Essential Oils for the Musculoskeletal System

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Institute of Spiritual Healing and Aromatherapy, Inc.
Disclaimer

The material in this book is a guide to the practice of aromatherapy. It is not a replacement for traditional health care, medical diagnosis, or medical treatment for illness. Refer to a licensed medical practitioner for medical care.

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About the Author

Linda is President of the Institute of Spiritual Healing & Aromatherapy. She is certified in holistic nursing, Healing Touch, Healing Touch Spiritual Ministry, and in aromatherapy. As creator of a certification in clinical aromatherapy program, Linda has produced a unique offering that enhances the study of clinical aromatherapy by adding the study of vibrational frequencies of the oils, emotional and spiritual aspects of healing with oils, and energetic healing techniques. When students graduate from this 300 hour course of study, they will have learned much more than the national requirements to become an aromatherapist. Linda lives in Arvada, Colorado but can be found most weekends teaching somewhere throughout the world. Her “calling” is to help restore healing in Christianity and so she takes a Christian approach to the presentation of essential oils—God’s healing pharmacy.

Linda is also an expert article writer on the internet and has published well over 250 articles for ezine articles primarily on aromatherapy and topics concerning Healing Touch Spiritual Ministry. To see a list of her published works you can google Linda Lee Smith or go to http://www.ezinearticles.com/?expert=Linda_Lee_Smith For more free aromatherapy education, you can go to Linda’s blog at http://EssentialOilEducation.com for the latest news and short articles on aromatherapy.

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# Table of Contents

**Introduction** 4

**Chapter 1 The Musculoskeletal System anatomy** 5

Our Bony Structure 5  
   Types of Bones 6  
   The Spine 6  

The Muscle System 8  
   Tendons 8  
   Ligaments 9  
   Joints 10  
   Involuntary Muscles 10  

How Can Essential Oils Aid the Musculoskeletal System? 10

**Chapter 2 Common Problems of the Musculoskeletal System Where Essential Oils Can Help** 13

Pain 13  
Types of Musculoskeletal pain 14  
Aromatherapy Applications 15  
Osteoarthritis 15  
Rheumatoid Arthritis 16  
Backache 16  
Bruised or Broken Bones 17  
Bruises (Contusions) 18  
Connective Tissue Trauma 19  
Cramps and Spasms 20  
Gout 21  
Inflammation 21  
   Tendonitis 22  
   Bursitis 22  
Fibromyalgia 23  
Osteoporosis 25  
Plantar Fasciitis 25  
Scoliosis 26  
Sciatica 27  
Scleroderma 27  
Sprains, Strains, Dislocations 28  
TNJ Disorders 28  
Whiplash 29

Footnotes 30  
Bibliography 31
Introduction

I can’t think of anyone who hasn’t experienced painful muscles at one time or another. It’s part of being human. As we grow older, those aches and pains can get more frequent unless you practice good self care. Even then, nothing is going to prevent the “good kind of pain” that comes from exercise, even walking. Our bones and muscles serve us well through life allowing us to be mobile and do things that our minds tell us are important to accomplish. This ebook will look at the anatomy of our musculoskeletal system and examine various problems where essential oils can be a definite benefit in dealing with pain and healing injured tissues.

I hope you enjoy it. I had fun writing about it.

Linda Smith

Thanks to Patricia Springer who did some of the anatomy research for this ebook.
Chapter 1

The Musculoskeletal System Anatomy

Our musculoskeletal system gives us the ability to move using both the muscular and skeletal systems. It is extremely resilient, providing form, support, stability, and movement to the body. The primary functions include supporting the body, allowing motion, and protecting vital organs. When there is a problem with our muscles or bones or joints, it is hard to ignore. Every movement seems to result in pain.

This system is made up of bones, muscles, cartilage, tendons, ligaments, joints, and other connective tissue that supports and binds tissues and organs together. Let’s take a closer look first at the skeletal structure.

Our Bony Structure

Our bones are the hardest tissues in the body and serve many important functions. They provide form and shape plus they support, protect, and allow bodily movement. Bones produce blood for the body and store minerals. We are
born with over 300 bones, but during our lifetime, many bones fuse, so an average adult skeleton consists of 206 bones.

The axial skeleton contains 80 bones located close to or along the central axis of the body. This includes the skull, middle ears, hyoid (located in the neck to anchor the tongue so we can swallow), ribs and sternum, vertebral or spinal column. The appendicular skeleton consists of 126 bones that are responsible for movement like walking, or manipulating objects within our environment. These bones include the clavicle (collarbone), scapula (large flat bone in the upper back), arms, hands, fingers, leg bones and toes. We have long bones, short bones, flat bones, irregular bones, and sesamoid bones. Our skeleton is supported by ligaments, tendons, muscles, and cartilage.

Types of Bones

Located in the long bones are two types of bone marrow—yellow and red. The yellow marrow has fatty connective tissue. During starvation—the body uses the fat in the yellow marrow for energy. The red marrow of some bones is where blood cell production takes place. Here erythrocytes (red blood cells), platelets, and most of the leukocytes (white blood cells) for in adults.

The Spine

The vertebral column or backbone protects the spinal cord and allows for mobility. The back is a powerhouse for the entire body—supporting our trunks and making all of the movements of our head, arms, and legs possible. We are born with 33 separate vertebrae but by adulthood most of us have only 24 due to fusion of vertebrae in parts of the spine during normal development. In the neck area, we have the Atlas—C1 and the Axis—C2
followed by seven vertebrae—C3-7. Below the cervical vertebrae are the thoracic vertebrae—T1-T12. The Lumbar region is next and has 5 vertebrae called L1 to L5. Below the lumbar spine—9 vertebrae at the base of the spine grow together. Five form the triangular bone called the sacrum. The lowest 4 vertebrae form the tailbone or coccyx.

Individual vertebrae are composed of a central body, arches that protrude from the top and bottom of the body, and various processes projecting from the body and/or the arches. The structure has an opening in the center for the spinal cord to pass through and provides protection for both the cord and the spinal nerves which pass through openings (foramens) to other parts of the body. Cartilage discs form cushions between each vertebral body. The discs have both a tough outer layer which surrounds a mushy, moist center. When a disc herniates or ruptures—the soft central nucleus spurts out through a tear in the outer part and can compress a nerve root. This of course causes extreme pain and may even cause injury to the nerve.
The Muscle System

We have three types of muscles—skeletal, smooth, and cardiac. The word muscle comes from the Latin “musculus” which means “little mouse”. Some muscles might have that shape, but perhaps when a muscle contracts, it looks like a mouse moving under the skin. Skeletal and cardiac muscles have striations. Cardiac muscles are found only in the heart and are used to circulate blood. Both cardiac and smooth muscles are not under our conscious control, whereas the skeletal muscles are and are innervated by the nerves that conduct electrical currents from the central nervous system causing the muscles to contract. The skeletal muscles that we are concerned with here are attached to bones and arranged in opposing groups around joints.

The skeletal muscles are also referred to as our voluntary muscles. They form the bulk of the fleshy parts of our body, provide strength for the body, and heat to keep us warm. These muscles are fixed to the bones by blending with the sheaths of fibrous tissue surrounding the bones. They are either attached directly to a wide area of bone surface or they taper to form a strong cord (tendon) that is attached at a specific place on a bone.

Tendons

Tendons are tough, flexible bands of fibrous connective tissue that connect muscles to bones. As muscles contract, tendons transmit the forces to the relatively rigid bones, pulling on them and causing movement. Tendons can stretch a great deal, allowing them to function as springs during locomotion. An example is the Achilles tendon pictured on the next page.
Ligaments

Ligaments are small bands of dense, white fibrous elastic tissue that connect the ends of bones together in order to form a joint. Most ligaments will limit any dislocation, or prevent certain movements that may cause breaks. Ligaments may restrict some actions like hyper extension and hyper-flexion or certain directional movement. When a ligament is injured, movement may be limited due to pain.
Joints

Bones are connected at joints. This is called articulation. Synovial joints, like the one pictured to the right, are lubricated by synovial fluid which lowers the friction between the surfaces of the bones. These joints allow for articular movement. Some types of synovial joints include: ball and socket—hip and shoulder; hinge—ankle and elbow; saddle—base of the thumb; ellipsoid—wrist and knee; pivot—head to allow for rotation; gliding—on the flat bones like the vertebrae.

Other joints in the body are immovable and allow for little or no movement—skull bones and teeth in their sockets.

Involuntary Muscles

These are found in the walls of the stomach and intestines, in the heart and blood vessels, and in other internal organs of the body. They continue to work throughout life as part of natural body function outside the control of personal will.

How Can Essential Oils Aid the Musculoskeletal System?

Essential oils can permeate the skin and detoxify, relax, and decrease swelling in muscle tissue. The best results for essential oils in our muscles comes from directly applying the oils to the affected area. When a muscle responds to pain
with a reflex contraction, blood flow to the area is impeded. Less oxygen and glucose along with the decrease in circulation means that removal of toxins and waste products is slowed. Inflammation, muscular soreness, and pain are the results. Some oils are cooling and anti-inflammatory, others are warming and increase blood flow to the area. Some are analgesic—pain relieving and others are antispasmodic.

Essential oils can also aid chronic pain sufferers by increasing levels of endorphins and enkephalins (these are the “feel good” hormones) through stimulating the pituitary and thalamus. In addition, the essential oils that are known to be “euphoric” or “aphrodisiac” can produce a feeling of well-being.

### How Essential Oils Can Aid:

<table>
<thead>
<tr>
<th>The Musculoskeletal System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analgesics</strong></td>
</tr>
<tr>
<td>Relieve Pain</td>
</tr>
<tr>
<td>Bay laurel, black pepper, Eucalyptus globulus or E. citriodora, German chamomile, ginger, lavender, lavandin, nutmeg, peppermint, sweet birch, wintergreen, Deep Relief™, PanAway™, Aroma Siez™, copaiba, balsam fir, Douglas fir, ginger, helichrysum, lavender, lemongrass, marjoram, nutmeg, oregano, palo santo, Relieve It™, Roman chamomile, rosemary, spearmint, thyme, vetiver, clove, frankincense, juniper, myrrh, rose, verbena, ylang ylang.</td>
</tr>
<tr>
<td><strong>Cooling Anti-Inflammatory</strong></td>
</tr>
<tr>
<td>Ideal for acute inflammation in any form.</td>
</tr>
<tr>
<td>Blue cypress, German chamomile, helichrysum, lavender, palmarosa, sweet birch, turmeric, wintergreen, yarrow, frankincense, peppermint, basil, balsam fir, white fir, copaiba, Deep Relief™.</td>
</tr>
<tr>
<td><strong>Warming Anti-Inflammatory</strong></td>
</tr>
<tr>
<td>Oils that warm the tissue and increase blood flow to the area.</td>
</tr>
<tr>
<td>Black pepper, cardamom, clove, cumin, ginger, nutmeg.</td>
</tr>
</tbody>
</table>
### Essential Oils for the Musculoskeletal System

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Oils</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antispasmodics:</strong></td>
<td>Relieves spasms, releases tight muscles.</td>
<td>Basil, black pepper, cardamom, clary sage, lavender, marjoram, petitgrain, Roman chamomile, tarragon, PanAway™, Aroma Siez™, clary sage, cypress, jasmine, peppermint.</td>
</tr>
<tr>
<td><strong>Detoxifier</strong></td>
<td>Enhances the removal of toxic substances from the body.</td>
<td>Carrot seed, cypress, fennel, grapefruit, juniper, lemon.</td>
</tr>
<tr>
<td><strong>Rubefacient</strong></td>
<td>Substances that increase cutaneous blood flow to a local area—causes reddening and warming of the skin.</td>
<td>Black pepper, ginger, juniper, sweet marjoram, rosemary ct camphor, thyme.</td>
</tr>
<tr>
<td><strong>Nervine</strong></td>
<td>Oils that relax the nervous system and thus reduce nervous disorders.</td>
<td>Angelica, bergamot, German chamomile, Roman chamomile, frankincense, lavender, mandarin, sweet marjoram, melissa, neroli, sweet orange, petitgrain, rose, sandalwood, vetiver, ylang ylang.</td>
</tr>
<tr>
<td><strong>Mending</strong></td>
<td>Mends torn muscles, ligaments and tendons.</td>
<td>Lemongrass, helichrysum, spruce, ginger, lemon myrtle.</td>
</tr>
</tbody>
</table>

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Chapter 2

Common Problems of the Musculoskeletal System Where Essential Oils Can Help

The musculoskeletal system seems like an obvious part of the body where essential oils can be of assistance. Massage therapists regularly encounter soft tissue problems where essential oils are very healing for sudden injuries, overuse injuries, arthritis, fibromyalgia, cramps, and spasms. But whether you are a healthcare professional or not, an aromatherapist needs to know how essential oils can ease the discomfort of pain and inflammation involving the musculoskeletal system.

Pain

Pain can be generalized or localized to a part of the body. The experience of pain will always be unique to the individual—pain is what the person says it is. Some will have a high tolerance for pain levels while others cringe at the first sign of pain. How one describes pain is also unique and can vary greatly. Lower back pain is the most common type of musculoskeletal pain; others common types include tendonitis, myalgia, and stress fractures.

Pain can also be acute or chronic. Chronic pain can linger for years and even incapacitate the individual from normal life activities.²

The kind of pain we are dealing with in the musculoskeletal system can be described as dull and aching, sharp, stabbing, burning, numbing, or shooting depending the severity of injury and whether or not nerves are involved. Muscle tissue can be damaged with the wear and tear of daily activities or there can be trauma to an area—falls, fractures, sprains, dislocations, direct blows. Sometimes people complain that their entire bodies ache.
Western medicine will usually do tests to determine the extent of the problem and begin with prescribing non-steroidal anti-inflammatories, acetaminophen or opioids to treat the inflammation or pain. Other treatments might include injections with anesthetic or anti-inflammatory medications in or around the painful sites, exercise that includes muscle strengthening and stretching, physical or occupational therapy, acupuncture or acupressure, relaxation/biofeedback techniques, osteopathic manipulation, chiropractic care, and therapeutic massage. This is one area where aromatherapy can really help.

**Types of Musculoskeletal Pain**

**Bone pain**—usually deep, penetrating, or dull. It most commonly results from injury but could be related to a fracture or tumor.

**Muscle pain**—Often less intense than bone pain, but can be debilitating. Can be caused by an injury, an autoimmune reaction, loss of blood flow to the muscle, infection, or a tumor. Can also include muscle spasms and cramps.

**Tendon and ligament pain**—often caused by injuries, including sprains. Pain becomes worse when the affected area is stretched or moved.

**Fibromyalgia**—pain in the muscles, tendons, or ligaments. It is usually in multiple locations and can be difficult to describe. Often accompanied by many other symptoms.

**Joint pain**—pain produces a stiff, aching, “arthritic” pain. The pain may range from mild to severe and worsens when moving the joint. Joints may swell and joint inflammation (arthritis) is a common cause of this pain.

**Tunnel syndromes**—refers to musculoskeletal disorders that cause pain due to nerve compression.
Aromatherapy Applications

- Skin application to the place of pain or injury
- Oils on the soles of the feet
- Oils diluted for a partial or full body massage
- Warm compresses with essential oils
- Aromatherapy baths
- Brushing an essential oil through the energy field with your hands

Musculoskeletal System Problems

Osteoarthritis
This is the most common form of arthritis. It involves the breakdown of the cartilage that forms a cushion between two joints. It affects joints, mostly in weight bearing areas—hips, knees, feet, and back and, it is a progressive disease with age. When the cartilage begins to wear away, the person develops pain, swelling, and stiffness. Eventually, it results in a lack of function. The bone shrinks at the margins of the bone and/or there are changes in the synovial fluid which is the thick liquid that cushions and lubricates the joint. Bone spurs may develop as bone rubs on bone, altering the shape of the joint and restricting movement.

Underlying causes may include injury or chronic overuse of the joint, hypermobility, or diabetes. Pain and

Suggested oils include: Wintergreen/birch, nutmeg, clove, German chamomile, helichrysum, Idaho balsam fir, Douglas fir, white fir, spruce, pine, cypress, peppermint, vetiver, marjoram, rosemary CT cineol, E. citriodora, basil, oregano, lemongrass, Idaho tansy, black pepper, elemi, lavender.

The most important focus in treatment is improving mobility and range of motion and decreasing pain. Inflammation is relatively less with osteoarthritis. Oils that are warming and analgesic, are nutmeg, bay laurel, and black pepper.3

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stiffness are the main symptoms. Exercise is crucial along with weight loss to ease the symptoms.

Rheumatoid Arthritis

RA is an autoimmune disease, meaning the body’s immune system mistakenly attacks healthy tissue. Since RA affects the musculoskeletal system, it is generally treated symptomatically. It is one of the more serious and disabling types of arthritis affecting mostly women.

RA usually affects joints on both sides of the body equally—wrists, fingers, knees, feet, and ankles are the most commonly affected. The disease often begins slowly, usually with only minor joint pain, stiffness, and fatigue. Over time, joints may lose their range of motion and may become deformed.

Symptoms include joint pain and swelling, stiffness, especially in the morning or after sitting for long periods, and fatigue.

The key to treatment in RA is detoxification.

During flare-ups the joints become hot, swollen, and extremely tender to the touch. Cooling anti-inflammatory and analgesic oils are the most beneficial. Sweet birch, wintergreen, German chamomile, peppermint, spike lavender, turmeric, and E. citriodora can bring relief.

When the person is not in a flare-up, it is important to maintain range of motion and strength. The more warming essential oils like nutmeg, black pepper, ginger, and bay laurel will make connective tissue easier to loosen and stretch. 4

Backaches

Backache is the most common complaint in humans regardless of cultural diversity or occupation. Most back pain occurs between the ages of 25-60 and is acute and will resolve itself in 3 days to 6 weeks with or without treatment. When it lasts longer than 3 months, it is said to be chronic. 80% of Americans will experience low back pain at least once in their lifetime. A small number will develop chronic or degenerative spinal

Essential oils can detoxify, relax, and decrease swelling in muscle tissue. Essential oils can aid chronic pain sufferers by increasing levels of endorphins and enkephalins (the feel good hormones).

In general, topically apply the oils neat to the aching back several times a day. Use a warm compress if there is no inflammation; cold if there is inflammation. 5

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disorders that can be disabling.

Ten common causes of back pain include: fractures, sprains, osteoarthritis, herniated disks, obesity, fibromyalgia, pregnancy, sleeping positions, bad posture, and stress and anxiety.

Lumbar strain is a stretching injury to the ligaments, tendons, and/or muscles of the low back. Microscopic tears of varying degrees can occur in this stretching.

Nerves of the lumbar spine can be irritated by mechanical impingement or disease anywhere along their paths. This includes lumbar disc disease, bony encroachment, inflammation of the nerves by a virus—shingles. Damage can occur simply from degeneration—wear and tear, or traumatic injury, or both.

In general—Lavender, German chamomile, basil, peppermint, geranium, elemi.

For chronic pain and tenderness, use the warming oils like ginger, black pepper, and bay laurel. These oils work particularly well when combined with lemon, grapefruit, or cypress.

A backache blend:
- 5 drops clary sage
- 5 drops lavender
- 5 drops chamomile

Apply oils neat, 2-4 drops to aching area 1-3 times daily as needed. Use a warm compress if there is no inflammation; cold if there is.

You can use these oils in a gentle massage in a 3-5% dilution. They can also be used in the bath to loosen muscles and provide pain relief.

I have found several blends to be helpful: Deep Relief™, Aroma Siez™, PanAway™, Relieve It™

<table>
<thead>
<tr>
<th>Essential Oils for the Musculoskeletal System</th>
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<tbody>
<tr>
<td>Bruised or Broken Bones</td>
</tr>
<tr>
<td>Cooling oils are best to help with swelling and heat while the injured limb is in a cast. Once the cast is removed, oils can gently be massaged over the area in an emollient cream or carrier oil. Ingrid Martin suggests sandalwood, rose, or geranium. Oils such as Eucalyptus globulus or rosemary will help increase local circulation.</td>
</tr>
<tr>
<td>Helichrysum, wintergreen/birch, peppermint, spruce, Idaho Balsam fir, white fir, pine, cypress, rosemary, basil, elemi, Idaho tansy,</td>
</tr>
</tbody>
</table>
Aromatherapists can support the healing process by helping to reduce swelling and pain by treating the accompanying soft tissue injuries.

**Bruises (Contusions)**

Bruises occur when tissue under the skin is injured in some way—blood vessels may be broken and blood collects under the skin resulting in pain, swelling, and discoloration. Bumps, pinches and falls can cause bruises or when bones are broken. When someone bruises easily or without apparent cause—it could be a Vitamin C deficiency or more serious health concern.

Treatment for light bruises may include rest, ice, compression, and elevation. Severe bruising is much more dangerous and may cause serious complications. Damage that causes this kind of bruising may also cause bones to be broken, tendons or muscles to be strained, ligaments to be sprained.

An old remedy to help heal bruising is to eat more peppers, citrus fruits or any other food that’s rich in Vitamin C to help build collagen around blood vessels in the skin.

First thing to reach for when treating a bruise is an ice pack or cold cloth compress. Ice cold Witch Hazel is another remedy for immediate relief.

<table>
<thead>
<tr>
<th>Essential Oils for the Musculoskeletal System</th>
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</thead>
<tbody>
<tr>
<td>lemongrass, clove, ginger. A bone healing blend: 8 drops Idaho balsam fir 6 drops helichrysum 1 drop oregano, 1 drop vetiver Apply in a 50-50 dilution, 2-4 drops several times a day.</td>
</tr>
</tbody>
</table>
• Helps heal the slight skin abrasions that dry, mature skin tends to develop.
• Can be applied directly to wounds and will act as an antiseptic.
• Can provide immediate relief and minimize pain after injuries.
• Great sports rub after a workout or physical labor.
• Speeds healing of incisions after surgery.
• Aids in regeneration of nerves.
• Chelates chemicals and other toxins from the body.
• Has a profound effect on the emotional heart—helps a person get in touch with unresolved feelings and emotions that may have been denied for a long time.

After Helichrysum, you would go to geranium or cistus for bruising. Geranium is an effective hemostatic which speeds up blood coagulation and checks bleeding.

Connective Tissue Trauma

We have several kinds of connective tissue in the body:

The dense connective tissue forms ligaments and tendons.

The loose connective tissue holds the organs and epithelium in place.

Reticular is a network of fibers that form a soft skeleton to support the lymph nodes, bone marrow, and spleen.

Adipose is used for cushioning, thermal insulation, lubrication (primarily in the pericardium that surrounds the heart), and energy.

In general, essential oils for Connective Tissue Traumas include: basil, lemongrass, marjoram, helichrysum, wintergreen/birch, cypress, peppermint, rosemary, E. radiata.

Specifically for muscles injuries—basil, marjoram, lavender, Relieve It™, PanAway™.

Specifically for ligament injuries—lemongrass, helichrysum, lavender.
storage.
Cartilage is a form of fibrous connective tissue that is composed of closely packed collagenous fibers in a rubbery gelatinous substance called chondrin.

Bone is a type of mineralized connective tissue that contains collagen and calcium phosphate.

Blood is considered to be a type of connective tissue. The matrix is the plasma and the red and white cells and platelets are suspended in the plasma.

### Cramps and Spasms

A spasm is a persistent muscle contraction that cannot be released at will. A cramp is a term for a painful spasm.

To understand a spasm, we first have to understand how a contraction occurs. A message is sent by way of a motor neuron to the muscle, releasing calcium in the muscle cell—this initiates the contraction. A spasm occurs when the contraction does not stop. Spasms are triggered by pain, stress, fatigue, medications, cold, poor circulation, dehydration, and a lack of calcium, sodium, or vitamin D.

Antispasmodic essential oils like marjoram, basil, tarragon, cardamom, clary sage, and Roman chamomile.

Shutes and Weaver have a longer list of suggested oils for cramps and spasms: Birch, German chamomile, clary sage, cypress, eucalyptus, fennel, juniper, lavender, lemon, marjoram, peppermint, petitgrain, sage, and spearmint.\(^8\)

Cold compresses are best for spasms caused by injury, while warm compresses are preferred for muscles that are chronically hypertonic.
### Gout

Gout is a kind of arthritis that occurs when uric acid builds up in the blood and causes joint inflammation. If too much uric acid builds up in the fluid around the joints (the synovial fluid), uric acid crystals will form. These crystals cause the joint to swell up and become inflamed.

Symptoms usually involve only one or a few joints. The big toe, knee, or ankle joints are most often affected. The pain starts suddenly, often during the night and is described as throbbing, crushing, or excruciating. The joint appears warm and red and very tender. The attack may go away in a few days but may return from time to time. Drinking alcohol of any kind will make the symptoms much worse. Gout affects more men than women. There may be a genetic predisposition, but attacks can be triggered by obesity, eating certain foods, drinking alcohol, and injury or surgery.

### Inflammation

Inflammation is considered the root of all illness. The word comes from the Latin word *inflammatio*, which means to set on fire. It is a complicated response of the body's tissues to harmful stimuli—like pathogens or irritants of one kind or another. Research shows that in the inflammatory process nitric oxide is released, inflaming tissue and causing tissue damage.

Muscle use or injury can produce an inflammatory response in which neutrophils (white blood cells) rapidly

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Cooling anti-inflammatory oils provide a measure of relief during flare-ups. *Lavender, peppermint, German chamomile, yarrow, helichrysum.*

Detoxifying oils like *fennel, lemon, grapefruit, carrot, and juniper* may also be helpful.

Research at the Young Living Research laboratory showed that six essential oils will inhibit nitric oxide: *oregano* (most important), *Melaleuca ericifolia, dill, nutmeg, lemongrass, peppermint.* Other oils that were shown to have intermediate nitric oxide inhibition were: *lemon, frankincense, tangerine, myrtle, lavender, patchouli, E. polybractea, juniper, clove, orange, and E. radiata.*

*Oregano* has been shown to reduce inflammation by 94%–just
Two forms of Musculoskeletal Inflammation Are:

### Tendonitis

Tendons are tough flexible bands of fibrous tissue that connect your muscles to the bones. Tendonitis is a torn or inflamed tendon. It could encompass muscle damage, nerve damage, ligament strain/tear, inflammation, infection, and possibly an emotion.

Symptoms include tenderness directly over the tendon, pain with movement of muscles and tendons, and swelling.

Tendonitis of the elbow is often referred to as “tennis elbow.” Tendonitis at the wrist is Carpal Tunnel Syndrome. Tendonitis is most often an overuse injury.

### Bursitis

Bursitis is a painful condition that affects the small fluid-filled pads (the bursae) that are the cushions located in the shoulder, elbow, and hip. You can also have bursitis in the knee, heel, and the base of your big toe. The picture to the left is of a swollen, fluid-filled elbow that became infected and needed to be drained.

Aromatherapy aims at natural drainage and return to normal function by massage with analgesic and diuretic essential oils.

Remember it is a hot oil and so it is recommended to be diluted 20-80.

Two more recent oils that are highly anti-inflammatory are *copaiba* and *ocotea*—both from the rain forest.

For tendonitis, *PanAway™*, *lemongrass*, *lavender with lemongrass*, *marjoram with lemongrass*, *Deep Relief™*.

A suggested blend:
- 4 drops *vetiver*
- 4 drops *valerian*
- 8 drops *wintergreen*

Another blend:
- 10 drops *rosemary*
- 10 drops *E. radiata*
- 10 drops *peppermint*

The most important oils for bursitis include *helichrysum*, *German chamomile*, *E. polybractea*, *E. radiata*. Other oils include *lavender*, *basil*, *Geranium*, *rosemary*, *birch*, *wintergreen*, *peppermint*, *marjoram*, *Cajeput*, *hyssop*, *juniper*, *onycha*, *Roman chamomile*.

Warming anti-inflammatory oils include *ginger*, *black pepper*, *cardamom*, *clove*, *cumin*, *ginger*, *nutmeg*. Some helpful blends include: *PanAway™*, *Aroma Siez™*, *Deep Relief™*.
Fibromyalgia Syndrome is a widespread musculoskeletal pain and fatigue disorder with unknown causes. It is known that certain people are more at risk of developing fibromyalgia than others. There is generally soft tissue tenderness, general fatigue, and sleep disturbances. Most common sites of pain include the neck, back, shoulders, pelvic girdle, and hands, but any body part can be involved. The problems seem to come and go. There is controversy as to whether fibromyalgia is an autoimmune disease or not. You can go to the National fibromyalgia Association www.fmaware.org for lots of information on this chronic illness.

Complementary/alternative medicine seems to make more progress treating these problems than Western medicine. The beauty of this approach is that it does not rely on pharmaceutical drugs or surgery. This form of treatment can offer trigger point therapy, hypnosis, light therapy, low frequency sound therapy, craniosacral therapy, Reiki, Healing Touch therapy, watsu therapy, magnet therapy, and digestive system cleanses.10

Gary Young ND teaches that fibromyalgia is an acid condition brought on by a toxic liver. A liver and colon cleanse is highly advisable before getting started on any essential oil regime.

Major symptoms associated with Fibromyalgia Syndrome include:
- Widespread pain

For pain relief:
Lavender, spike lavender, marjoram, petitgrain, Roman and German chamomile, clary sage, lemongrass, helichrysum, peppermint, ginger, black pepper.

Spike lavender with peppermint and helichrysum creates an anti-inflammatory synergy.

Other anti-inflammatory oils include nutmeg, balsam fir, white fir, and wintergreen. You can topically dilute 50-50 and gently massage a few drops on pain locations.

For stress/anxiety relief: rose, frankincense, clary sage, sweet orange, bergamot, grapefruit, ylang ylang, sandalwood, neroli, marjoram, petitgrain, mandarin, lavender, geranium, tangerine, jasmine.

For peaceful sleep: lavender, neroli, jasmine, marjoram, Roman chamomile.

For a feeling of harmony and safety: frankincense, lavender, rose, mandarin, neroli, helichrysum.

For headaches: lavender, peppermint, marjoram, basil, Roman chamomile.

For increased circulation: rosemary, ginger, black pepper, peppermint, lemongrass, geranium.

A good overall blend for fibromyalgia might include the following:
4 drops lavender
1 drop frankincense
4 drops orange
1 drop neroli

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• Nausea  
• Dizziness  
• Morning Stiffness  
• Headaches  
• Sleep disorders  
• TMJ disorders  
• Skin complaints  
• Depression  
• Myofascial pain  
• Low levels of serotonin  
• Low levels of magnesium  
• Sleep apnea  
• Weather changes  
• Multiple chemical sensitivities  
• Restless leg syndrome  
• Dysmenorrhea (painful periods)  
• Weight gain  
• Muscle twitching  
• Fatigue  
• Muscle weakness  
• Chest pains  
• Anxiety  
• Vision problems  
• “fibrofog”  

Another blend:  
4 drops of marjoram  
1 drop Roman chamomile  
4 drops mandarin  
1 drop rose  

Another blend:  
8 drops Idaho balsam fir  
6 drops white fir  
4 drops wintergreen  
2 drops spruce  

Another blend:  
10 drops PanAway™  
6 drops wintergreen  
8 drops marjoram  
6 drops spruce  

Select an oil or oils for each potential cause/symptom of fibromyalgia and apply in rotation or prepare a blend to address multiple causes.

The best blend for someone with fibromyalgia would be specific to their individual needs.

In selecting your oils to be used, be familiar with the mental, emotional, and spiritual effects of the oils as well as their physical properties. This will make the blend more appropriate for a specific client. The citrus oils provide energy and courage, the flowers create peace and harmony, and oils for spiritual connection include rose, neroli, sandalwood, frankincense, helichrysum, mandarin and lavender.

Essential oils may help the fibromyalgia client in a massage, a bath as well as simple diffusion or inhalation. For the purpose of therapeutic massage, up to 10-12 drops of a blend of essential oils can be used in a one-ounce base carrier or you could mix the oils in a 50-50 dilution and massage 2-4 drops on painful locations. Use a warm compress.
### Osteoporosis

Osteoporosis is bone deterioration caused mainly by progesterone deficiency. Postmenopausal osteoporosis is the most common form resulting in thinner, weaker bones that can break more easily.

Other causes include:
- Lack of magnesium and boron in the diet
- Lack of Vitamin D and lack of dietary calcium (it is known that calcium cannot be driven to bone unless Vitamin D3 and K2 are present at the same time)
- Excess acidity from food intake and soft drinks. The acid state pulls calcium from the bones to neutralize the acidity.

Osteoporosis is a major reason for hip fractures. Mostly women are afflicted with low bone density (osteopenia).

Essential oils include wintergreen, birch, elemi, spruce, balsam fir, pine, cypress, peppermint, marjoram, rosemary, basil, copaiba. Blends include PanAway™, Aroma Siez™, Relieve It™, Deep Relief™.

Topically dilute 50-50 and massage 6-10 drops on spine or affected area 2-3 times daily.

### Plantar Fasciitis

Plantar fasciitis is inflammation caused by injury to the plantar fascia of the foot.

Massage with essential oils can be very helpful to release tension in deep calf muscles that put strain on the plantar fascia.

Suggested oils include: Birch, cardamom, German and Roman chamomile, clary sage, clove, eucalyptus, helichrysum, laurel, lavender, marjoram, peppermint, rosemary ct camphor or cineol, spearmint, arnica and St. John’s wort.

Epsom foot baths with essential oils, massage oil or cream with your chosen oils, hydrotherapy, reflexology, and myofascial release.
**Scoliosis**

Scoliosis is a curvature or a twisting of the spine. The word is from the Greek meaning “crooked condition.” As a medical term, it means a side-to-side curvature and may involve a rotation of the vertebrae. Curvatures are measured in degrees just like an angle. A normal spine is straight or has a curve of less than 10 degrees. Mild curvature is 10-20 degrees. Moderate curvature is 20-50 degrees. Severe spinal curvature is measured at over 50 degrees.

**Lordosis** (commonly referred to as swayback or saddle back) is a medical term used to describe an inward curvature of a portion of the vertebral column. Two segments of the vertebral column, namely the cervical and lumbar, normally have this curve.

**Kyphosis** (commonly called hunchback), is a condition of a curvature of the upper spine. It can be either the result of degenerative disease such as arthritis, developmental problems, osteoporosis with compression fractures of the vertebrae, and/or trauma.

Traditional medical treatment is complex and determined by the severity of the curvature and skeletal maturity. Conventional options are observation, bracing, or surgery.

Conventional chiropractic and physical therapy have some degree of anecdotal success that is primarily neuromuscular in nature.

**Suggested oils to be used on the spine:** oregano, thyme, basil, wintergreen/birch, cypress, marjoram, peppermint, and Aroma Siez™.

These oils can be used on the spine several times a week along with light massage or feathering of the oils along the spine. These oils are immune enhancing, support the body’s natural defenses, as well as the circulatory, respiratory, endocrine, digestive, nervous and other body systems.  

Research is showing that infectious microorganisms lodge near the spinal cord and contribute to deformities. Studies in Scotland have linked virus-like particles to idiopathic scoliosis.  

Two other blends have been shown to be helpful for scoliosis: PanAway™, and Valor™.

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## Sciatica

Sciatica is characterized by pain in the buttocks and down the back of the thigh. It is caused by pressure on the sciatic nerve.

Symptoms may include pain, numbness, or reduced sensation from the buttocks down to the legs.

Suggested oils include cistus followed by peppermint, helichrysum, peppermint, nutmeg, thyme, spruce, wintergreen/birch, basil, rosemary ct camphor, clove, tarragon, cardamom, German or Roman chamomile, cinnamon leaf, clary sage, cypress, frankincense, juniper, laurel, lavender, marjoram, neroli, spearmint, arnica, St. John’s wort.

Whatever oil is chosen, follow it by peppermint to drive in the essential oil’s various compounds. Topically dilute 50-50 and apply 6-10 drops on location twice a day or as needed.

A rather new oil is *Palo Santo* which has been shown to be an excellent anti-inflammatory and anti-spasmodic oil.

## Scleroderma

Scleroderma is a group of rare diseases affecting collagen that causes a thickening and hardening of the skin and other connective tissue. The cause is unknown and it is relatively rare, mostly striking women between ages of 30 and 50. It can be localized, affecting skin, fascia, muscle, and possibly bone in some areas, or more generalized affecting many systems of the body including the skin, cardiovascular system, kidneys, and GI tract.

Symptoms might include thickening of the skin, loss of range of motions, and muscle weakness. It can lead to serious symptoms and even death from heart failure.

The focus in early scleroderma is on retaining softness and flexibility in skin and muscle. Calendula appears to have a good effect also rose hip seed oil. Essential oils include rose, sandalwood, geranium, palmarosa, and cistus.
Sprains, Strains, and Dislocations

A strain is an injury caused by overstretching a muscle-tendon group.

A sprain is an injury caused by overstretching a ligament.

A dislocation is a dissociation of the articulating surfaces of a joint which generally includes injury to surrounding ligaments and tendons.

All three are actually very common sports injuries. Strains are caused by sudden overstretching of the muscle. Sprains and dislocations are caused by sudden wrenching or twisting movements of a joint, and dislocations may also be caused by an outside force, like a heavy blow.

Shirley Price suggests a foot or hand bath with marjoram and rosemary in cold water. Compresses may also help using these oils. Never massage a sprained joint.¹³

Suggested oils include German chamomile, lavender and clove—all have been clinically proven effective at reducing swelling and redness related to inflammation. Frankincense, wintergreen, peppermint, clove, fir, Douglas fir, balsam fir, spruce, and ginger lend immediate pain-relief by depressing sensory receptors in the brain.

In an acute stage, use cooling anti-inflammatory oils that are also analgesic. Lavender, German chamomile. Oils that are astringent may help move lymph that can start to relieve swelling—cypress, grapefruit, juniper. If there is bruising, helichrysum and hyssop are helpful.

In the sub acute stage, combining the cooling and the warming anti-inflammatory oils will help remove toxins and bring nutrients and oxygen to the area. German chamomile and helichrysum are particularly good.

TMJ Disorder
Temporomandibular joint Dysfunction

The exact cause of TMJ disorder is often difficult to determine. The pain may be due to a combination of problems like arthritis or jaw injury. Some people who have jaw pain also tend to clench or grind their teeth. TMJ can follow dental work in which the bite is off.

In TMJ, there is increased tension in the muscles controlling the mandible (jaw bone). There may be spasm and pain. Stress is believed to be a primary trigger, but other triggers include

Suggested oils include analgesic oils like wintergreen, birch, German chamomile, or black pepper. Antispasmodics like marjoram, basil, or cardamom will also be helpful.

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trauma, poor posture of the head and neck, and sinus infection. Main symptom is dull jaw pain, which increases while chewing. Other symptoms include jaw clicking or popping, earache, headache, and limitation of mouth opening.

<table>
<thead>
<tr>
<th>Whiplash</th>
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<tr>
<td>Whiplash is caused by an abrupt backward and/or forward jerking motion of the head, often as a result of a car accident. It is also referred to as a neck strain or sprain. Symptoms include neck pain and stiffness, headaches, pain in the shoulder, low back pain, pain or numbness in the arm and/or hand, dizziness, difficulty concentrating or remembering, irritability, sleep disturbances, fatigue.</td>
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Essential oils include wintergreen/birch, black pepper, cardamom, German and Roman chamomile, clary sage, clove, cypress, frankincense, ginger, helichrysun, juniper, laurel, lavender, marjoram, neroli, peppermint, petitgrain, rosemary ct camphor, spearmint, vetiver, lemongrass, hyssop (inflammation), spruce, arnica and St. John’s wort. Blends might include Deep Relief™, Aroma Siez™, Relieve It™, PanAway™.

Dilute as necessary and apply on location with gentle massage.
Footnotes


2 Please see the ebook on How Essential Oils Can help us Deal with Stress, pp. 21-23.

3 Ingrid Martin, *Aromatherapy for Massage Practitioners*, p. 213.

4 Martin, Ibid., pp. 212-213.


8 Jade Shutes, Christina Weaver, *Aromatherapy for Bodyworkers*, p. 213.


Bibliography


The Following Teleseminars Were Also used as References:


