

Essential Oils Basics

by April Huckabay and Tamar Clarke

Spring 2019, Revised July 22, 2019

Note: This is for public education, and not a substitute for professional medical care.

Overview

- Opening
- What are essential oils?
- What are essentials are made from?
- More about essential oils
- The importance of using certified grade essential oils.
- Two types of essential oils (cold or hot)
- Three ways of using essential oils
- Nine major essential oils
- Other essential oils
- Addendum
 - Bibliography
 - Other essential oils
 - Health issues that essential oils can be used for
- Conclusion

Opening

- Why is there renewed interest in essential oils?
 - As more people are finding that there are shortcomings in the use of western medicine and its reliance on prescription drugs as well as the use of surgery, they are seeking alternatives.
- The benefits of essential oils?
 - Essential oils can be used for both physical ailments as well as for mental health issues.
- Ways of using essential oils
 - Essential oils can be used as a single or more than one essential oil can be combined with other oils. There are three ways of using oils. A resource guide will specify which oils and how to administer it for specific ailments.

What are Essential Oils?

- If you have ever enjoyed the scent of a rose, you've experienced the aromatic qualities of essential oils. These naturally occurring, volatile aromatic compounds are found in the seeds, bark, stems, roots, flowers, and other parts of plants.
- Essential oils provide plants with protection against environmental threats and play a role in plant pollination.
- In addition to their intrinsic benefits to plants and being beautifully fragrant to people, essential oils have long been used for food preparation, beauty treatment, and health-care practices.
- Essential oils go back centuries, way before prescription drugs were developed.

More about Essential Oils

- One, essential oils are 50 to 70 times more potent than herbs
- Two, one drop of peppermint equals 28 cups of peppermint tea
- Three, it varies among plants sources as to how much essential oils can be obtained
- Four, there are different grades of essential oils:
 - Synthetic (perfume/industrial)
 - Food (Generally Recognized as Safe – GRAS)
 - Therapeutic (health benefit)
 - Certified Pure Therapeutic Grade tm (CPTG)

More about Essential Oils

- Five, There are a number of methods to collect these oils. They are:
 - Steam collection
 - Solvent extraction
 - Supercritical Carbon Dioxide (CO₂) extraction
 - Cold pressing
- Six, responsible companies have a third party testing on their products. They use:
 - Gas chromatography
 - Mass Spectrometry
 - FTIR Scan (Fourier Transform Infrared Spectroscopy)
 - Microbial Testing
 - Organoleptic Testing
 - Test for valid oils – Leave a drop on light colored paper for 5 to 24 hours. If it shows a mark, then it has other substances

More about Essential Oils

- Seven, essential oils are complex substances. On an average, 20 to 400 chemicals exist in each oil. Some have even more chemicals in their oil.
- Eight, these substances in oils protect their plant, they can also protect us.
- Nine, due to their potency, only drops are needed.
- Ten, the history on essential oils goes back at least 6,000 years.
- Eleven, the oils need to be stored in dark colored, airtight glass bottles.
- Twelve, many of the aromatherapy products include synthetic substances.
- Thirteen, when more than one oil is combined with another oil, it creates a new product and benefits.
- Fourteen, oils are listed by their commonly known name followed by their botanical name.

The importance of using certified grade essential oils.

- Not all essential oils that are available on the market are quality oils as well as being effective.
- A number of oils are diluted, especially with other substances. This can pose a danger, a reaction that is not expected.
- An oil that is certified grade is the one to use. One company that produces quality oils is DoTerra. This company does third party testing on their products. Testing includes:
 - GAS Chromatography
 - Mass Spectrometry
 - FTIR Scan (Fourier Transform Infrared Spectroscopy)
 - Microbial Testing
 - Organoleptic Testing

Two types of essential oils (hot or cold)

- When beginning to use essential oils, keep in mind that there are number of hot oils, oils that need to be used with a carrier oil and in a diluted form.
- They are:
 - Cassia
 - Cinnamon
 - Oregano
 - Thyme
 - Note: Additional oils need dilution when being used on children, sensitive individuals, and during pregnancy.
- The remaining oils are considered cold and can be used without dilution.

Source: Modern Essentials: a contemporary guide to the therapeutic use of essential oils, eighth edition, (2014) (Publisher: Aroma Tools), located on back inside cover under Quick Reference.

Three ways of using essential oils

- There are three ways of using essential oils:
 - One, is through aromatic or breathing its scent. Some oils are stimulating and others are calming. It can also be used to cleanse and purify the air of unwanted odors.
 - Two, is placing the oil (either diluted with a carrier oil or) without dilution on the skin. Note: As we are dealing with oil, it needs another oil to be used topically.
 - Three, is taking the oil internally as a beverage. Drops of oil can be placed in water and taken internally. A number of oils are also spices that are used for cooking.
- The Resource Guide will specify the ways to take the essential oil
- For specific ailments, the guide will specify a number of primary and secondary oils. One suggestion may not work, so try using the alternative suggestion.

Nine major essential oils

Single Oils

- Frankencense
- Lavender
- Lemon
- Melaleuca
- Oregano

Combination Oils

- doTERRA Breathe
- DigestZen
- doTERRA On Guard
- Deep Blue

Note: The focus of the essential oils is on medicinal purposes. However, essential oils can be used for cooking, personal care products, and cleaning products as well as for detoxification purposes.

Frankincense



Primary Benefits

- Ingest to support healthy cellular function*
- Aroma promotes feelings of relaxation
- Helps reduce the appearance of skin imperfections when applied topically
- Supports healthy immune, nervous, and digestive function when taken internally*

Aromatic Description

Warm, spicy, clean

Collection Method

Steam Distillation

Plant Part

Resin from *Boswellia carterii*, *sacra*, *papyrifera*, and *frereana*

Lavender



Primary Benefits

- Soothes occasional skin irritations
- Taken internally, Lavender reduces anxious feelings and promotes peaceful sleep*
- Helps ease feelings of tension.*

Aromatic Description

Powdery, floral, light

Collection Method

Steam Distillation

Plant Part

Flower

Main Constituents

Linalool, Linalyl acetate, Ocimene

Lemon



Primary Benefits

- Cleanses and purifies the air and surfaces
- Naturally cleanses the body and aids in digestion*
- Supports healthy respiratory function*
- Promotes a positive mood

Aromatic Description

Clean, fresh, citrus, bright

Collection Method

Cold Pressed/Expression

Plant Part

Lemon rinds (peel)

Main Constituents

Limonene, β -pinene, γ -terpinene

Melaleuca



Primary Benefits

- Renowned for its cleansing and rejuvenating effect on the skin
- Promotes healthy immune function when used internally*
- Ingest to protect against environmental and seasonal threats*

Aromatic Description

Herbaceous, green, leathery

Collection Method

Steam Distillation

Plant Part

Leaf

Oregano



Oregano

Primary Benefits

- Used as a powerful cleansing and purifying agent
- Supports a healthy immune system, healthy digestion, and respiratory function when used internally*
- Offers powerful antioxidants when ingested*

Aromatic Description

Herbaceous, sharp, green, camphoraceous

Collection Method

Steam Distillation

Plant Part

Leaf

Main Constituents

Carvacrol, thymol

doTERRA Breathe (combination of oils)



Primary Benefits

- Maintains feelings of clear airways and easy breathing
- Promotes a restful nights sleep
- Helps minimize the effects of seasonal threats

Ingredients

Laurel Leaf, Eucalyptus Leaf, Peppermint Plant, Melaleuca Leaf, Lemon Peel, Cardamom Seed, Ravintsara Leaf, Ravensara Leaf essential oils

Aromatic Description

Minty, fresh, airy

DigestZen (combination of oils)



Primary Benefits

- Supports healthy digestion when used internally*
- Consume to soothe occasional stomach upset*
- Take orally to help reduce bloating, gas, and occasional indigestion*

Ingredients

Anise Seed, Peppermint Plant, Ginger Rhizome/Root, Caraway Seed, Coriander Seed, Tarragon Plant, and Fennel Seed essential oils.

Aromatic Description

Spicy, sweet, minty, licorice

doTERRA On Guard (combination of oils)



dōTERRA On Guard®

Primary Benefits

- Supports healthy immune and respiratory function*
- Protects against environmental threats*
- Supports the body's natural antioxidant defenses*
- Promotes healthy circulation*
- Energizing and uplifting aroma

Ingredients

Wild Orange Peel, Clove Bud, Cinnamon Leaf, Cinnamon Bark, Eucalyptus Leaf, and Rosemary Leaf/Flower essential oils.

Aromatic Description

Warm, spicy, camphoraceous, woody

Deep Blue (combination of oils)



Primary Benefits

- Soothing and cooling oil blend
- Comforting part of a massage

Ingredients

Wintergreen, Camphor, Peppermint, Ylang Ylang, Helichrysum, Blue Tansy, Blue Chamomile, and Osmanthus

Aromatic Description

Minty, camphoraceous

Other Essential Oils

Bergamot

- Works mainly on the nervous system
- Recommended for relieving skin, scalp, mouth, urinary tract, and respiratory infections
- It takes 100 bergamot oranges to create 2 ounces of essential oil.

Cardamon

- Can work on the digestive, muscular, respiratory, and nervous system

Note: The information is just to give you an idea of what is available. It doesn't cover the psychological benefits of these oils. Check with written sources and pay attention for issues associated with children and pregnancy.

Other Essential Oils

Cedarwood, Virginia

- Can be used orally or topically to treat rheumatism, arthritis, skin rashes, delayed menstruation, venereal warts, gonorrhea, and kidney, urinary, and respiratory infections.
- Can help sluggish blood and lymphatic flow.

Chamomile, German and Chamomile, Roman

- German version is calming, relaxing, helps with skin issues, helps with nervous and digestive issues
- Roman version helps with courage, calming, relaxing, and helps with skin issues

Other Essential Oils

Cinnamon

- Has been used as a spice
- Helps with circulation
- As a “hot” oil, it needs to be diluted.
- An anti-infectious agent, useful for anti-bacterial, anti-viral, and anti-fungal

Clary Sage

- Eases depression, nervous burnout, skin challenges, and women's health
- Helps with muscle stiffness
- Helps with childbirth, reduces hot flashes and menstrual cramping

Other Essential Oils

Clove Bud

- Can be used for acne, bruises, toothaches, and mouth sores
- Can repel insects
- Can help with bronchitis and depression
- Avoid using on children and people with kidney disease

Cypress

- Cypress is a tree and the oil it produces is useful when there is an excess of bodily fluids like profuse sweating, weeping eczema and psoriasis, cuts or scrapes that won't stop bleeding. It is also a herbal diuretic.

Other Essential Oils

Eucalyptus

- More than one type
- Antianxiety
- Antibacterial
- Antifungal
- Diuretic
- Other
- Note: Keep away from homeopathic medicines as it can antidote them

Geranium

- Powerful for wounds
- Helps with skin issues such as
- Acne, eczema and dermatitis
- Helps with nerve pain, a tonic for the urinary system and liver, helping the body to get rid of toxins

Other Essential Oils

Ginger

- A spice, and a good medicine for cold, moist conditions. It can help with digestive complaints, excess gas and nausea, dizziness, stiff muscle and joint discomfort, migraine headaches, poor circulation, lymphedema, and other conditions.

Grapefruit

- Has a stabilizing effect on blood sugar, diminishes the appetite, enhance digestion, acts as a mild diuretic, and helps with infectious illnesses.
- Helps with moods, lifts spirits

Other Essential Oils

Helichrysum

- Used for a number of complaints, respiratory, liver, skin, headaches, and inflammation. Can help with arthritic pain, sciatica, sprains, and muscle spasms
- Considered a wound healer

Marjoram, Sweet

- A close relative of oregano
- Can help with digestive complaints, nervous disorders, intestinal cramps, respiratory infections, fungal conditions, muscular and rheumatic pain, sprains, stiff joints, bruises, anxiety, and insomnia

Other Essential Oils

Myrrh

- Used in ancient times
- Helps with skin issues, helps with inflammatory and infectious conditions of the mouth and throat, respiratory issues

Orange, Wild or Sweet

- Great as a massage oil along with peppermint
- Helps with skin and lymphatic issues, antibacterial

Other Essential Oils

Peppermint

- Helps with mental fatigue and depression
- Supports the digestive system
- Can help with sinus and respiratory issues, also skin
- Important – keep this stored away from homeopathic medicines as it can antidote them

Rosemary

- An inflammatory
- Helps with memory, the respiratory system
- Helps with hair, an astringent for skin, tightening and strengthening it
- Helps with high and low blood pressure

Other Essential Oils

Scotch Pine

- From a tree
- Can help with skin issues, cracked skin, eczema, psoriasis, and infected wounds.
- Can help with arthritis, rheumatism, gout, sore or stiff muscles, poor circulation, respiratory issues

Spikenard

- Was used in ancient times, in the holy land, Europe, and India
- Helps people with sleeping issues, a calming, relaxing, and helps those who worry too much
- A fever reducer

Other Essential Oils

Thyme

- Strengthens the respiratory system, so it helps with colds, flu, asthma, bronchitis, sinusitis, rheumatism, gout and sore muscles after exercising
- Stimulates the lymphatic system, helps the digestive system
- Helps memory and concentration
- Helps with depression

Addendum

- Bibliography
 - Essential oils 101: your guide to understanding and using essential oils (2017) by Kymberly Keniston-Pond. (Publisher: Adamsmedia).
 - Modern Essentials: a contemporary guide to the therapeutic use of essential oils (2014). (Publisher: Aroma Tools, www.aromatoools.com).
 - Stephanie Tourles's essential oils: a beginner's guide (2018) by Stephanie Tourles (2018). (Publisher: Storey Publishing).
 - www.aromaticscience.com
 - www.doterra.com
- Other essential oils (on the next slide)

Addendum: Complete Listing of Essential Oils, part one of three

- Arborvitae
- Basil
- Birch
- Black Pepper
- Cardamom
- Cassia
- Cedarwood
- Cilantro
- Cinnamon
- Clary Sage
- Clove
- Coriander
- Cypress
- Dill
- Douglas Fir
- Eucalyptus

Addendum: Complete Listing of Essential Oils, part two of three

- Fennel
- Frankincense
- Geranium
- Ginger
- Grapefruit
- Helichrysum
- Juniper Berry
- Lavender
- Lemon
- Lemongrass
- Lime
- Marjoram
- Melaleuca
- Melissa
- Myrrh
- Orange

Addendum: Complete Listing of Essential Oils, part three of three

- Patchouli
- Peppermint
- Petitgrain
- Roman Chamomile
- Rose
- Rosemary
- Sandalwood
- Spearmint
- Spikenard
- Thyme
- Vetiver
- White Fir
- Wintergreen
- Ylang Ylang
- Note: There are others not listed.

Note: These are oils available for DoTerra and listed in Modern Essentials, eighth edition.

Addendum: Health issues that essential oils can be used (Physical)

- Acne
- Allergies
- Arthritis
- Asthma
- Bacterial infection
- Bee Sting Bleeding
- Blisters
- Bronchitis
- Bruises
- Burns
- Colds
- Corns
- Congestion
- Coughs
- Cuts/Wounds
- Dandruff
- Diarrhea
- Earache
- Energy
- Fever
- Fungal infection
- Gas
- Headaches

Source: AromaTools Reference Card. Other health issues can be addressed using essential oils.

Addendum: Health issues that essential oils can be used (Physical)

- High Blood Pressure
- Hives
- Indigestion
- Inflammation
- Influenza (flu)
- Insect Repellent
- Insomnia
- Low Blood Pressure
- Memory
- Muscle Cramps
- Nausea
- Neuralgia
- Pain
- Parasites
- PMS
- Pneumonia
- Poison Oak/Ivy
- Shock
- Sore Throat
- Toothache
- Viral Infection
- Warts

Addendum: Health issues that essential oils can be used (Mental Health)

- Anxiety
- Depression
- Stress

Addendum: Carrier Oils

- Avocado Oil
- Borage Oil
- Calendula Oil
- Coconut Oil (fractionated)
- Evening Primrose Oil
- Grapeseed Oil
- Jojoba Oil
- Rosehip Seed Oil
- Sweet Almond Oil
- Tamanu (*Calophyllum*) oil

• Note: Most common oil used is coconut fractionated oil.

Addendum: Categories of Essential Oils (more technical)

- 1. Monoterpenes
- 2. Sesquiterpenes
- 3. Monoterpenols
- 4. Sesquiterpenols
- 5. Aldehydes
- 6. Ketones
- 7. Esters
- 8. Oxides
- 9. Phenols

Addendum: Recipe for Shampoo using an essential oil

- 6 ounces of aloe vera gel
- 3 Tablespoons of olive oil
- 5 Tablespoons of baking soda
- 20 drops of Rosemary oil
- 10 drops of Sage oil

Conclusion

- When conventional medical methods don't seem to work, essential oils is another option. Or, on the other way around, use essential oils as a preventive measure.
- Besides for dealing with health issues, essential oils can be used for cleaning products and personal care products.

Information about the authors

- Tamar Clarke has a master's degree in library science from the University of Pittsburgh and a master's degree in public administration from American University.
- April Huckabay has studied integrative health at Allegany College of Maryland with an AA degree, a Reiki master, Aroma Touch technician, and undertaken a number of classes on nutrition, yoga, and other independent classes. She teaches yoga and other classes.