to 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](https://www.seafoodwatch.org) to find a list.)

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 cure 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 metabolism-boosting favorites is the Republic of Tea's Get Burning blend.
- **Senna tea** stimulates the intestines, aiding in the natural process of elimination. [Traditional Medicinals' 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 essential 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 YOU CAN EXPECT WHEN YOU MAKE THE SWITCH

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 fat-burning 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.

Chapter 7

Digestive Enzymes & Key Benefits

What are digestive enzymes? Believe it or not, we have had very little information on the inner workings of the digestive system until just recently. Now, illnesses linked to malabsorption are growing in frequency and have been linked to lack of digestive enzymes.

I am reminded of a Chinese proverb that says, “He that takes medicine and neglects diet, wastes the skill of the physician.” While this saying makes sense, it may not be as true as we would like to believe. A proper, nutritious diet is not all we need to maintain our health and fight off illness.

A Look at Digestive Enzymes

Digestive enzymes exist primarily to promote our body's life preserving chemical reactions. These enzymes break down larger molecules so that our bodies can more easily absorb them, which is essential to our survival.

There is a lot going on in the initial section of the small intestine, also known as the duodenum. It is here where simple sugars are extracted from carbohydrates, amino acids are extracted from proteins, and fatty acids are extracted from fats and cholesterol.

To ensure the metabolism stays running strong, macronutrients are broken down into small molecules that can then travel through our blood stream. Also, micronutrients that haven't been split by the stomach acid are absorbed into the bloodstream as well.

From there, the pancreas creates bile salts or acids that are made up of acids, cholesterol, water, fats, electrolytes, and bilirubin. These are all sourced from the liver by way of the gallbladder. It is when the cholic and chenodeoxycholic acids mix with glycine or taurine, that these bile salts are produced. Our body uses the bile salts to break down foods and allows the lipase enzyme to further reproduce.

INTESTINAL ENZYMES, THAT SPECIFICALLY AFFECT SUGAR METABOLISM, INCLUDE:

- **Maltase** which transforms maltose to glucose
- **Lactase**, a dairy sugar, which transforms lactose to glucose
- **Sucrase** which transforms sucrose to disaccharides and monosaccharides
- **Cholecystokinin** which aids digestion of proteins and fats
- **Aminopeptidases** which degrade peptides into amino acids
- **Secretin** which manages the secretion of the duodenum

WHEN TALKING SPECIFICALLY ABOUT FATS AND AMINO ACIDS, PANCREATIC ENZYMES INCLUDE:

- **Phospholipase** which transforms phospholipids into fatty acids
- **Nucleases** which transform nucleic acids to nucleotides and nucleosides
- **Trypsin** which transforms proteins to amino acids
- **Lipase** which transforms triglycerides into both fatty acids and glycerol
- **Amylase** which transforms carbohydrates into simple sugars
- **Elastases** which degrades the protein elastin
- **Chymotrypsin** which transforms proteins to amino acids

This is why digestive enzymes are not just beneficial, they are essential to life. The work to dissolve the foods we eat into good cholesterol, amino acids, fatty acids, simple sugars and nucleic acids, help in forming our DNA.

THERE'S A SIX-STEP PROCESS THAT STARTS WITH THE CHEWING OF FOOD AND KICKS OFF A BIOLOGICAL DOMINO EFFECT:

1. Saliva (Salivary amylase) is produced in the mouth. This enzyme instantly aids in breaking down the food while we chew, a process that continues once the food makes its way to the stomach.
2. Pepsin, acids and other enzymes are released by the parietal cells in the stomach which starts the procedure of debasing the partially digested food into "chyme."
3. Gastric amylase takes over from the acid-neutralized salivary amylase.
4. About an hour into the digestion process, the chyme is sent to the duodenum, or the upper small intestine, where the hormone secretin is released. This is triggered by the acidity from the stomach.

5. That process then tells the pancreas to release the hormones, numerous enzymes, including lipase, trypsin, amylase and nuclease; bicarbonate, and bile.
6. The acidity of the chyme transforms from acid to alkaline due to bicarbonate changes. This process allows the enzymes to digest food and helps bacteria that survived the stomach's acidic environment to break down further.

This is the point at which most of the work is done, unless you are suffering from insufficient digestive enzymes. If that's the case, supplements are needed.

Supplementing with Digestive Enzymes

The approach we take to supplementing with digestive enzymes will either be proactive or reactive. And this basically comes down to how we look at nutrition today. I know many of you take the view that "if it ain't broke, don't fit it." Am I right?

When you look at it that way, you're basically telling yourself that since I don't have any noticeable gut health issues, there's no need for enzyme supplementation. But a little extra help is not necessarily a bad thing, especially considering the declining nutrient supply in our food and the increase in chronic diseases, such as diabetes and heart disease.

However you decide to look at it, the truth remains that more and more people are turning to digestive enzyme supplements for specific health conditions.

Digestive Enzymes as We Age

The older we get, the more alkaline the acid in our stomach becomes. When it comes to our enzyme production, this means the likelihood that the acids triggered by chyme entering our intestine could fail.

This is bad because when the acid triggers fail, it starts a chain reaction and secretin isn't released, which in turn stops pancreatic secretions. In fact, the more we age, the more likely digestive issues can result from enzyme deficiency or low levels of stomach acid.

A Lack of Stomach Acid (Hypochlorhydria)

Unfortunately, the lack of stomach acid, a condition known as hypochlorhydria, doesn't pertain solely to the elderly. Not only does the limited stomach acid fail to trigger its intended reactions, but also it is not enough to break down foods that release the nutrients, vitamins and minerals our bodies desperately need.

The majority of the micronutrients in foods are released in the stomach. When this process doesn't work as intended, an automatic enzyme deficiency is created.

Digestive Enzymes and Liver Disease

People suffering from liver disease are most likely suffering from an enzyme deficiency at the same time. Alpha-1 antitrypsin, a more common condition, is a genetic disease that impacts about 1 in 1,500 people around the world. This usually affects adults between the ages of 20 and 50 with breathing and other respiratory issues, and nearly 15 percent of adults will develop some sort of liver condition.

There are also other illnesses, which at first may not appear to be related to an enzyme deficiency, that need to be explored.

For instance, Crohn's disease could be a direct result of insufficient digestive enzymes. Deficiencies of Iron and Vitamin B12 could be signs that the digestive system is failing to remove the proper nutrients from the food you eat. The same goes for Vitamin D deficiencies, which indicate malabsorption, and Vitamin A, which can cause blindness.

But you don't have to wait until you have a diagnosed sickness to determine whether you enzyme deficient. Other, minor, conditions can be a warning sign, such as:

1. **Gastrointestinal Complaints** – One gauge, which is paired with stomach distention around an hour after eating, is diarrhea. Flatulence and indigestion can be indicators of an enzyme deficiency.
2. **Stool Changes** – When your stool is pale and floats in the toilet bowl, this is a sign that your pancreatic enzymes are not performing the way they should. This is because fat is not being broken down properly and fat floats. One more sign can be greasy or fatty deposits left floating in the toilet bowl.

3. **Fluoridated Water** – Recent research proposes that fluoride in our drinking water may be responsible for the decreased activity of both pancreatic lipase and protease. (7) The report, which was conducted on pigs, has major repercussions relative to increased numbers of free radicals and loss of mitochondria production.

So the answer to “who should be taking digestive enzyme supplements,” as it turns out, is more than we first thought.

What Are Digestive Enzymes and How Can We Benefit From Them?

There are many benefits to taking supplements of digestive enzymes. As we know from above, we simply cannot process food without them. But going a bit further, there are three important reasons for taking digestive enzyme supplements:

- They promote gut health by reducing the amount of stress in the gastrointestinal tracts.
- They improve the absorption of nutrients into the body, helping to stop malnutrition.
- They act as a counter measure against naturally occurring enzyme inhibitors, such as those found in peanuts, nuts, seeds, egg whites, wheat germ, beans and potatoes.

Best Supplements for Digestive Enzyme

There are three sources from which digestive enzymes are sourced:

- Plants – From fungi.
- Animals – Mainly from the pancreatin from hogs or oxen.
- Fruit – Pineapple and papaya are best.

Options for Vegetarians

While off-the-shelf digestive enzyme products can have a plethora of ingredients, some are limited solely to plant-based contents. There are geared toward vegetarians and vegans. Plant-based supplements will typically contain bromelain, an enzyme most commonly found in the pineapple, and papain, which is found in papaya. Others will include herbs and spices that complement these enzymes. While it's not an enzyme, but instead an herbal remedy, Amla, or gooseberry, extract is sometimes included for its ability to synergize with other compounds.

Then there are also products built specifically for vegans. For these, the pancreatin source comes from *Aspergillus Niger* (a common fungus), in most cases. This is a fermented product, not an extract such as ox or hog bile.

Full Spectrum Digestive Enzymes

For basic improved digestion, it's important to look for full spectrum blend of digestive enzymes. A few tips include:

- Make sure your blend has herbs, such as ginger and peppermint, which support digestion.
- Look for options with more lipase and bile salts if you suffer gallbladder problems.
- If you see Betain HCl on the list of ingredients, you'll want to make sure pepsin is there, too.

It's important to keep in mind your specific needs because some people will require more pancreatic enzymes than others. Many supplements will hold some level of pancreatin, which is a combination of all three pancreatic enzymes.

When all is said and done, enzyme supplements have great value.

SECTION 2

Essential Oils

Chapter 8

Getting You Started with Aromatherapy

Although the use of aromatherapy essential oils isn't new, it has definitely gained a wild fanfare in recent years. More and more people are using essential oils in place of artificial fragrances in the home and on their bodies, for culinary purposes, and for health and healing. The more we use aromatherapy essential oils, the more we fall in love, and it's hard to remember a time when aromatherapy was an unfamiliar term.

Everyone has to start somewhere, though – few of us were born into families who already used aromatherapy essential oils regularly. If you are just starting out and find yourself a bit lost in the jargon, recipes, and excitement, don't worry. You aren't alone. Let's take a little bit of time here and catch you up to speed.

Our Favorite Aromatherapy Essential Oils Blends

I'm not sure about you, but my wife and I utilize aromatherapy essential oils all day long. It enhances our mood, health and virtually every aspect of our lives! We have an essential oil diffuser in nearly every room in our home, and once we gave all those toxic plug-ins and aerosols the boot, we started to notice some pretty cool changes in our health and the health of our children.

These are our favorite blends:

- ***Good Bye Allergy Blend*** – Lavender, lemon, and peppermint
- ***Healthy Digestion Blend*** – Anise, caraway, fennel, ginger, lemon, tarragon
- ***Focus Blend*** – Cedarwood, frankincense, sandalwood and vetiver
- ***Christmas Blend*** – Fir (Balsam, Douglas, white), peppermint and vanilla absolute
- ***Holy Anointing Blend*** – cinnamon, frankincense, myrrh (cinnamon is a hot oil when used topically. Always dilute it appropriately or use in a diffuser instead of topical blend.)
- ***Immune Boosting Blend*** – Cinnamon, clove, eucalyptus, rosemary, orange and lemon
- ***Joyful Blend*** – Orange, lemon, bergamot, grapefruit and vanilla absolute

- **Deep Breathing Blend** – Cardamom, eucalyptus, lemon, peppermint, rosemary, tea tree
- **Sleepy Time Blend** – Roman chamomile, lavender, and vetiver

At this point, you may be asking, “How can these aromatherapy blends make a difference in my life?”

Well, it’s all about the healing power of aromatherapy essential oils...

What are Aromatherapy Essential Oils?

“And the leaves of the tree are for the healing of the nations.”

~ (Revelation 22:2)

I can think of no other substance on earth that epitomizes this Bible verse than aromatherapy essential oils.

The very first questions a newbie should ask – what is aromatherapy, and what is an essential oil? You might associate aromatherapy with massage therapists and thick massage oil. Or perhaps you picture heavy patchouli incense and a Volkswagen van. Or the base, middle, and high notes of a perfumery’s concoctions.

All of these can be accurate associations with aromatherapy – while at the same time, each of them may or may not be using essential oils.

The term essential oil doesn’t refer to how much we need it (though many of us argue that they are pretty vital parts of our daily lives!). In fact, the original scientific term for these oils is volatile oil, which paints a much better picture of what we’re referring to.

The volatile oil – or essential oil – of a plant is the part that releases quickly from the plant and into the air. The Encyclopedia Britannica describes the naming rationale:

Essential oil, highly volatile substance isolated by a physical process from an odoriferous plant of a single botanical species...Such oils were called essential because they were thought to represent the very essence of odor and flavor.

The essential oil is why you smell a rose when you lean down and sniff the blooms. It releases as you walk through the garden and shake up the plants. How many plants can you identify by their scent alone? The scientists who had the privilege of naming this chemical component could think of plenty, as well,

and thus believed the oils to be “essential” to the plant as much as it was volatile (quickly released).

We now know that aromatherapy essential oils are more prevalent in some plants than others, and can be found in roots, stems, leaves, and blossoms alike. They aren't necessarily an essential part of the plant – in fact, we don't always know the function the volatile oil serves, and it can vary from plant to plant. But we do know that aromatherapy essential oils are complex, with broad therapeutic actions that vary based on their composition.

Ultimately, the essential oil of a plant is a component of the plant itself, filled with vast amounts of molecules specific to that plant's needs and uses. This is important to remember, because chemical composition (*phytochemistry*, the chemistry of plants), tells us how we can best use a substance.

History of Aromatherapy

More recently, essential oils have been used under the guise of the aromatherapy profession, although we have records of people using them as far as thousands of years ago. Did they have essential oils like we know them today? Of course not! Modern distillation procedures are relatively new in relation to the Earth timetable. However, Nicander (b.c. 183—135), a Greek poet and physician for example, “Spoke of the extraction of perfumes from plants by what we should now call a process of distillation” and we have other ancient accounts of crude methods to extract the precious oil from plants.

The term aromatherapy is relatively new in our history, coined by a French chemist named Rene-Maurice Gattefosse in the 1930s. His work ultimately led to the modern understanding of essential oils as therapeutic for health and healing benefits.

This shift toward isolating and emphasizing the use of aromatherapy essential oils as a separate and concentrated compound with the goal of therapeutic results has shaped what we know about essential oils today. It gave us the vials of pure essential oils, separate from the other compounds they shared space with in the larger composition of a plant. But it wasn't the first time essential oils were recognized for their healing abilities.

Because essential oils are part of herbs – the aromatic compound that hits your nose right away – they can be part of herbal preparations. The practice of using herbs as medicine dates back to the beginning of human history, and since we have always had noses, the fragrant component of those herbs did not go unnoticed.

Most civilizations utilized fragrant herbs for medicine and rituals, and oil extractions were commonly used to separate the fragrance and medicinal benefits from the bulkier material of the rest of the plant. Many of the oils used in this way were rich in essential oils that we continue to use to this day – myrrh, cinnamon, frankincense, cassia – prized for their fragrances and traded vigorously throughout the ancient world and into the development of the Western world we know today.

The ‘spices’ were burned, infused into carrier oils, and even crudely distilled. This crude distillation produced something similar to what we nowadays call hydrosols, which contain minute amounts of the essential oil from the distillation process.

Today, thanks to pioneers such as Gattefosse, we really do have essential oil extraction down to a science, and we’re learning more all the time.

Herbal Preparations vs. Essential Oils

There is no doubt that the ancients realized the fragrance was something more than just pleasant. Such was the confidence in the therapeutic power of aromas that, at one point, the entire prevailing theory of disease centered around bad and good smells!

So when we talk about aromatherapy essential oils being used from ancient times – for example, in the Bible, when fragrant offerings were commanded and incense was to be burned – it’s true in that the essential oils were present and utilizing the fragrance was the intended result.

Where ancient and modern use differs, however, is that we are now able to isolate the essential oil – not simply include it, but use it exclusively. An herbal oil is herbal matter infused with an oil such as olive, so that it contains the essential oil (albeit in very small amounts) alongside many other compounds from the plant. There are fewer compounds, obviously, since the plant matter is strained away and discarded, but there are still many, creating a highly usable oil infused with a range of medicinal properties.

The essential oils as we know them, on the other hand, take the small amount of volatile oil from part of a plant and concentrate it so that it’s the only product of the plant remaining. This is usually accomplished using steam distillation to release the droplets and then catch them. Because it’s an “extraction” of a very small facet of a plant, it takes large volumes of each plant to create even a 5ml bottle of essential oil.

It comes down to this: for herbed oils, the oil is now medicinally stronger than it was before, but the herbal matter is more varied and less concentrated than an essential oil.

For aromatherapy essential oils, the oil is concentrated and specific in use, condensed from large amounts of herbal matter that have been isolated for a single component, therefore compressed into much, much smaller volumes of oil.

To break it down further, the herbal oil can contain the essential oil but not vice versa.

How Aromatherapy Essential Oils Work

Let's put this into practical terms. Cinnamon, for example, is a delicious spice. The cinnamon that you sprinkle onto toast is essentially ground-up bark and is the culmination of a combination of many chemical components – yes, including essential oils.

In cinnamon sticks or ground cinnamon, the oils are dispersed amongst the other components, giving you a wide range of substances to stir into tea or add to Christmas pie.

Now, to make cinnamon essential oil, that same bark would be placed through a distillation process, releasing and separating the essential oil. Great amounts of bark would be used in the process, and precious vials of aromatherapy essential oil would be the result.

Same bark, same plant. But would you shake your cinnamon essential oil bottle all over your morning toast, just like you did with the powder?

Putting Oils in Context of the Plant

When the essential oil – whatever is left after processing, packaging, and then your cooking methods – is part of the whole product, it is in such small and dispersed amounts that it's only a small contribution to the whole. You're enjoying powdered cinnamon for the combination of molecules that create texture, flavor, and varied benefits.

When you use an essential oil, you should use it for the very specific benefits that those specific molecules can provide. In the case of cinnamon bark, it's pretty potent as an antibacterial, moreso than a dessert seasoning.

And while it still does taste great and could be used with proper care in a culinary setting (we'll get to that in a minute), it's also a dermal irritant. In other words, it could really hurt your skin or the tender lining of your mouth and throat if you were to use it just like cinnamon sticks or powder.

To throw another wrench in the works, the essential oil gathered from the bark won't have the same components as that of the essential oil taken from leaves. And it will vary between varieties of the same plant species, growing methods, seasons, and even the way it's harvested. These are volatile oils, remember? They are pretty delicate in their composition and will adapt based on their conditions and use to the plant.

Pretty powerful stuff! The progress that we have made since *Aromatherapie* was first written allows us to choose aromatherapy essential oils for specific uses based on what we know of their composition. Rather than burning whatever smells good and hoping it chases away disease, we can combine the art and science of aromatherapy to be intentional and effective in our use.

How Aromatherapy Essential Oils are Used

The term *aromatherapy* was coined to combine aroma and *therapy*, indicating therapeutic benefits using fragrance. This is still the heart of aromatherapy, but essential oil use has expanded in many ways and toward many uses. The main categories of use are:

- Inhalation
- Topical
- Internal

INHALATION

Not only is inhalation the oldest form of aromatherapy essential oil use, it is also arguably the safest. Oils diffused throughout a room are relatively safe for most people in most cases due to the low level of concentration when used correctly.

More direct effects can be obtained by breathing in a steam directly or inhaling right from the bottle, or from a few drops on a cloth. This carries the volatile oil directly into your respiratory system and mucous membranes, diffused throughout the steam or air molecules.

TOPICAL

Topical use is a step further than traditional inhalation-based aromatherapy, though still familiar in the context of massage therapy, which often utilizes fragrant aromatherapy essential oils for massage applications.

Instead of the broad diffusion through air droplets that inhalation provides, topical use of aromatherapy essential oils is much more direct. But at the same time, the oil is absorbed through the barrier layers of skin, while inhalation moves quickly through the thinner mucous membranes. Knowing your oil and the goal you have in mind can help you determine which application is more appropriate.

In theory and in professional practice, some aromatherapy essential oils can be used on the skin undiluted. However, the safest application is via dilution. Carrier oils like olive, coconut, jojoba and avocado oils usually have benefits of their own, and you can easily combine a couple of drops in a teaspoon to dilute the oils and help bypass potential irritation.

INTERNAL

Finally, and most controversially, some oils are safe for ingestion. The most basic form of ingestion is in culinary use. Revisiting cinnamon, you could use cinnamon essential oil in a cake batter, but you'd only need one drop for the whole batch vs. a tsp or more of the bark powder.

Another common internal preparation is to combine it into a drink. Do remember that oil and water *do not mix*, so simply adding a drop to water will leave that drop undiluted. Some oils are irritants and all oils are very strong, so it's best to be safe and dilute it into some coconut oil first.

Many aromatherapists believe aromatherapy essential oils are never to be ingested, and most will suggest only trained professionals utilize internal methods. Again, it's better to be safe, and for someone just starting out, this is excellent advice to consider. Additionally, when you are dealing with a specific medical condition, it makes sense to talk to your health care provider about ingestion and dosages.

Conversions and Dilution of Aromatherapy Essential Oils

Dropper sizes vary and volume varies based on oil, so advanced techniques would include more specific measuring techniques. Most bottles that I've seen contain either 5 ml or 15 ml of oil, which would be 100 drops or 300 drops, respectively. For you math enthusiasts out there, this is how the conversions all pan out:

- $\frac{1}{8}$ oz. = 3.75 ml
- $\frac{1}{4}$ oz. = 7.5 ml
- $\frac{1}{2}$ oz. = 15 ml.
- 1 oz. = 30 ml
- 4 oz. = 120 ml
- 8 oz. = 237 ml
- 16 oz. = 473 ml

The final conversion typically looks like this:

- $\frac{1}{8}$ oz. = 75 drops
- $\frac{1}{4}$ oz. = 150 drops
- $\frac{1}{2}$ oz. = 300 drops
- 1 oz. = 600 drops

Using these conversions:

- 1% dilution: 6 drops of EO per oz of carrier oil (1% of 600 drops is 6)
- 2% dilution: 12 drops of EO per oz of carrier oil (2% of 600 drops is 12)
- 3% dilution: 18 drops of EO per oz of carrier oil (3% of 600 drops is 18)

If working with tablespoons are more comfortable for you, 1 oz. = 2 tablespoons. So, there are 300 drops of EO in a tablespoon.

- 1% dilution: 3 drops of EO per tablespoon of carrier oil (1% of 300 drops is 3)
- 2% dilution: 6 drops of EO per tablespoon of carrier oil (2% of 300 drops is 6)
- 3% dilution: 9 drops of EO per tablespoon of carrier oil (3% of 300 drops is 9)

If working with grams, 1 drop of essential oil = 0.02 to 0.03 grams approximately (depending on your dropper), which converts to 20-30 milligrams or 20000 micrograms (μg).

So 30 mg is about 1 drop.

Application Methods of Aromatherapy Essential Oils

Within the major types of aromatherapy essential oil use, there are many ways to actually apply them. These suggestions and guidelines can get you rolling, but once you are familiar with your oils and their safe use, you can really start to think outside of the box.

INHALATION

For inhaled oils, you only need a small amount to create a big impact. Diffusers will use a bit more, but direct inhalation is up close and personal and only requires a couple of drops. Here are some of the methods you might use to inhale essential oils.

- **Diffusion** – Good for blends intended to affect the entire room. Place as few as 2-3 and as many as 6-10 total drops in the diffuser or in a pot of simmering water and let it disperse throughout the room. The benefits should be lasting after the diffusion has ended; there is no need to run it continuously. *Ideally for aromatherapy essential oils that are energizing, antimicrobial, promoting memory and focus, relaxing. Ex: citrus, lavender, rosemary.*
- **Personal inhalation** – Good for portable, direct inhalation for specific benefits to an individual. Fewer drops are needed due to the close proximity of use. Up to 20 drops of an essential oil blend can be used in a commercially made personal diffuser. Or consider jewelry style inhalers such as a piece of porous jewelry, a piece of cloth or handkerchief, or inhalers made of a wick of sorts placed in a glass tube. Place 1-2 drops of a single oil or a pre-prepared blend of oils on the jewelry inhaler, then hold it close to the nose and breathe in periodically. *Ideally for personal benefit such as clear breathing, focus, anxiety, headaches, and stress relief. Ex: eucalyptus, bergamot, peppermint.*
- **Steam inhalation** – Technically also personal inhalation, “tenting” is more intensive and not very portable. When the aromatherapy essential oils need to be inhaled in greater concentration and affect the respiratory system more directly, 2-3 drops of a single oil or pre-prepared blend can be placed in a bowl of boiling water – usually warmed in and poured from a tea kettle. Place a towel over your head and drape it over the bowl

(forming a tent, of sorts), close your eyes, and breathe deeply. Avoid the more hot oils that would irritate mucous membranes. *Ideal for clearing the nasal passages and respiratory system. Ex: eucalyptus, citrus, tea tree.*

- **Sprays** – Aromatic sprays have benefits of both inhalation and, in the case of antimicrobial oils, surface cleaning benefits. Combine 10-20 drops of a combination of oils to ½ oz 190 proof grain alcohol or the 91% isopropyl you can find in the store, then add ½ oz distilled water and shake to combine. Spritz in the air, on linens, or on clothes as desired. *Ideally for air freshening, cleaning, antimicrobial purposes, body sprays, and even topical anti-inflammatory benefits and healing. Ex: tea tree, lemon, thyme.*

Topical Application

Aromatherapy essential oils placed directly on the skin are able to sink in through the pores and then move through the body, creating both topical benefits as well as systemic. While there is a time and a place for neat application, the smart way to apply oils topically is to first dilute them. Carrier oils are non-volatile oils and are not irritants, so essential oils can be blended into them first and then the mixture applied.

Popular carrier oils include: coconut, olive, almond, jojoba, avocado, apricot, and sunflower. Most carrier oils have benefits of their own that can be explored to create even more beneficial blends.

Topical application can be direct in a small area such as for scar healing or broader such as for a massage oil. The important variables here are dilution rates.

- **0.5% dilution** – Strong oils, application on children, and oils that you are testing for sensitization. The heavy dilution allows for greater distribution throughout the application and less per dose. *Ideal for irritating oils, children, and those who are highly sensitive. Ex: cinnamon, eucalyptus, peppermint.*
- **1% dilution** – Even adults who tolerate oils well will still find some oils too strong for normal applications. A 1% dilution rate protects your skin while still enjoying the benefit of the more powerful essential oils or use on sensitive areas of the skin. *Ideal for facial applications, and treatment of delicate skin. Ex: tea tree for acne, frankincense in a facial toner, etc.*
- **2-3% dilution** – This is the most common dilution range, suitable for massage oils, healing treatments, lotions and creams, and cosmetic applications. It is enough to gain significant benefits of the essential oil without risking sensitization. Unless the oil is particularly potent or you

have sensitive skin, this is likely to be the dilution you'll use. *Ideal for most applications – lotions, creams, salves, balms. Ex: geranium, helichrysum, chamomile.*

- **5%+ dilution** – Higher concentrations should be used with care. Or, extremely safe oils can be used in small amounts on small areas of the skin – for example, as a strong acne treatment. Know your oil's safety profile and choose high concentrations with caution. *Ideal for specific situations based on either extreme safety and high potency in a targeted area OR further dilution beyond the initial formula. Ex: lavender, sweet orange, tea tree.*

Ingestion

Typically reserved for culinary oils or for use by trained aromatherapy professionals, ingestion is used when there is a need for specific dosing or certain areas of the body need to be reached that cannot easily be affected by other application methods. Dosage is important, as does education before use. Some of the more common ways ingestion is used are highlighted here.

- Excellent for digestive oils or simply to enjoy the flavorful concentration, 1-2 drops can be mixed thoroughly into a lipid or syrup portion of the recipe and then added to the rest of the batch. *Ideal for oils that benefit digestive wellness, essential oils of culinary herbs, and oils of culinary spices. Ex: dill, sweet orange, cinnamon.*
- Dispersing an oil into a glass of water is the quickest way to ingest it, but do not miss the importance of both dosage and dilution. One drop is more than sufficient, and remember that oil and water do not mix! Without dilution or dispersion, the drop is likely to make direct contact with sensitive internal organs. You can use a dispersing agent like Solubol for essential oils taken in water, or you can quickly mix a drop into a teaspoon of honey and take the spoonful. *Ideal for quick and simple use, especially for digestive wellness. Ex: chamomile, ginger, lavender.*
- A truly medicinal application, encapsulated oils are used to get the oil directly to the stomach, or – in the case of enteric-coated capsules – to the intestines. This is used when the oil is to be consumed regularly and when the individual struggles with the taste of it in other forms. Dilute the essential oil into a carrier before making the capsules, or purchase encapsulated oil blends already made. *Ideal for professional guidance, digestive health, and oils that need to make it directly to the intestines. Ex: peppermint, lavender, lemon.*

Beginners Guide to Aromatherapy Essential Oils

So now that you know what an essential oil is to a plant, how to differentiate between an herbal oil and an essential oil, how the ancients used oils and how that has evolved over time to the modern science of aromatherapy – are you hooked yet?!

Aromatherapy is absolutely incredible. Plants are literally throwing these substances at us (Really! Pay attention the next time you walk past a lavender shrub). And then chemists can isolate those substances and analyze their very molecules. And THEN we can begin to study how these things impact our health? Amazing. If you aren't hooked yet, you will be once you get started.

5 Steps to Get Started with Aromatherapy Essential Oils

1. The best place to begin with aromatherapy essential oils is with familiar scents. Lavender is both a familiar scent and a versatile and safe essential oil. The citrus oils are also easy to use on their own or in blends. Choose a few, and then learn all you can about them.
2. Next, locate a source and make your purchase. Remember that it takes large amounts of plant matter to make small amounts of oil, so a cheap bottle of a precious oil is not likely to be high quality. You want real essential oils – nothing synthetic – and always pure, especially if you are going to learn to safely ingest them.
3. Once you have a few oils ready to go, start by diffusing them on their own, and then in combinations of a couple of drops of two or three of them at a time. You can buy a diffuser, or you can simply simmer a pot of water on the stove and add your drops there.
4. When you are familiar and comfortable with the scents, you will start to learn what blends you like. As you learn more about their effects, you can begin to create blends for specific reasons, like energizing your sluggish afternoon or clearing the air after a virus passed through the house.
5. From there, you can begin to experiment with diluted topical applications, like a soothing peppermint rub or a calming massage.

The important thing is to always be learning – never stop learning! The more we learn and grow, the better we can utilize these precious, truly aromatherapy essential oils.

Chapter 9

Using Carrier Oils for Double Benefits

When reading about essential oils – whether you are brand new to essential oils or digging for new recipe blends – you’ll often see a carrier or base oil included in the discussion, or see mention of dilution. So what is a carrier oil, and how do you know which carrier oils to get?

The carrier oil is a fatty extract, usually cold pressed from its source. Individual allergies aside, carrier oils are not likely to cause sensitization and therefore make an excellent medium to disperse the more concentrated essential oil across your skin.

Carrier oils are nutritive and have healing properties of their own, so in your discovery of essential oils, don’t forget to take some time to learn about your options for carrier oils, as well.

When to Use Carrier Oils

Before you ask – yes, carrier oils are necessary! Once you get the hang of it, adding your essential oils to a carrier first is hardly any extra work, and in return you are actually amplifying the efficacy of your healing application.

It might seem backwards to say that diluting a substance makes it more effective, but in this case it is true. Essential oil applications without carrier oils (called “neat” applications) put the oil directly onto your skin. A few things of note are happening here:

1. The skin may be sensitized to the concentrated oil, harming the body by creating an allergic response.
2. The essential oil may quickly evaporate off the surface of the skin, whereas the lipids in a carrier can help keep it on the skin longer. Remember, essential oils are “volatile organic compounds,” which means that they are emitted as gas when exposed to open air. This is why you may notice their aroma within seconds of opening the bottle. Carrier oils may decrease the absorption

3. You can't massage it in or disperse it across wider spaces.
4. An ingested neat oil may cling to the mucous membranes and never make it to the intended site of application.
5. Not to mention, ingesting neat oils can easily burn your mouth and irritate your esophagus!

Bottom line: using essential oils undiluted is largely a waste of time, money and can place your body in harm's way. While there are instances when neat is acceptable – gentle oils, or oils under the supervision of a trained aromatherapist – your best bet is to dilute essential oils into a carrier every time.

Without essential oils, you will also use carriers as the base of most DIY herbal preparations, from lotion bars to chapstick to salves. Start with the most accessible carrier oils, then work through others as you learn their benefits and ideal uses.

4 Categories of Carrier Oils to Know

Herbal supply stores, health food stores, and online supply shops will offer you dozens of carrier oils to choose from. Don't get overwhelmed at your options! What is a carrier oil? Carrier oils are relatively simple to understand, and for most preparations, you can't really go wrong.

We'll walk through the more common of the carrier oils here, but if you run into one you aren't sure about that isn't covered here, take the time to look it up and learn what it is and does. Self-education may not teach us everything, but it can take us a long way if we pursue it.

1. BEGINNER CARRIER OILS: OLIVE AND COCONUT

The best place to start is at the beginning, and for DIY aromatic and herbal preparations, that's right in your own kitchen. Really, if we take it back to Hippocrates encouraging us to find our medicine in our food, the kitchen has been the starting point for many generations!

Let's spend a bit of time on these two, as this is likely where you'll start with carrier oils and diluted topical preparations before branching out to other carrier oils.

Olive Oil

Almost undoubtedly in your kitchen, as it is probably the most commonly used culinary and carrier oil out there. Because it is used so much, however, it may be adulterated with similarly-colored sunflower and corn oils.

Once again, we are reminded to check our product sources carefully! Extra virgin olive oil – which is cold pressed and minimally processed – is the ideal, and it will be a light green color with a thick scent. Sometimes, the scent can be off-putting, so you'll want to choose olive oil when making a highly aromatic blend or preparation. In 2015, a double-blind, randomized study took place in which olive oil was used on diabetic patients with ulcers on their feet. After four weeks of treatment, the patients who'd received olive oil topical treatments had smaller, less pronounced ulcers than those who received placebo or nothing. The use of olive oil as a carrier can add to the soothing, healing effects of your dilutions and preparations.

Choose this when: Making homemade salves, creams and oil pulling. Good for dry skin.

Coconut Oil

A saturated fat taken from coconuts, which are actually giant seeds. The oil spreads over the skin easily with very little greasy residue, taking the oils you've blended in with it. Even without anything blended into it, coconut oil has been shown to enhance the wound healing process. You probably already use coconut oil regularly; its popularity has recently sparked internet jokes about how much you can do with coconut oil: fix your hair, fix your budget, fix your significant other... The jokes, of course are rooted in reality, poking good-natured fun at the almost comical range of things you can do with coconut oil.

Choose this when: Making most of your DIY projects and is a nice massage oil carrier. Tasty addition to your oil pulling ritual. And is best for oily skin as it leaves little oily residue.

The way coconut oil is processed will affect its uses. Cold pressed coconut oil (virgin, extra virgin) will retain the coconut scent and will become solid when room temperature or cooler. Heat processed coconut oil will not have the taste and smell of coconut, and fractionated coconut oil (the most processed of the options) will not become solid. The tendency to solidify can be good or bad for your preparations – for quick dilutions, it is sometimes nice to mix up the essential oil into a semi-solid coconut oil and then be able to rub on a quick-melting preparation as it warms to your skin.

Fractionated Coconut Oil

Literally a fraction of the coconut oil – being that all of the long chain triglycerides have been removed – fractionated coconut oil is a lightweight emollient that is a must-have for dry or sensitive skin. Also referred to as FCO, It provides an effective barrier without clogging pores and leaves your skin feeling smooth and never greasy. It is considered to be the most cost-effective oil because it will not go rancid. In fact, some suppliers claim that it can be mixed with other (more expensive) carrier oils to extend their shelf life. However, once you add essential oils that begin oxidation process, the carrier oils will begin to lose their shelf life stability. It is colorless and odorless, and it incorporates perfectly with other oils without altering their scent, appearance or effectiveness.

Chose this when: Quick dilutions with what you have on hand; enhancing skin healing; perfect to treat health conditions like infections, open wounds and chronic disease.

2. NUT & SEED CARRIER OILS: ALMOND AND JOJOBA

These oils are probably not in your kitchen for cooking, but they are still very commonly purchased, easy to work with, and rich sources of skin-health nutrients. If you are ready to take a step beyond your pantry, these make a good place to start.

Almond Oil

Very mild in scent and flavor, almond oil is nutrient dense and versatile. Almond oil is a good topical source vitamins A & E, adding to the many nutritional benefits that almonds have simply as a food. Traditional uses indicate almond oil for dry skin conditions, like psoriasis and eczema. As an emollient, almond oil can be soothing for sore skin. It's fabulously nutritious and is a favorite for skin.

Jojoba Oil

If you've not yet heard of jojoba (or heard it pronounced), it's ho-HO-ba that you are looking for. Derived from the seeds, jojoba is actually classified as a liquid wax, which adds another option to your carrier oil choices. It doesn't solidify as quickly as coconut oil does, but the consistency is well suited to deep penetration and moisturizing. Jojoba has an excellent shelf life, which is perfect for storing until you need it for small dilution preparations. It has been studied for anti-inflammatory properties, wound healing ability, and efficacy in face-mask treatments for acne. It's one of Sabrina's favorite and she uses it as a base for her carrier oil blend.

Choose these when: Skin is dry or inflamed; nutrients are lacking; versatility and ease of use are desired. Good for most DIY projects.

Rosehip Seed Oil

This is one of Sabrina's favorite carrier oils for skin conditions. You don't have to use it solo, but it can be a great oil to add into any blend you're using to boost the nourishing richness. It's high in Vitamin C and is a soothing emollient for a variety of skin conditions. It can even be part of a skin conditioning lotion bar!

Choose this when: Whenever you need additional support for your skin or add this into healing skin serum.

3. FRUIT CARRIER OILS: APRICOT, AVOCADO, AND GRAPSEED

Easy to remember thanks to kitchen staples, these oils typically come from the seeds of their respective fruits, as is the case with the other carrier oils. These choices are as affordable and accessible as they are versatile.

Apricot Oil

Available as expeller pressed, refined, or cold pressed, the difference is simply texture and preference. Apricot oil's nutrient profile includes vitamins E and A as well, or at least the carotenoid precursor to vitamin A. It is edible as well as beneficial topically. Because it is so incredibly gentle as well as nourishing, apricot oil is a good choice for applications that will cover a good deal of skin or that will be applied on children heavily.

Avocado Oil

Avocado as a fruit is one of the best sources of fat and nutrients (and dip!) you can find. The oil itself, as you might imagine, is an emollient, taken from the smooth flesh around the pit. An exception to the typical seed-derived oil, avocado oil is rich in nutrients and excellent at penetrating the skin. In another animal trial, this one occurring in 2008, avocado oil was also found to have good wound healing ability. Before elaborating on the study, the researchers noted that the oil is "rich in nutrient waxes, proteins and minerals, as well as vitamins A, D and E...an excellent source of enrichment for dry, damaged or chapped skin."

Grape Seed Oil

Also a culinary oil, grape seed oil topically is used for its light texture and lack of residue. Once on and in the skin, grape seed is another oil verified for its contributions in wound care and healing. The high levels of fatty acid content and antioxidants in grape seed oil contribute to much of its beneficial composition. Without the heaviness of more saturated oils, grape seed makes a cleaner topical application with less of a greasy film.

Choose these when: Creating a massage oil; looking for deep hydration; creating chapsticks and balms.

4. ESSENTIAL FATTY ACID CARRIER OILS: BORAGE AND EVENING PRIMROSE

While most of the carrier oils we've talked about and what is on the market are decent sources of essential fatty acids, some oils are considered good sources of these vital nutrients.

Borage Oil

Taken from the seeds of a flowering perennial herb, borage oil is a potent source of omega-6 essential fatty acids. While we usually take omega-3 to counter the unhealthy balance of essential fatty acids that our diet affords, borage oil as a natural source is a different story. Omega-6, at its root, is actually as anti-inflammatory as omega-3, which likely aids in the topical benefits of borage oil. It's in the overconsumption of junk-food-sources and lack of balance in the omegas that we begin to see trouble. Borage oil has been used for dermatitis and other anti-inflammatory preparations.

Evening Primrose Oil

Named for the flowers that open only in the evenings, evening primrose oil is a more delicate oil that must be cold pressed, refrigerated, and should not be added to any heat preparations. Typically, evening primrose is consumed in supplement or culinary form, and of those uses it is highly researched and evaluated for its benefits as a source of essential fatty acids. For topical use, results seem to be similar to that of borage: anti-inflammatory effects that relieve flare ups such as dermatitis.

Although these are culinary oils, we already get large amounts of omega-6 in the diet. Be cautious with long-term culinary ingestion without professional guidance.

Choose these when: Resolving topical inflammation; essential fatty acid deficiency/imbalance is a problem. Creating hormone-balancing serums and women's health blends.

How to Use a Carrier Oil

For simple dilution purposes, start with small amounts of your carrier oil and work up as you become comfortable and have sanitary ways of storing your blend. Always place blends into heat-sanitized containers, particularly if they will stay there for any amount of time.

Start with 1 tsp of carrier oil, or 5ml of oil. It will vary from 60-150 drops depending on the specific oil. Since it's oil we are dealing with, the assumption is that it will be closer to 60 than 100. You can assume 100 for extra safety and simple dilutions (1% = 1 drop), or you can calculate based on the more generous 60 drops.

Here's a simple dilution guide (Note some oils need a different dilution amount but this is a good starting place.):

- 1% dilution = 6 drops of essential oils per 1 ounce of carrier oil = good for sensitive skin face, genitals, underarms, babies to toddlers
- 2-3% dilution = 12 – 18 drops of essential oil per 1 ounce of carrier oil = standard adult concentration for massage oils, creams and DIY recipes
- 5% – 10% dilution = 30 – 60 drops of essential oil per 1 ounce of carrier oil = more for acute conditions like infections. Don't use for more than a week at a time.
- 25% dilution = 150 drops of essential oils per 1 ounce of carrier = for one-time application like wart removal, skin tags, or areas with localized pain.
- 50% dilution = 1:1 ratio of carrier to essential oils = not recommended unless under the supervision of a trained professional.

Stir the essential oil into the carrier, then apply as indicated. And that's that! You've successfully diluted your essential oil and enjoyed the added benefit of a nourishing carrier oil.

Chapter 10

Culinary Dosing & Cooking with Essential Oils

Learn how cooking with essential oils safely (and deliciously!) can help you cook up nutritious concoctions in the kitchen.

Combining nutritious foods with flavorful spices and herbs is a time honored tradition and a beautiful picture of God's design for the Abundant Life. The flowers and herbs that grace our gardens are also delicious sources of wellness. Extending this celebration to cooking with essential oils as well widens our appreciation for creation and all of the goodness available at our fingertips.

Cooking with Essential Oils Ingestion Controversy

Admittedly, the ingestion of essential oils is a hot topic with much controversy. What, if any, oils can be ingested and how do we do it? There are plenty of opinions out there, but past precedent alone tells us that cooking with essential oils is nothing new.

Essential oils and extracts have been used as flavoring agents for years. It's just too easy to add a drop or two of an intensely flavored oil in place of time consuming ingredients with much more volume.

In addition to flavor, cooking with essential oils are regularly tested by researchers for their potential to improve food safety. Antimicrobial oils, the theory goes, may be able to minimize food borne illness if manufacturers added it to packaging.

So the idea of cooking with essential oils or incorporating them into our kitchen process is nothing new. The important thing is to do it safely, appreciating the differences between a whole herb or spice and its essential oil.

You'll also want to note that not every essential oil is a good choice for cooking. Sometimes cooking with essential oils changes the taste and it doesn't taste quite as yummy as the whole herb. Sometimes the oil has too much of a certain component, making it less than ideal or even unsafe in high quantities. Fennel is a good example, when a woman ate an "undisclosed amount" of fennel cakes with essential oil in them and experienced seizures.

Knowing all about the oil you'd like to use – its safety, profile, and precautions – is important. With proper use, dilution, and amounts, I believe cooking with essential oils can be both safe and fun.

Cooking with Essential Oils Basics

Cooking with essential oils actually helps to make cooking much easier and more flavorful. There's always a place for herbs and spices – we need the variety of nutrients they offer! But sometimes, it's just easier to add a drop or two instead of spending time chopping and slicing and preparing. Other times, a yummy essential oil can take the place of a recipe's artificial flavoring ingredient (think "orange extract" or "lemon flavoring" or vanilla).

For the basics of cooking with essential oils, remember to:

- Convert
- Dilute
- Delay

CONVERT THE AMOUNTS WHEN COOKING WITH ESSENTIAL OILS

Remember that the essential oil is a concentrated portion of its original source. Just like cinnamon sticks take up more space than cinnamon powder, the essential oil should be used in much smaller quantities than the whole substance.

We don't quite have a hard-and-fast rule for substituting essential oils for whole herbs and spices, but a good rule of thumb is that a drop will replace a teaspoon and that you don't need more than one or two drops for a full recipe.

DILUTE ESSENTIAL OILS FOR COOKING AS NEEDED

Another thing to remember when cooking with essential oils is that they should still be diluted into a lipid first. This not only keeps us safe, but it helps to ensure the oil (and flavor!) gets dispersed throughout the whole dish. Learn more about the chemistry of dispersing and diluting essential oils [here](#).

For savory recipes, dilute into a bit of olive or coconut oil. Stir, then add to the recipe.

For sweet recipes, honey or a syrup works well; however, this is better done with non-liquid dishes as neither are sufficient to keep the essential oil safely dispersed in water, tea, etc.

DELAY ADDING ESSENTIAL OILS

Finally, for hot recipes, wait until the end of the process before adding the essential oil. These are called “volatile oils” for a reason – they are relatively fragile and will dissipate quickly in high heat!

For stovetop recipes, after the cooking is finished, stir your diluted essential oil into the dish. For baking, you’ll simply expect to lose a bit of the properties in the process. Dilution throughout the recipe will help, and you’ll still be able to enjoy the flavors of cooking with essential oils, no matter what!

Does Cooking With Essential Oils Damage Their Beneficial Properties ?

This point is worth expanding a bit more before we move on to the best essential oils for cooking. After all, it’s important to understand why we’re doing it and what the benefits and drawbacks may be.

The two concerns with cooking essential oils seem to be:

1. Alteration of chemical structure
2. Evaporation

Both of these concerns are valid, but that shouldn’t stop us from enjoying the culinary use of cooking with essential oils. Minimize exposure to high heat by adding essential oils last, and minimize evaporation by proper dilution and dispersion throughout the recipe.

While one would think boiling would eliminate the beneficial properties, but at least one study found that some properties were better retained during boiling than baking. Go figure!

Because these oils are going to be ingested and some of the properties are indeed retained, it’s important to get high quality, certified organic oils for the absolute best in safety and flavor.

Finally, remember that cooking with essential oils is largely to enjoy the flavors and fragrance, with a dash of potential health benefits on the side. For direct and potent health effects, other remedies or applications are ideal.

10 Great Oils to Include in Your Recipes

It doesn't take much essential oil to flavor your dish when using essential oils. Remember you typically need just a drop or two at most. Here are some of the best essential oils for cooking.

1. LAVENDER

As one of the most gentle oils, lavender essential oil is a great oil to start with as you learn to cook with essential oils. Its flavor is delicate and floral, excellent for a variety of culinary options.

Try lavender in dessert recipes like scones or even savory dishes like fish bakes. Just a couple of drops for the whole recipe will add just a touch of that unique floral flavor to take your recipe from bland to gourmet.

Lavender essential oil properties are linked with relaxing, calming, anti-anxiety effects.

2. PEPPERMINT

Cool and refreshing, peppermint essential oil is another easy one to start out with. A drop of peppermint essential oil added to honey turns an ordinary mug of tea into a stimulating, energizing jump start. Peppermint also blends well in lemonade, and for the adventurous – go for a lavender, peppermint, lemonade mix! It's yet another case where the big-three essential oils and flavors work together well when cooking with essential oils.

Use peppermint oil in candies and chocolates for your own mint treats. And while it's not actually cooking, don't forget to use peppermint to make your own oral health treatments.

Peppermint essential oil properties are linked to energizing stimulation, relief of aches and pains, and even athletic performance.

3. CITRUS

There's just no way around it – all of the citrus oils are great for cooking! Citrus oils are unique in that they are pressed directly from the peel of the fruit, so while you're getting the oddball composition of roots and leaves and bark with other oils, you are much closer to the familiar fruit in citrus.

That also means they aren't steam distilled – which means they've yet to undergo heat. This makes citrus potentially more sensitive to heat applications. Don't avoid it, really, just be aware of that when you set your expectations.

Use citrus oils properly emulsified in drinks, smoothies (orange-cream, anyone?), and treats. Add to stir-fries and casseroles, one-pot wonders, and even in dips. The sky's the limit with these delicious, fruity oils.

Citrus essential oils are linked to energizing, antimicrobial properties and may even contribute to weight loss efforts.

4. BERGAMOT

While bergamot is technically citrus, it deserves special mention. First, it's not a fruit that we eat so we don't readily relate to the flavor. And second, it is a stand-out anxiety reliever.

Bergamot's flavor is mildly citrus-like. Try bergamot in scone recipes and other treats to take advantage of its excellent pairing with mild flavors.

Bergamot essential oil is a cold-pressed citrus oil that is associated with stress relieving, anti-anxiety benefits.

5. CINNAMON

Now we're stepping into the meat and potatoes (though, I'm not sure I'd use that literally for cinnamon!). Cinnamon essential oil is strong in both flavor and effects. It's more important than ever to dilute properly to protect sensitive membranes, and to only use a drop or two for a recipe.

Cinnamon essential oil works very well in sweet dishes, particularly cinnamon bark oil to replace powdered cinnamon bark. Think cinnamon French toast, you could add a drop into the eggs before dipping the toast into it, or to give an extra cinnamon boost in cinnamon rolls.

Cinnamon essential oil is associated with antimicrobial and antioxidant effects, as well as being a stimulating, energizing oil.

6. CARDAMOM

An excellent pairing with cinnamon oil, cardamom is known as a strong antioxidant with potential digestive benefits. Use cardamom and cinnamon as part of a chai flavor blend or in any spice-flavored dessert or treat.

Cardamom powder is also included in some savory recipes, adding a warm flavor touch to meat dishes and main courses. Adding cardamom essential oil in place of the powder may add digestive benefits to the recipe as well as tons of flavor.

Cardamom essential oil is associated with digestive wellness such as nausea relief, as well as potent antioxidant composition.

7. GINGER

Another digestive substance, ginger root has long been used to relieve nausea and protect the stomach. Ginger essential oil can be used in similar ways, and it is great for cooking.

Add ginger to sweet treats like ginger snaps, gingerbread, and spiced drinks, without a doubt. But also try it in sauces for savory dishes like stir fries and marinades. Fresh ginger has to be peeled and grated, so ginger essential oil can be a quick and easy addition when time is short but flavor is needed.

Ginger essential oil is linked to digestive wellness, nausea prevention, and anti-inflammatory benefits.

8. THYME

Typically used in cleaning blends, thyme essential oil is best known for its frontline effects against the microbes that cause illness. But it's also an immune stimulant and part of a flavorful culinary herb.

As a savory flavor, add thyme to main course dishes, especially when meat is involved. The herbaceous flavor blends well into soups, stews, and bakes as well. Add to marinades to add an herbaceous touch without being limited to dry rubs. For a surprising twist, experiment with thyme in desserts and treats to offset the sweetness.

Thyme essential oil is known as an antimicrobial immune stimulant and may help to improve food safety.

9. ANISE

With a licorice flavor, anise essential oil is fun to experiment with as a unique and absolutely delicious addition to nearly any kind of recipe. Anise as a whole herb is used in cookies and treats, mild biscotti, savory marinades, soups, sausages, and various ethnic recipes.

Anise is similar to fennel in flavor and digestive benefits. Replace anise in recipes with a drop or two of the essential oil. But, like fennel, it can be counterproductive and even dangerous if used in excess. Use it cautiously – not daily and not in excess – to enjoy the flavor and digestive benefits of anise essential oil.

Anise essential oil is associated with digestive benefits, as well as the risks associated with estragole content. Use appropriately.

10. CORIANDER/CILANTRO

Coriander is the seed of the plant and cilantro is the leaf of the same – but their flavors and applications are much different. Their essential oils work in a similar way. While the benefits are somewhat similar, the flavors are different and their best uses are different.

Use cilantro essential oil where you would use cilantro, in salsas, dips, and savory cuisine. Coriander essential oil works well in sauces, vegetable dishes, pickling, and other savory recipes that use herbs.

Coriander and cilantro essential oils are associated with digestive benefits and antioxidant properties.

Chapter 11

Top Essential Oils for Gut Health

When we say *you are what you eat*, it's not just a quip or playful admonition. What enters your digestive system quite literally shapes your gut health. The digestive tract is a center of nutrition, of course, but also immunity and even neural processes. If the intestinal tract is faltering, the whole body suffers.

So, when we say that essential oils are good for gut health, it means they are good for whole body health, by proxy.

The tides of natural health could not have turned toward natural health at a more important time in our cultural history. Everything about our society is moving us further away from optimal health, shifting the balance of bacteria toward processed foods, dangerous antibiotic-resistant strains, and damaging our bodies from the inside out.

Protecting the core of our body is paramount to natural health, and essential oils are a key partner.

Gut Health is The Cornerstone of Wellness

Raised on the belief that microbes are inherently bad, with products that proudly claim to kill "99.9%" of bacteria, our society seems to struggle with the idea that bacteria can be – and usually are – good for you. We house bacteria on our skin and all throughout our bodies. In fact, the NIH Human Microbiome Project has proven that the human body actually contains trillions of microorganisms; literally outnumbering human cells 10 to 1! And what most people don't realize is that a major hub of microbial focus is in the gut.

It's important to understand that bacteria are most frequently our allies, because the way we approach bacteria ultimately determines how successful our attempts at wellness can be. Without beneficial bacteria to balance the deleterious strains, we are susceptible to intestinal damage, illness, mental and emotional stress, and so much more.

Be sure you don't discount the importance of gut health because it is responsible for a vast majority of your immune function! From a seminal 2008 report:

The gastrointestinal system plays a central role in immune system homeostasis. It is the main route of contact with the external environment and is overloaded every day with external stimuli, sometimes dangerous as pathogens (bacteria, protozoa, fungi, viruses) or toxic substances, in other cases very useful as food or commensal flora. The crucial position of the gastrointestinal system is testified by the huge amount of immune cells that reside within it. Indeed, gut-associated lymphoid tissue (GALT) is the prominent part of mucosal-associated lymphoid tissue (MALT) and represents almost 70% of the entire immune system; moreover, about 80% of plasma cells [mainly immunoglobulin A (IgA)-bearing cells] reside in GALT. GALT interacts strictly with gastrointestinal functions in a dynamic manner; for instance, by increasing intestinal permeability in replay to particular stimulations, or orientating the immune response towards luminal content, allowing either tolerance or elimination/degradation of luminal antigens, or sometimes provoking damage to the intestinal mucosa, such as in coeliac disease or food allergy.

The Anti-bacterial Problem That Hurts Gut Health

Before we dive into the Top 6 Essential Oils for Gut Health, we need to address the elephant in the room: our obsession with being "clean" and killing bacteria.

There is certainly a time and a place for antibacterial effects and even antibiotics. In fact, there are essential oils that carry these actions. Sound like a contradiction? It's not. It's not the act of eliminating a bacteria that's the concern; it's the lifestyle of being anti bacterial.

When we are anti-bacterial and out to destroy it haphazardly, we miss the mark in a big way.

Yet, we are interrupting healthy bacterial growth in every phase of life. Babies are increasingly born via C-section, which bypasses the mother's birth canal and loses valuable transfers of beneficial bacteria from mother to baby.

In childhood, children are plastered with antibacterial hand sanitizers while parents scrub the house with antibacterial wipes and sprays – all the while killing weaker bacterial strains and allowing the more dominant to resist the component and live on.

As young adults, we often become a little too free with "junk" foods, damaging beneficial intestinal bacteria. As older adults, we've spent a lifetime damaging and otherwise eliminating bacteria, and the effects begin to surface as GERD, leaky gut, IBS, and more.

Healing the gut is a topic to come, but for now let's work to overcome the struggles that we've created for ourselves in this dangerously hygienic world!

Holistic Gut Health Solutions

With a shift in focus away from eliminating dangerous bacteria and toward strengthening good bacteria, holistic options are available to us.

Holistic refers to the body as a whole, which means we can take those first baby steps toward wellness from any area of our lives. Diet is a primary concern, improving the gut directly via the substances that come in contact with it – particularly in light of many meat sources relying on gross misuse of antibiotics that may be retained in the meat itself. Cleaning supplies that do not harshly eliminate beneficial bacteria are also important, as well.

Believe it or not, even stress plays a role in gut health. A Harvard educational article describes this phenomenon as the “brain-gut axis,” explaining,

The enteric nervous system is sometimes referred to as a “second brain” because it relies on the same types of neurons and neurotransmitters that are found in the central nervous system (brain and spinal cord)... researchers are interested in understanding how psychological or social stress might cause digestive problems.

Essential oils, if you haven't heard, can meet each of these needs – from improving the intestinal tract directly to cleaning up our cleaning products to relieving stress. If you're ready to be good to your gut, get these oils:

- Thyme & Rose
- Cardamom
- Peppermint
- Clove
- Tea Tree & Oregano
- Fennel
- Tarragon

Each of their preparations and actions are different, but the overarching effects spell wellness for the gut. Here are some of the best ways to use these essential oils for gut health.

Top 6 Essential Oils for Gut Health

1. **Thyme & Rose** – In a study released earlier this year, researchers found that the primary constituents of thyme and rose oil – thymol and geraniol, respectively – “could be effective in suppressing pathogens in the small intestine, with no concern for beneficial commensal colonic bacteria in the distal gut.”
2. **Cardamom** – Both anti-inflammatory and antispasmodic, cardamom is a soothing oil related to the ginger family. It has been associated with many digestive health benefits, including gastroprotective effects.
3. **Peppermint** – Cool and soothing, peppermint oil has been shown to improve IBS, one of the most common disruptors for gut health, when taken in a professional grade, enteric coated, commercial supplement.
4. **Clove** – As an oil with some of the most eugenol, clove is an efficient antimicrobial that can counter *Candida albicans* overgrowth. Its effects against the yeast are effective to the point that an over the counter internal preparation is being studied using clove oil.
5. **Tea Tree & Oregano** – A powerful duo, tea tree and oregano essential oils are the case-in-point for antibacterial as a beneficial component, compared against harsher, synthetic or toxic antibacterials. Use in DIY cleaners to help stop the spread of viral illnesses without attempting to bleach away the good with the bad.
6. **Fennel** – Used as a digestive stimulant in whole-herb form, the essential oil retains some of the soothing components for the gut as an anti-spasmodic, likely connected to the estragole content. (9) This component is also found in fennel. Aromatherapy and diluted topical use are very popular, but since estragole has been monitored for potential toxicity internally some recommend against ingesting it.

BONUS:

Not making the Top 6 Essential Oils for Gut Health list, don't forget about Tarragon. It's still a super healing oil that promotes gut health as well!

Chapter 12

Gut Health Protocol

Now that we've talked about essential oils for gut health and oils that can help to heal the gut, we can walk through ways to use DIY essential oil blends for digestive issues. There are dozens of oils and countless blends out there, but a few are especially beneficial for the gut, with several approaches for application and use.

When to Use Essential Oils

An essential oil is the “volatile” component of the plant, meaning they are released quickly and evaporate just as fast. This little botany tidbit can help you remember that they work especially well for *quick* results situations.

In other words, most essential oils are helpful for fast-acting results, such as symptom relief and antimicrobial effects.

This kind of effect matches well with gut health concerns and is amplified as part of a multipronged approach to healing the gut. Diet and lifestyle changes are imperative, and it's often worth working with a holistic healthcare professional to maximize your natural efforts using essential oils.

Taking a Whole-Body Approach Using a DIY Essential Oil Blend

As we walk through some of the uses for essential oils and gut health, it's important to remember that you can integrate the essential oils into your whole-body approach to wellness. Suggesting a DIY essential oil protocol or preparation does not exclude other steps toward health and healing.

For gut health in particular, a DIY essential oil blend will pair very well with probiotics, an absolutely vital component of intestinal healing and balance. They are also often used alongside digestive enzymes to maximize digestion improvement. An excellent example of early research on the combination comes with lab testing, where animals showed decreased intestinal inflammation with thymol and cinnamaldehyde essential oil components combined with the enzymes xylanase and beta-glucanase.

DIY Essential Oil Applications for the Gut

The DIY Essential Oil Protocol for Gut Health includes evidence-based & traditional techniques to counteract concerns like nausea, GERD, IBS and more! EOs can be used in numerous ways, varying based on the oil, individual, concern, and even preference. Here are some ways to use essential oils for improved gut health.

INTERNAL USES

Use capsules when you need the oil to make it to the stomach rather than the mucous membranes of the esophagus. If the oil is specifically for the intestines, enteric coated capsules are necessary, which you can find, but they can be pricey.

The important thing to remember for capsule creation is that the oils should still be diluted as an extra precaution, and that the capsule shouldn't be filled only with the DIY essential oil blend for gut health. You still only need 2-3 drops at a time, so most of the capsule should be comprised of the carrier oil. Very small capsules are best.

Note: Internal, medicinal use of oils should be executed in proper dosing, with knowledge of contraindications and safe usage. Seek guidance or further education before creating and using capsules, or use a pre-formulated, pre-dosed essential oil supplement.

- **Optimal oils for capsule use:** peppermint, clove, ginger, oregano, tea tree, thyme. (Choose 2-3 oils at a time, and mix up protocol every couple weeks).
- **Optimal situations for capsule use:** indigestion, nausea, IBS, GERD, dysbiosis, with supervision by an integrative care professional. (Note: Peppermint oil could make GERD worse and is not recommended for this specific condition.)
- **Carrier oil options:** coconut, almond, sesame, apricot kernel, avocado, castor, evening primrose, jojoba, sunflower, pumpkin seed, neem, hemp seed, hazelnut, borage seed.

TOPICAL USES

The soothing effects of aromatherapy are translated well into massages, and an upset tummy can be eased with a topical application. If you keep a diluted blend or two on hand, you can quickly grab it and apply when needed.

Dilute oils to 1-3% of the total volume into a carrier oil of your choice. Favorites include coconut oil, almond oil, jojoba, and avocado oil. Do remember that if the coconut oil is exposed to temperatures below the mid-seventies, it will solidify. Fractionated coconut oil is an option if you'd like it to remain liquid and other carriers are unavailable.

- **Optimal oils for topical use:** peppermint, ginger, caraway, coriander, *fennel, anise, tarragon, thyme, or citrus.
- **Optimal situations for topical use:** indigestion, constipation, stomach aches, and nausea.
- **Word of Caution:** *Fennel oil (*Foeniculum vulgare*) contains the estrogenic compound Trans Anethole. This raises obvious concerns for people with estrogen dominance and estrogen positive cancer. Also, "estragole, a main component of *vulgare* has become a cause of concern, as the structurally similar methyleugenol has been recently found to be a potential carcinogen. This has led to the European Union (EU) to allow a new legal limit for estragole of 10 mg/kg in non-alcoholic beverages."

INHALATION

Don't let a pretty scent fool you! Aromatherapy is powerful, transferring the oil's composition to your body simply by inhaling it. Inhalation is actually one of, if not the most, effective ways to administer the benefits of essential oils.

We are most familiar with diffusion, but DIY essential oils for digestive health can be inhaled much more directly for the person who is experiencing tummy trouble or gut concerns. A couple of drops in a bowl of hot water becomes an instant personal steamer if you "tent" a towel over and inhale. Jewelry or clothing can hold a drop or two for a more lasting personal source to inhale, and aroma sticks can fit in pockets or purses for easy, portable access. The easiest method? Simply open the bottle and sniff!

- **Optimal oils for inhalation:** citrus, ginger, fennel, peppermint, clove, cinnamon...or any!
- **Optimal situations for inhalation:** nausea, stomach ache.

(Note: It is recommended to avoid hot oils like cinnamon and clove in steam inhalations so as not to irritate the sinus passages.)

DIY Essential Oil Digestive Blends

Now that you have a good idea of your options, you can start to connect them for overall health and wellness. Blending the oils first into a carrier oil or honey will ensure proper dispersion and dilution, creating a safer and more effective remedy. For internal use, culinary or otherwise, a pure, organic essential oil is ideal.

HEALTHY DIGESTION BLEND

- Choose a few of the following, and blend a total of 20 drops into 10 ml honey and carrier oil (coconut is my favorite): clove, orange, cinnamon, rosemary, eucalyptus, lemon. Stir 2 drops of this diluted blend into tea or water, or take directly.
- Add a drop or two of the following organic essential oils as replacements in culinary preparations: ginger, fennel, dill, coriander, cardamom, cinnamon, citrus, thyme, clove, etc.

NAUSEA BLEND

- Blend 3 drops ginger and 2 drops lemon and diffuse. You could also blend the same number of drops into 10 ml carrier oil and apply topically.
- Blend 3 drops peppermint and 2 drops ginger and diffuse. You could also blend the same number of drops into 10 ml carrier oil and apply topically.

TUMMY TROUBLE BLEND

- Choose a few of the following, and blend a total of 5 drops into 10ml carrier oil: cardamom, peppermint, tea tree, ginger, caraway, coriander, or fennel. Inhale or use topically.
- Blend one drop of peppermint in 1 tsp of honey and consume for soothed and improved digestion, or create capsules replacing the honey with carrier oil.

LEAKY GUT CAPSULES

- Taking 2-3 drops of oregano in an enteric-coated capsule filled with an edible carrier olive oil and take once a day for a week while you monitor your results. Be sure to work with your healthcare provider when doing this.

A working knowledge of DIY essential oil blends can be a valuable ally in times of digestive upset. Take the time to learn about each of these oils thoroughly so that you can add them to your at-home DIY essential oil medicine cabinet and begin to heal your gut.

Chapter 13

101 Additional Uses

Knowing the concepts of aromatherapy and enjoying the 101 essential oil uses for your home is key to living a clean, healthy and abundant life! But don't worry, you don't have to have a full cabinet of essential oils at home to get a wide – extremely wide! – range of uses. Some of the most gentle and effective essential oil uses are also the most versatile.

Lemon, lavender, and peppermint are three of the most commonly purchased and used oils out there. Aside from some caution against using peppermint directly on small children, all three of these oils are known as extremely safe and effective for most of the population.

How to Use Essential Oils: Essential Oil Uses for Freshening Up

1. Add lavender to an alcohol or vinegar spray for refreshing linens and creating a bedtime ambiance.
2. Put a couple of drops of lavender or lemon on a cloth in the closet to remove stale odors.
3. Make a lavender spritz to spray the “monsters” away at bedtime – they’ll be relaxed and ready to snooze!
4. Freshen up an old mattress with a lavender-peppermint or lemon spray, or add the oils to baby powder or baking soda and sprinkle it on before adding sheets.
5. Wash towels with some lemon to freshen up that stale towel smell.
6. Add lemon or peppermint to baking soda and sprinkle in stinky shoes.
7. Wash sporting gear or sprinkle it with baking soda and a lemon peppermint mix to kick that sweaty athlete smell to the curb.
8. Remove cigarette smoke odors with a diluted alcohol or vinegar based spray with lemon and peppermint.
9. Clean pet stains with a castile soap and lemon essential oil, or spray pet beds and pet potty areas.
10. Put a couple drops each of lavender and lemon in a simmering pot on the stove after dinner to cut the heavy cooking smell.

11. Pour a few drops in the bag of your vacuum cleaner for a fresh scent throughout the house.
12. Add essential oils to baking soda and sprinkle on the carpet before vacuuming.
13. Add a few drops to the wash (not the dryer), especially with no-additive unscented laundry soap.
14. Use a drop of lemon as a spot treatment to cut grease and lift stains – especially effective with peroxide!
15. Run another quick rinse with a few drops of lemon in some vinegar to cut the “I forgot to switch the laundry”
16. Add a couple of drops of peppermint or lemon to a gallon of paint to help disperse the chemical fumes.
17. Drop some lemon or peppermint onto sponges or washcloths and run them through the dishwasher for heavy sanitization and refreshment.
18. Put a drop in the inside of the toilet paper roll for a boost of scent every time the roll turns!
19. Brighten potpourri by sprinkling a few drops of your favorite oils onto it.
20. Coat unscented incense sticks in several drops of essential oils and allow to dry for a full day before using.
21. Create a diluted vinegar, witch hazel, or alcohol based spray with your favorite scented essential oils, then spritz into the potty before use for direct odor control!
22. Combine 10-15 drops of lemon and lavender essential oil with baking soda and sprinkle into the bottom of the diaper pail.
23. Lemon and peppermint combined with baking soda sprinkled into the trash can before the bag goes in will keep trash odors at bay.
24. Freshen the car even if you don't have a car diffuser – just add a drop or two to a central air vent for circulated aroma!
25. For more specific car use, choose lavender and bergamot to calm traffic anxiety or peppermint and ginger to minimize car sickness.

BONUS RECIPE: INSPIRED BY MAMA Z HERSELF, MAKE YOUR OWN DIY LAUNDRY SOAP

- Grate 1 bar Fels-Naptha Soap over a giant pot on the stove (or split batches).
- Add 10 cups water, turn it on medium-high, and stir until dissolved.
- Add 5 cups Borax and 1.5 cups washing soda, stir until dissolved.

- Let cool while pouring 4 cups hot water into one bucket for each of the 6 months this soap will last.
- Add 2 cups of your stove mixture into each bucket.
- Add up to 40 drops of a combination of lemon, lavender, and peppermint (or choose a single oil) and stir.
- Top the buckets with water and let sit overnight to thicken. Stir each time before use.

How to Use Essential Oils: Essential Oil Uses for Cleaning

26. Add lemon essential oil to a combination of baking soda, a squirt of dish soap, and a dash of vinegar for a grout cleaning.
27. Lemon, lavender, and peppermint blend well with tea tree for a disinfecting spray or air-cleaning diffusion.
28. Mix dish or castile soap with water and lemon into a squeeze-top bottle; squeeze into the inner rim of toilets and scrub.
29. Use your baking soda, soap, and vinegar grout cleaning scrub with lemon and peppermint for a non-toxic shower scrub.
30. Skip the scrub altogether with a daily shower spray. Vinegar, a squirt of soap, and your favorite essential oils, sprayed daily after showering.
31. Combine a gallon of hot water with ¼ cup castile soap and a total of 40-60 drops of any combination of essential oils – lemon and lavender work well here – to clean the floors.
32. Wash windows with vinegar and water boosted with peppermint and lemon. (See our favorite essential oil powered glass cleaner.)
33. Dishes get an extra boost with a drop of lemon in the dishwasher or dishwasher soap compartment.
34. Use a few drops of lemon oil on a rag for polishing silverware.
35. Take dusting to the next level with a drop of essential oil on the rag.
36. Refresh old wooden surfaces with a bit of lemon oil on the polishing rag.
37. Wipe down sinks and surfaces with a diluted vinegar or alcohol based spray brightened with antiviral lemon and antibacterial lavender.
38. Clean the fridge with a few drops of lemon and lavender added to some vinegar, water, and a dash of dish soap.
39. All purpose cleaners can be mixed up and ready to go – try combining all three (lavender, lemon, peppermint) with a bit of dish soap, vinegar or alcohol, and water as an all purpose disinfectant cleaner.
40. Cut grease with lemon oil added to your dish soap.

41. Clean stainless steel with lemon or peppermint in a bit of soap mixed into water.
42. Burned pan? Add some lemon oil to a bit of water and boil to loosen burnt residue.
43. Bugs don't like peppermint – spritz it on them directly or add to baking soda and powder it around bug entrances.
44. Clean cutting boards with lemon and lavender to stop the spread of foodborne illness.
45. Sticky surface? Soak a rag in water and add a bit of soap and lemon oil – lay it over the sticky then wipe it up a few minutes later.
46. Put some baking soda and a combination of lemon, lavender, and peppermint into a mason jar with holes in the lid. Set in the bathroom and shake periodically to reboot its air freshening power.
47. Polish scuffed surfaces with a rag and a bit of lemon oil.
48. Kick your hand soap up a notch with a few drops of lemon and lavender mixed in.
49. Spritz cut produce with diluted lemon oil to minimize browning.
50. The best cleaning tool is good old fashioned motivation – diffuse peppermint for a stimulating energy boost to get you going.

EASY-TO-MAKE RECIPE: ESSENTIAL OIL USES FOR FLOOR CLEANER

Ingredients

- 1 gallon of hot water
- ¼ cup castile soap
- ¼ cup murphy oil soap
- Around 25-30 drops of a combination of lemon, lavender, and/or your choice of essential oils. Mix and use to mop.

Instructions

1. Mix soap and oils together in large bucket.
2. Pour in hot water.
3. Gently stir and use with mop.

How to Use Essential Oils: Essential Oil Uses for Pampering

51. Add a drop of peppermint to toothpaste.
52. Make your own mouthwash with a diluted alcohol base and oils like peppermint, clove, and myrrh.
53. Shampoo is transformed with just a few drops of peppermint or lavender shaken into the whole bottle.
54. Make DIY deodorant with baking soda, cornstarch, coconut oil, and your favorite combination of oils.
55. The most basic lotion is simply coconut oil scented with a bit of lavender oil.
56. Acne doesn't stand a chance against antibacterial lavender oil. Apply a drop neat or slightly diluted to a cotton ball and swab affected areas.
57. Sugar scrubs with lemon, lavender, or peppermint simply can't be beat.
58. Make a soothing facial mask with honey and lavender oil.
59. Rebalance the skin's pH with a witch hazel, lavender, and peppermint toner.
60. Soothe tired feet by diluting peppermint and lemon into an evening foot soak.
61. Dilute lavender into an Epsom salt mixture for a calming bath.
62. Put a few drops of peppermint onto a rag in the bottom of the shower for an energizing start to your day.
63. Melt a bit of beeswax into your coconut oil and lavender mix for an all purpose soothing balm.
64. Massage your aches and pains away; dilute peppermint or lavender into the carrier oil of your choice.
65. Add a bowl of water and essential oils to a sauna to maximize their respective benefits.
66. A vinegar rinse is excellent for conditioning your hair but smells like a pickle jar. Add some lemon and lavender to freshen it up.
67. Fix cracked feet with an overnight application of lavender and coconut oil.
68. Settle into a restorative night of sleep with lavender diffused at your bedside.
69. Create a simple perfume with your favorite oils diluted into a carrier and poured into a roller ball.
70. Beat dandruff with a few drops of lavender and a couple drops of tea tree added to shampoo.

71. Whiten teeth periodically with the odd but effective combination of lemon and fresh, mashed strawberries mixed with coconut oil. Rub onto teeth, let sit for a couple of minutes, then rinse off.
72. Add your favorite essential oils to a small amount of alcohol or witch hazel in a spritz bottle, topped off with water, for a custom body spray.
73. A small spritz bottle of peppermint essential oil in alcohol and water makes a quick and easy breath spray.
74. Peppermint and lavender in coconut oil relieve tension, especially massaged onto the temples for headaches.
75. Diffuse peppermint and lemon before and during exercise routines for energy and endurance.

BONUS RECIPE: DIY LIP BALM

Melt together:

- 4 Tbls. coconut oil or combination of carrier oils
- 2 Tbls. beeswax

Remove from heat; stir in:

- 5-10 drops lavender
- 5-10 drops lemon or peppermint

Pour into tins or tubes and enjoy!

How to Use Essential Oils: Essential Oil Uses for Health

76. Sooth mild burns with lavender and coconut oil.
77. Anti-inflammatory lavender and cooling peppermint are a must for any balm made for soothing sores.
78. A drop of lavender directly on bug bites can soothe itching.
79. Inhale or massage diluted peppermint oil for headache relief.
80. Include lavender in massage oil blends to help relieve body aches.
81. Breathe clear with peppermint added to aromatic chest rub formulas.
82. Or, simply place a drop each of lavender, lemon, and peppermint into a bowl of steaming water. Lean over it and breathe deep.
83. Improve digestion with a drop of peppermint or lavender diluted into honey and added to your favorite drinks.

84. Inhale peppermint to relieve acute bouts of nausea.
85. Soothe psoriasis, eczema, and other inflammatory skin conditions with lavender preparations.
86. Calm an inflamed sunburn with aloe vera, lavender, and peppermint sprays.
87. Diffuse or inhale lavender to lessen the severity of anxiety.
88. Find a boost of energy with stimulating lemon and peppermint diffusions.
89. Melt stress away with lavender rubbed onto temples and neck.
90. Cleanse the air with antiviral lemon and antibacterial lavender diffused.
91. Help curb cravings and appetite with peppermint diffused between meals.
92. Improve focus and calm anxious minds by diffusing lavender during study times.
93. Dilute peppermint onto a rag soaked in cool water, and sponge onto the neck and back of someone feverish. (Head to the doctor if it gets too high!)
94. Keep lemon and peppermint on hand to inhale when morning sickness takes over.
95. Add lavender to compresses for an added anti-inflammatory effect.
96. Make a gentle spray of lavender and water to ease kids' minds that you can take care of boo-boos when they're too old for magic kisses but too young to shake it off. (Do shake the bottle well, however!)
97. Add some diluted peppermint to your clove based toothache remedy and apply with a cotton ball or swab.
98. A drop of peppermint and lemon mixed into a spoon of honey can soothe a painful sore throat.
99. Massage diluted lavender oil around lymph glands and ears to help ease discomfort and promote drainage for ear infections.
100. Put a drop or two of lavender into your humidifier per manufacturer's instructions for a quick, multi-purpose diffuser.
101. Cold sores are soothed with a drop of lavender applied with a cotton ball or swab.

BONUS RECIPE: ESSENTIAL OIL USES FOR SUNBURN SOOTHER

Mix together:

- ½ cup water
- ⅓ cup aloe vera gel
- 10 drops lavender
- 5-10 drops peppermint

Pour into a glass spritz bottle and store in the fridge to be spritzed onto sunburns.

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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.

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