# Arnica Oil Health and Beauty Benefits

Arnica oil is an all-natural oil that helps relieve bumps, bruises, aches and pains. Arnica oil is an extract of the arnica plant. It has been used for centuries to heal bruises and other injuries by speeding up the healing process. Arnica oil health and beauty benefits include relieving pain, improving circulation and reducing inflammation.

The <u>market value of essential oils worldwide</u> is expected to grow from around 17 billion U.S. dollars in 2017 to about <u>27 billion dollars by 2022</u>. <u>Europe accounts for the largest share</u> of the global essential oils market, with the Asia Pacific region and North America tying for second place.

## DESCRIPTION OF ARNICA

Arnica /ˈɑːrnɪkə/ is a genus of perennial (lives for more than two years), plants in the family (Asteraceae or Compositae, species of flowering plants within the order Asterales, commonly known as aster, daisy, composite or sunflower).

*Arnica* plants have a deep–rooted, erect stem (one of two main structural axes of a vascular plant) that is usually unbranched, each stem having 1–3 flower stalks, measuring 5–7.5 cm. The plant grows to a height of about 18–60 cm (7.1–23.6 in) tall, aromatic, fragrant and herbaceous (vascular plants with no persistent woody stems above ground).

Arnica montana, also known as wolf's bane, leopard's bane, mountain tobacco and mountain arnica, is a moderately toxic European plant. It is noted for its large yellow flower head (or *pseudanthium*, an inflorescence that resembles a flower).

The names "wolf's bane" and "leopard's bane" are also used for another plant, *Aconitum* (also known as *aconite, monkshood, wolf's bane, leopard's bane, mousebane, women's bane, devil's helmet, queen of poisons,* and *blue rocket*, a species in the family Ranunculaceae), which is extremely poisonous.

*Arnica* was previously classified in the largest tribe of Asteraceae known as Senecioneae because it has a flower or *pappus* (the modified *calyx* of an individual floret, it surrounds the base of the corolla tube and functions as a wind–dispersal mechanism for the seeds) of fine bristles.

Arnica montana is a hemicryptophyte in the Raunkiær system (a system for categorizing plants using life-form categories), which helps the plant survive the extreme overwintering conditions of its habitat.

## ROOTS

*Arnica* forms rhizomes (a modified subterranean stem that sends out roots and shoots from its nodes), which grow in a two–year cycle: the rosette part grows at its front while the tail is slowly dying.

#### LEAVES

The *Arnica* plant downy opposite leaves (*phyllotaxis* or *phyllotaxy*, the spiral arrangement of leaves on a plant stem) are borne towards the apex of the stem. The ovoid, leathery basal leaves are arranged in a rosette.

The plant's basal green ovate leaves have rounded tips, are brightly colored and level to the ground. In addition, they are somewhat downy on their upper surface, veined and aggregated in rosettes (a circular arrangement of leaves).

By contrast, the upper leaves are opposed, spear–shaped and smaller, which is an exception within the Asteraceae family. The chromosome number is 2n=38.

## FLOWERS

Flowering season is between May and August (in central Europe). The hairy flowers are composed of yellow disc florets in the center and large yellow or orange flowers, 6–8 cm (2–3 in) wide with 10–15 cm (4–6 in) long ray florets at the external parts.

The *phyllaries* (a single bract, a modified or specialized leaf, under an individual flower–head) has long spreading hairs. Each *phyllary* is associated with a ray floret. Species of *Arnica*, with an involucre (a circle of bracts surrounding the flower head) arranged in two rows, have only their outer *phyllaries* associated with ray florets. The flowers have a slight aromatic smell. If the flower extracts are taken in the wrong dosage they can be very dangerous.

#### SEEDS

The seed–like fruit (*achenes*) has a one–piece rough *pappus* of plumose, white or pale tan bristles, which open in dry conditions. The entire plant has a strong and distinct pine–sage odor when the leaves of mature plants are rubbed or bruised.

## ESSENTIAL OIL

Arnica is available dried flower form that can be used to prepare infusions, salves and tinctures. The essential oil of arnica is extracted from the flowers of *A. montana* through Through steam distillation or  $CO_2$  extraction. This highly concentrated preparation should be used with great caution because of its potency. A few drops should be diluted with a carrier oil such as sweet almond or coconut in preparations.

## CO<sub>2</sub> Extracted Arnica Oil

A relatively new preparation that is gaining traction, is an arnica aromatic extract that uses carbon dioxide as the solvent for extraction. Carbon dioxide extraction is able to extract more constituents from the plant that steam distillation, which is typical to essential oil extraction, this is due to the delicate nature of the plant matter.

This aromatic extract is technically not an essential oil, the end product is different—usually thicker, almost solid, like a resin. Precautions and use of this extract should be the same as that of the essential oil because both contain the same toxins.

Broken skin and ingestion are contraindicated. When applying extract topically, remember to dilute the  $CO_2$  arnica oil heavily—one source suggests 0.5–1% or less—and avoid diffusion or inhalation. It should be noted that the thick nature of the extract will make dilution more difficult.

## **Comedogenic Rating**

Arnica oil is best for all skin types but always dilute it (or buy it diluted). Arnica oil has been given a <u>comedogenic rating of 2</u> when infused in olive oil, meaning it is non–comedogenic and should not cause any adverse reactions, even in sensitive or easily irritated skin.

For this reason, arnica oil is often used as a carrier oil, to dilute essential oils. Only use arnica oil in diluted form, as pure arnica is very potent. Use sweet almond or grapeseed as a carrier oil to dilute pure arnica essential oil in a 30:70 ratio if the oil is not already diluted.

## HOMEMADE ARNICA PREPARATIONS

Another option is to buy or make your own arnica tea (infusion), ointment or tincture. These contain *flavonoids, tannins* and *sesquiterpenes* that, much like arnica essential oil have a number of health benefits. *Note: arnica tea should only be used externally.* 

# THE ETYMOLOGY OF ARNICA

The genus name *Arnica* may be derived from the Greek *arni*, "lamb", in reference to the plants' soft, hairy leaves.

# SPECIES OF ARNICA

Accepted species of Arnica:

- Arnica acaulis—Common leopardbane–eastern U.S. from Alabama to New Jersey
- Arnica angustifolia—Narrowleaf arnica–Canada (from British Columbia to Quebec), U.S. (Montana, Idaho, Wyoming, Colorado); Russia, Scandinavia
- Arnica cernua—Serpentine arnica–California, Oregon
- Arnica chamissonis—Chamisso arnica–U.S. West of the Rocky Mountains incl. Alaska; Canada (British Columbia to Quebec plus Yukon, the smallest of the three territories + Northwest Territories, the second–largest of the three)
- Arnica cordifolia—Heart–leaf leopardbane, heartleaf arnica–U.S. West of Rockies plus Alaska + Michigan; Canada (from British Columbia to Quebec plus Yukon + Northwest Territories)
- Arnica dealbata–California
- Arnica discoidea Rayless arnica–California, Oregon, Nevada, Washington
- Arnica fulgens Foothill arnica, orange arnica, shining leopardbane–U.S.= West of Rockies plus Michigan; Canada (from British Columbia to Manitoba)
- Arnica gracilis—Smallhead arnica (A. latifolia x A. cordifolia)–U.S. (Montana, Idaho, Wyoming, Colorado, Oregon, Washington); British Columbia, Alberta, Northwest Territories
- Arnica griscomii–Russia, Canada, Alaska
- Arnica intermedia—eastern Russia in Yakutskiya (the capital city of the Sakha Republic), Khabarovsk (the largest city of Khabarovsk Krai) and Magadan (a port town in Magadan Oblast)
- Arnica lanceolata—Arnica, lanceleaf arnica–U.S. West of Rockies plus Alaska, Maine New Hampshire, Vermont, New York State; Canada (British Columbia, Quebec, New Brunswick)
- Arnica latifolia—Broadleaf arnica–western US, western Canada
- Arnica lessingii—Nodding arnica–Kamchatka (peninsula), Alaska, Yukon, Northwest Territories, British Columbia
- Arnica lonchophylla—Longleaf arnica–most of Canada; Alaska, Montana, Minnesota, South Dakota
- Arnica longifolia—Longleaf arnica, spearleaf arnica–U.S. West of Rockies, British Columbia, Alberta
- Arnica louiseana—Lake Louise arnica–British Columbia, Alberta
- Arnica mallotopus-Honshu, the largest main Island in Japan
- Arnica mollis—Hairy arnica, wooly arnica–U.S. West of Rockies plus Alaska, New Hampshire + Vermont; Canada (from British Columbia to Quebec plus Yukon + Northwest Territories)
- Arnica montana— Mountain arnica–most of Europe plus Greenland (an island country part of the Kingdom of Denmark); it is also naturalized in India
- Arnica nevadensis—Nevada arnica–California, Oregon, Nevada, Washington
- Arnica ovata–British Columbia Alberta, Yukon, U.S. West of Rockies
- Arnica parryi—Nodding arnica, Parry's arnica–British Columbia, Alberta, Yukon, U.S. West of Rockies
- Arnica porsildiorum–Kamchatka, Yukon Northwest Territories
- *Arnica rydbergii*—Rydberg arnica, Rydberg's arnica, subalpine arnica–British Columbia, Alberta, northwestern U.S.

- Arnica sachalinensis–Hokkaido (second–largest main island in Japan), Sakhalin (largest island in Russia), Kuril (a volcanic archipelago near Sakhalin), Irkutsk (the largest city of Irkutsk Oblast in Russia)
- Arnica sororia—Twin arnica–British Columbia, Alberta, Saskatchewan (a prairie and boreal province), U.S. West of Rockies
- Arnica spathulata—Klamath arnica–California Oregon
- Arnica unalaschcensis—Alaska arnica–Hokkaido, Honshu, Kamchatka, Sakhalin, Kuril, Alaska
- Arnica venosa—Shasta County arnica–California
- Arnica viscosa—Mt. Shasta arnica–California, Oregon

## THE TAXONOMY OF ARNICA MONTANA

The Latin specific epithet (In binomial nomenclature) *montana* refers to mountains or coming from mountains.

## THE DISTRIBUTION AND HABITAT OF ARNICA MONTANA

This Circumboreal and montane (subalpine) genus occurs mostly in the temperate regions of western North America, with a few species native to the Arctic regions of northern Eurasia and North America.

*Arnica montana* is widespread across most of Europe. It is absent from the British Isles and the Italian and Balkan peninsulas. In addition, it is considered extinct in Hungary and Lithuania.

*Arnica montana* grows in nutrient–poor siliceous meadows or clay soils. It mostly grows on alpine meadows and up to nearly 3,000 m (9,800 ft.). In more upland regions, it may also be found on nutrient–poor moors and heaths. However *Arnica* does not grow on lime soil, making it is an extremely reliable bio indicator for nutrient poor and acidic soils.

Globally, it is rare, but may be locally abundant. It is becoming even rarer, particularly north of its natural habitat distribution, largely due to increasingly intensive agriculture and commercial wild-crafting.

# THE PHYTOCHEMISTRY OF ARNICA MONTANA

The main constituents of *Arnica montana* are essential oils, fatty acids, *thymol* and *thymol* derivatives such as *phlorol isobutyrate* (natural monoterpenoid phenol derivatives of p–cymene) constitute the volatile oil component, *pseudoguaianolide sesquiterpene lactones* (a class of sesquiterpenoids containing a lactone ring) and *flavanone glycosides* (flavonoids).

Pseudoguaianolide sesquiterpenes constitute 0.2–0.8% of the flower head of *Arnica montana*. They are the toxin *helenalin* and their fatty esters. *2,5–Dimethoxy–p–cymene* and *thymol methyl ether* (a methyl group bound to oxygen) are the primary components of essential oils from both the plant's roots and rhizomes.

*Chamissonolid* and *11,13*– *dihydrohelenaline* are two other sesquiterpene lactones (STLS) that have specific actions at the cellular level. These three STLs in arnica have been shown to have strong anti– inflammatory properties in lab studies.

Arnica essential oil includes the essential fatty acids *linolenic* and *linoleic acids*. Other constituents include several types of *lignans* and *flavonoids* such as *astragalin*, *luteolin–7–glucoside*, and *isoquercitrin*. Phenolic acids include *caffeic acid*, *chlorogenic acid* and *cynarin*. Coumarins such as *scopoletin* and *umbelliferone* are also present in the essential oil.

The quality and chemical constitution of the plant substance *Arnicae flos* can be monitored by near– infrared spectroscopy (NIRS, a method that uses the near–infrared region of the electromagnetic spectrum).

## THE CULTIVATION OF ARNICA MONTANA

Although the European species *A. montana* is the commercially available herb, closely related American natives such as *A. cordifolia*, *A. chamissonis* and *A. sororia* contain the same active ingredients. They naturally grow in the mountain ranges of the U.S. and Canada, but *A. chamissonis*, commonly called Meadow arnica, adapts well to lower elevations.

Arnica montana is sometimes grown in herb gardens. Arnica plants can be grown from seeds and rhizomes, but the latter is the more reliable. Generally, 20% of seeds do not germinate. For large scale planting, it is recommended to raise plants first in a nursery and then transplant them in the field (outdoors). Seeds sprout in 14–20 days but germination rate depends highly on the seed quality.

Planting density for *Arnica montana* should be 20 plants/m<sup>2</sup> such that the maximum yield density will be achieved in the second flowering season. While *Arnica montana* has high exigencies of soil quality, it cannot tolerate lime or acidic soils, before planting arnica, the growing beds should be carefully prepared and the soil amended. Analyses should be done before adding any fertilizer.

In the first year, the rhizome grows only a whorl of basal leaves which remain close to the ground. In the second year, a flowering shoot with a few leaves appears. It may branch lightly and carry a single flower at the tip of every branch. The central disc of the flower is surrounded by daisy–like petals arranged in a single layer.

The solitary flowers appear in summer and can be harvested when fully mature. They can be used fresh to make herbal teas and extracts, or dried and stored without their bracts nor receptacles (vegetative tissues near the end of reproductive stems). Handling of the flowers may cause you to sneeze, a common reaction that gives arnica the common name "sneezewort". Dried flowers retain their potency for a year. They can be used to prepare tinctures to make them last longer. The roots can be harvested in autumn and dried as well, after careful washing.

Arnica species are used as food plants by the larvae (juvenile insects) of some Lepidoptera (order of insects that includes butterflies and moths) species, including *Bucculatrix arnicella* (or Bucculatrigidae, a family of moths).

## THE HISTORY OF USE OF ARNICA IN HERBAL MEDICINE

Hildegard of Bingen (1098–1179), also known as Saint Hildegard, a German nun known for her keen observations of nature and physiology. Around the 12<sup>th</sup> century, she wrote about the healing properties of the *Arnica montana* plant. This alpine herb also has a long history of use in Russian folk medicine and in the Swiss Alps. The flowers as well as the root are used for herbal preparations.

Dating back to the 16<sup>th</sup> century, people in this Alpine area have used it to relieve muscle aches and bruises. An herbal tea of arnica to ease back pain was used by the North American Indigenous Cataula people. It is said that the higher the altitude, the more aromatic the arnica flowers become.

References to arnica and its medicinal use appear in the 1911 *Encyclopædia Britannica* (an edition developed during the transition from a British to an American publication) article "*Arnica*". And in the entry "*Arnica*", in *The American Cyclopædia* (or the New American Cyclopædia was an encyclopedia created and published by D. Appleton & Company of New York). 1879.

Historically, the species *Arnica montana*, native to Europe, has been used as an herbal medicine (study of uses for medicinal plants) similarly to willow bark (from the genus *Salix*, are species of deciduous trees and shrubs), generally being employed for analgesic (pain relief) and anti–inflammatory purposes.

However, there is insufficient high–quality evidence–based medicine (EBM) for such effects. Clinical trials of *Arnica montana* have yielded mixed results. A <u>2014 systematic review</u> found that the available evidence did not support the effectiveness of *A. montana* at concentrations of 10% or less for pain, swelling and bruises.

Although herbal preparations of arnica for ingestion were traditionally prevalent, it is now mainly used for topical applications, except in homeopathic preparations that contain infinitesimally small amounts of *helenalin*, rendering the compound harmless. Arnica homeopathic remedies come as an internal tablet that dissolves in your mouth.

Homeopathic healers use arnica tea in diluted form for the <u>treatment of dermatologic disorders</u>. *A. montana* has been the <u>subject of studies of homeopathic preparations</u> (alternative medicine based on the belief that a substance that causes symptoms of a disease in healthy people can cure similar symptoms in sick people). The premise is that these tablets exert effects that are similar to the ailment, triggering the body to contend with the ailment on its own in order to regain homeostasis.

A <u>1998 systematic review</u> of homeopathic *A. montana* conducted at the <u>University of Exeter</u> found that there are no rigorous clinical trials that support the claim that it is efficacious (effective) beyond a placebo effect at the concentrations used in homeopathic preparations.

# THE TOXICITY OF ARNICA MONTANA

The <u>US Food and Drug Administration</u> (FDA) has classified *Arnica montana* as an unsafe herb because of its toxicity (a substance that can damage an organism). *Arnica montana* contains the toxin *helenalin* (a sesquiterpene lactone), which can be poisonous if large amounts of the plant are eaten or small amounts of concentrated arnica extracts are used.

It should not be taken orally or applied to broken skin where absorption can occur. *Arnica* irritates mucous membranes (moist membranes that line body cavities). It may produce contact dermatitis (inflammation of the skin caused by exposure to a chemical) when applied to skin.

Consumption of *A. montana* can produce severe gastroenteritis (inflammation of the gastrointestinal tract), internal bleeding of the digestive tract, diarrhea, vomiting, raised liver enzymes (which can indicate inflammation of the liver), nervousness, accelerated heart rate, muscular weakness, and death if enough is ingested.

In the Ames test, an extract of *A. montana* was found to be mutagenic (a chemical agent that permanently changes genetic material, usually DNA) to bacteria.

# THE ECONOMIC MARKET FOR ARNICA MONTANA

The demand for *A. montana* is 50 tonnes (metric ton) per year in Europe but the supply does not meet the demand because the plant is rare, and it is protected in Belgium, France, Germany, Italy, Poland and some regions of Switzerland. France and Romania are the producers of *A. montana* for the international market.

Changes in agriculture in Europe during the last decades have led to a decline in the occurrence of *A. montana*. Extensive agriculture (agricultural production system that uses small inputs of labor, fertilizers and capital relative to the land area being farmed) has been replaced by intensive management

(agricultural system with higher levels of input and output per unit of land area). Nevertheless, it is cultivated on a large scale in Estonia.

# THE HEALTH BENEFITS OF ARNICA OIL

Applied to the skin in the form of an oil, cream, ointment, liniment, tea or salve, arnica has been used traditionally for medicinal purposes. *Arnica montana L.* is a source of several active compounds (*sesquiterpene lactones, flavonoids, terpenoids, phenolic acids,* and essential oils) exhibiting antibacterial, antifungal, antiseptic, anti-inflammatory, antiradical, antisclerotic, and antioxidant activities.

<u>Arnica oil contains several fatty acids</u>, including *palmitic*, *linolenic*, *linoleic* and *myristic*, as well as the phytochemical compound *thymol*. The <u>antibacterial activity of *thymol*</u> found in arnica essential oil has been well–established and reported in a multitude of scientific studies.

#### 1. Heals Bruises

A bruise is a discolored area of the skin, which is caused by an injury or impact rupturing the underlying blood vessels (capillaries). Healing a bruise fast by natural means is always preferable. One excellent natural remedy for bruises is arnica oil.

A 2010 study out of the <u>Northwestern University Department of Dermatology</u> found that topical application of a <u>20% arnica topical agent was more effective at reducing bruises</u> than the 1% vitamin K with 0·3% retinol and white petrolatum formulations. And it was about equal in effectiveness to the 5% vitamin K formulation. Researchers identified compounds in arnica that account for anti–bruising, including some caffeine derivatives.

*Helenalin* and, to a lesser extent, *11,13–dihydro helenalin* inhibit platelet aggregation and thromboxane formation (are anticoagulants). These reactions reduce clot formation following an injury to the blood vessels and help heal bruises faster.

## 2. Treats Osteoarthritis

As researchers Chen et al. note in their 2017 study on the condition, osteoarthritis is the most common degenerative joint disease and a major cause of pain and disability in adult individuals.

Arnica has been shown in studies to be effective against osteoarthritis, making it an effective natural arthritis treatment. The use of topical products for symptom relief is common in people with osteoarthritis (a degenerative disease that results from breakdown of joint cartilage and underlying bone).

A 2007 study in 204 patients published in <u>*Rheumatology International*</u> found that a 50% arnica tincture gel was as effective as a 5% ibuprofen gel preparation (NSAID) in the 21 days of <u>treatment of</u> <u>osteoarthritis of the hands</u>. Adverse events were reported by 6.1% of patients on ibuprofen and by 4.8% of patients on arnica.

Arnica was also found to be an effective topical treatment of osteoarthritis of the knee. A study out of the Department of Rheumatology, Valens Clinic for Rheumatism in Switzerland evaluating the safety and efficacy of topical arnica had both men and women apply arnica twice daily for six weeks. The 2002 study published in <u>Advances in Therapy</u> found that the <u>arnica gel was a safe, well-tolerated and</u> <u>effective treatment of mild to moderate osteoarthritis of the knee</u>.

## 3. Improves Carpal Tunnel Syndrome

Arnica oil is an excellent natural remedy for carpal tunnel, an inflammation of a very small opening just below the base of the wrist brought on by the repetitive movements of the hands while typing and

other similar activities. Arnica oil helps with the pain associated with carpal tunnel and could even help patients avoid surgery. And for those who choose to have surgery, studies have shown that arnica can relieve pain after carpal tunnel release surgery.

In a double–blind, randomized comparison of arnica administration versus placebo post–surgery in patients between 1998 and 2002, the participants in the group treated with arnica had a significant reduction in pain after two weeks.

## 4. Relieves Sprains and Muscle Pain

Arnica oil is a potent remedy for various inflammatory and exercise–related injuries. The positive effects of topically applying arnica have proven to be effective in reducing pain, indicators of inflammation and muscle micro–trauma, which in turn can improve athletic performance. It is also a natural remedy for delayed onset muscle soreness.

In a 2014 study published in the <u>European Journal of Sport Science</u> (EJSS), participants who <u>used arnica</u> <u>had less pain and muscle tenderness</u> 72 hours after intense exercise. Arnica oil can also be used to relieve stiffness resulting from flying or long–distance driving.

Arnica has been used in traditional medicine for everything from protection against infection, hematomas, contusions, swelling, sprains and rheumatic inflammations to superficial inflammations of the skin. The constituents of arnica, *helenalin* and other STLs, have an analgesic effect similar to *salicylic acid* as well as anti–inflammatory actions.

In addition, the phytochemical compound *thymol* found in arnica has been found to be an effective vasodilator of subcutaneous blood capillaries, which helps facilitate the transport of blood and other fluid accumulations and acts as an anti–inflammatory to aid normal healing processes.

#### 5. Lowers Cholesterol

Laboratory experiments in mice have shown that the STLs in arnica can lower serum cholesterol by inhibiting lipogenesis. However, due to the toxicity of *helenalin* at higher doses, ingestion of arnica extract for cholesterol control is not advisable.

## 6. Boosts Immune System

White blood cells are the first line of defense for your body's immune system. One of the constituents of arnica that makes it such a potent anti–inflammatory is the sesquiterpene lactone *helenalin*, which <u>inhibits activation of the central mediator of the human immune response</u>. It inhibits the biochemical reactions involved in the inflammatory process such as lysosomal rupture, neutrophil migration, and prostaglandin synthesis.

Some cosmetic and plastic surgeons recommend arnica oil to patients before and after surgical procedures to reduce bruising and pain. Oral intake of homeopathic preparations and topical application of ointments are often prescribed.

A recent study in 2016 tracked the use of arnica oil uses in a post–operative setting. While the oil would not have been used on the open incision site, it was found useful for <u>post–traumatic and postoperative</u> <u>pain, edema and ecchymosis</u>.

In a <u>2011 animal study</u>, mice treated for acute inflammation with a 5% arnica tea solution every 15 minutes, between 30 and 180 minutes after exposure to the irritant showed a reduction in inflammatory vascular events.

## 7. Has Anticancer Effects

According to the <u>2019 study</u> by Surgier et al., arnica is a source of several metabolite classes with diverse biological activities. The essential oil of *Arnica montana L*. exerts an anticancer effect by induction of anaplastic astrocytoma and glioblastoma multiforme cell death.

## 8. Soothes Skin Conditions

An evaluation of the actions of arnica oil uses in a <u>2012 *in vitro* study</u> revealed antioxidant capabilities supporting its traditional use in the treatment of skin disorders. Antioxidants repair damage on a cellular level, the relief felt after using arnica is not simply numbing or relaxation. It is actual healing of the skin tissues from inside the cells out.

The sesquiterpene lactones from the tincture of arnica has been found to be quickly and easily absorbed into the body within three hours of topical application. Arnica oil can control acne, reducing puffiness (edema) and clearing dark circles under the eyes. Arnica oil also soothes skin irritations such as eczema and psoriasis.

#### 9. Soothes Insect Bites

Arnica oil's ability to reduce pain and inflammation when applied to the skin comes in handy for all manner of aches. It can even be applied to <u>insect bites to reduce irritation and inflammation</u>.

#### 10. Calm Sea Sickness

In the form of homeopathic tablets, arnica oil is useful for reducing motion sickness and sea sickness, as well as treating *vertigo*. *Never consume pure arnica oil to treat sea sickness*.

#### 11. Oral Health Issues

Arnica's anti–inflammatory properties make it a good treatment for some oral health issues. <u>Many</u> <u>dentists are now prescribing arnica to patients</u> following invasive procedures like gum surgery, root canal treatment, implant surgery or wisdom teeth extraction to help reduce swelling and bruising.

In a <u>2005 study</u> on the antimicrobial effects of arnica essential oil against *Streptococcus mutans* and *Lactobacillus plantarum*, the essential oil showed some antimicrobial potency. Arnica essential oil might be useful in the development of anticaries oral treatments.

## 12. Has Anti-Aging Properties

Antioxidant elements helps lower oxidative stress. Prevents wrinkles, blemishes and other signs of aging. Arnica oil helps the production of collagen, making it useful as a natural moisturizer for the skin and to minimize the signs of premature aging. The content of flavonoids in arnica help soften the skin. Arnica in the form of bath salts is commonly used in foot baths to relax sore tired feet.

## 13. Encourages Hair Growth

According to a <u>seminal 1987 study</u> by Cotterill and Unger, hair loss may affect up to 50% of males between the ages of 30 and 50 years. There are a few different pharmaceutical drugs for the treatment of hair loss. The most effective of these is *finasteride*, sold under the brand name "Propecia". However, finasteride carries a risk of severe side effects, including erectile dysfunction, gynecomastia and depression.

Arnica oil can be a natural hair treatment for hair loss for men beginning to experience male pattern baldness or for women experiencing hair loss due to aging or certain medical conditions. In fact, arnica oil is one of the best secret treatments for reversing hair loss, promote hair growth and control dandruff.

Using arnica tea as a hair toner cleanses excess oil and sebum from the scalp. It also helps prevent dandruff and a dry, itchy scalp. Regular use of an arnica tea as a hair toner will prevent tangles and dry, brittle hair.

A regular scalp massage with arnica oil can provide invigorating nourishment to the scalp, which stimulates hair follicles to support the growth of new and healthy hair. There are even some claims that <u>arnica can stimulate the growth of new hair in cases of baldness</u>. You can also look for shampoos, conditioners and other hair products that contain arnica as one of the ingredients.

# THE THERAPEUTIC USES OF ARNICA OIL

Arnica oil is a carrier oil that can be used as a base to dilute the more concentrated essential oils. Diluting essential oils makes them safe for topical use and for use in homemade recipes. Arnica oil is used to help "carry" the essential oils into the skin.

As one of the most popular homeopathic remedies for pain management, arnica oil is one of the most important tools in any <u>homemade essential oil first aid kit</u>.

Arnica is sometimes used as a <u>flavor ingredient in beverages and food products, including candy</u>, frozen dairy desserts, gelatins, baked goods and puddings. The amount of arnica used in edible products is always minimal. In manufacturing, arnica is used in hair tonics and anti–dandruff preparations. Arnica oil is also used in perfumes and various cosmetics.

- **1. Pain Relief:** Apply diluted arnica oil directly to affected areas by massaging into the skin until absorbed. *It may stain clothing so be sure it is fully absorbed before dressing*.
- 2. Relieve Headaches: Apply diluted arnica oil around the neck.
- **3.** Heals Bruises: Apply diluted arnica oil to the bruise twice daily (as long as the bruised skin area is unbroken).
- 4. Arthritis & Rheumatism Relief: Dilute arnica and other essential oils such as wintergreen in a carrier oil and massage into the skin on affected areas to reduce rheumatic pains.
- 5. Acne Control: Add 2–3 drops to 1 Tbsp. sweet almond oil and use sparingly, but never on acne where there is ruptured skin.
- 6. Skin Conditions: Dip a cotton ball in arnica tea and apply topically to areas of skin affected by acne or eczema.
- 7. Hair Care: Add 2–3 drops of arnica oil to your usual shampoo or conditioner.
- 8. Nourish Hair Follicles: Massage arnica tea or oil to your scalp from the roots to the tips before going to bed. Wash the tea off your hair the next morning.
- 9. Sore Feet: Make a foot bath with arnica tea, soak your feet in it for 15–20 minutes.
- 10. Insect Bites: Dip a cotton ball in arnica tea and apply topically to the bite or sting.
- **11. Reduce Stretch Marks:** Apply arnica tea extract to your stomach at least four times a day.

## PRECAUTIONS

Arnica is available as a 100% pure essential oil but should not be applied to skin before it is diluted into a carrier oil, ointment, gel or cream form. In any form, arnica should never be used on broken or damaged skin. Do not apply directly to open wounds as it can be toxic.

Arnica oil should only be used for topical application. Before using arnica oil, make sure to shake the bottle well. Never use arnica oil in eyes or in mucous membranes. The pure essential oil is actually not even recommended for aromatherapy purposes because it is too potent for inhalation.

Arnica oil is generally safe to use in diluted form. Topical application of herbal preparations is generally safe but can cause adverse reactions in people allergic to daisy–family plants (ragweed,

chrysanthemums, marigolds and daisies). Some people may experience side effects after use. You can find arnica oil in a blend of healing oils called "Trauma Oil", it is a favorite for bumps and bruises.

When purchasing arnica oil, look for one that has a low number of natural ingredients. Ideally, the oil contains arnica extract and a high–quality base oil (or oils) such as certified organic olive, almond or grapeseed. Beneficial vitamin E is sometimes also added as a natural preservative. Avoid arnica oil that contains fragrance, often listed as "*parfum*", since the fragrance source is unknown and can often be an irritant or cause allergic reactions.

Never ingest essential oils. Ingestion of arnica oil is not recommended as it can be toxic in high doses. Even when diluted and ingested it can cause an upset stomach, nausea, vomiting, diarrhea and other gastrointestinal problems. In large amounts it can cause internal hemorrhaging. Avoid prolonged use, prolonged use may cause skin irritation or an allergic reaction.

Patients taking medicines for the treatment of blood clotting, such as anticoagulant or antiplatelet drugs, should avoid applying arnica to your skin or hair, as it can slow down the process of blood clotting. It is not safe to use for people with hypersensitive skin, or women who are pregnant or breastfeeding as it can be toxic. It can also induce premature labor due to the simulating effects. Use essential oils with extreme caution on children, do not use on children under 5 years old. Some brands clearly labels their essential oils "KidSafe" on the bottle if it can be used on children ages 2–10.

When applying arnica oil topically (on your skin), always perform a 24–hour skin patch test first using 1– 2 drops, <u>read how for further details</u>. Only use arnica oil in diluted form, as pure arnica is very potent. Use almond or grapeseed as a carrier oil to dilute pure arnica oil in a 30:70 ratio if oil is not already diluted.

Use only 100% authentic oils. Arnica oil has a shelf life of years if stored properly in tightly–sealed dark glass containers. Keep in a cool and dry place, such as a dresser drawer or kitchen cabinet. Keep away from heat and cold temperatures and moist areas (such as a bathroom).

Arnica oil products come with expiration dates. Manufacturer's advice against using arnica products beyond this date. Any arnica product whose use—by date has passed, should be discarded. Signs that it has expired includes changes in scent, texture and color. If you are interested in trying arnica oil, be sure to choose a product that is 100% pure and organic. Arnica oil can be found at most health food stores or online.

Note: May also stain clothing.