

Arnica: A proven first aid remedy for injuries and accidents

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Common Name: Arnica, Mountain daisy

Botanical Name: *Arnica montana* L.

Family: *ASTERACEAE* (Formerly known as *Compositae*)

The New Year started with a delightful trip to Central Otago to collect for the first time fresh Arnica flowers in the Southern hemisphere. It was always my dream to use as many New Zealand grown herbs as possible for my traditional ARTEMIS health care range. What a great start to the beginning of this new decade, coming a step closer to my herbal dream!

The unique climate of New Zealand together with the absence of big polluting industries in the vicinity of the Southern Alps means that medicinal herbs from our very special country are of world class quality. Arnica is in great demand worldwide as more people become aware of its healing benefits in accidents and injury recovery.

Arnica is a friend of my childhood. In the alpine areas where my family often went mountaineering the plant was a treasured sight on the high country meadows and rocky outcrops, growing together with other native plants like Edelweiss and Gentian. Arnica has always struck me as a slightly eccentric alpinist with her disheveled hair-do. Not that she would mind, she loves the wind and the wild weather. Arnica is a perennial herb that grows to 30-60 cm with a horizontally growing rhizome and bright yellow-orange tubular flowers. The plant grows well in moist swampy areas with slightly sour soil deficient in lime. It disappears quickly in areas that have been fertilized for farming purposes. A native in Europe from Scandinavia to the Southern Alps, southern Russia and central Asia it is often seen on alpine meadows and in sparse coniferous forests 600-2800 metres above sea level.

Harvest and mode of preparation

In the Northern hemisphere the flowers are harvested in June-August whilst the roots are dug out in spring (April) and autumn (October). In Central Otago New Zealand the best harvesting time for the flowers is December-January. They are harvested including the calyx, then dried in a warm and shady area with good air circulation, or processed fresh as a fresh-plant tincture. Fresh plant tinctures contain a wider spectrum of active constituents compared with dried plant tinctures which means that they can be taken at a lower dose for the same therapeutic effect. Because of their concentration of active constituents, including important enzymes, essential oils, vitamins and minerals along with their great bioavailability, fresh-plant



ABOVE: Arnica (*Arnica montana*) is native to Europe. It is now being grown in the South Island

tinctures are medicinal at small doses. These preparations are so active that they are generally administered at 1/5th of a dose of a dry plant dose. Being able to use Arnica effectively at a low drop dosage is especially important when Arnica is taken internally as this is a very potent plant that can cause overstimulation of the heart when used at higher doses.

Today Arnica is mostly used in topical applications. It is applied externally as a cream or gel or as a wet poultice made with a solution which contains 1 tablespoon of Arnica tincture to a quarter litre of lukewarm water (the poultice should be removed after 30 minutes. It can be repeated twice a day until improvement is achieved). However, Arnica has traditionally also been taken internally as a fresh-plant mother tincture (this is a fresh-plant tincture which forms the base for homeopathic preparations). As I read in Tabernaemontanus (1588), the mountain folk also extracted Arnica in beer and gave it to those injured in the rugged environment. What a fabulous way to take a remedy! Growing up in Switzerland I have learned from the mountaineers about the stimulating action of Arnica on heart and circulation and the way it can combat exhaustion as well as altitude sickness. When they go high up into oxygen deprived areas or when they are doing a strenuous climb and need some extra strength they put some flower petals of Arnica under their tongue. I have tried it, and it does indeed open the chest straight away. 3-5 drops of fresh Arnica tincture in a glass of water has the same effect. Swiss herbalists and naturopaths continue to prescribe the fresh-plant mother tincture as a circu-

latory stimulant and powerful anti-inflammatory. Internal use of Arnica has been researched for the treatment of acute weakness of the heart and angina pectoris with promising results. (1) This mirrors my clinical experience with a client suffering from a weakness of the heart and shortness of breath due to an infection with rheumatic fever in childhood: at a dose of 5 drops 3 x a day, with additional 1-2 emergency doses if she experienced a tightening of the chest, she reported better stamina and less puffing. Fresh-plant Arnica is also part of my professional ARTEMIS range for the traditional tissue and strain repair remedies – I have received consistently good reports for over a decade now.

Can Arnica be used internally and on open wounds?

Every now and again the question arises whether it is safe to take Arnica internally. Some Health Authorities and herbal text books have issued cautionary statements with regard to these traditional internal applications. The sensitivity of a small number of people to this highly beneficial mountain plant – which is a rare allergic reaction towards plants from the Compositae family – as well as some people's tendency to overdose with this potent herb, have unfortunately called the internal use of Arnica into question.

Overdose symptoms after substantial internal doses include dizziness, diarrhoea, trembling, increased heart rate, cardiac rhythm disturbances and collapse. As stated by the illustrious Swiss medical doctor Paracelsus in the 16th century: it is the dose that makes a substance a medicine or a poison. The key is to keep the internal dose of Arnica to a maximum of 5-10 drops of a fresh-plant mother tincture (1:10 v/w) 3 x a day. This dose and method of extraction has not been documented to produce the side effects that are said to occur from overdosing on more concentrated modern extracts.

In the European environment Arnica attracts a fly, *Tephritis arnicae*, which lays eggs in the flowers towards the end of the season. The black larvae are highly irritant when accidentally ingested internally or used as part of an external application. Contaminated Arnica is probably more the cause of reported irritations than the herb itself. One of the most influential European herbalists of the 20th century, Prof. Dr. Rudolf Weiss, hadn't witnessed a single case of Arnica sensitivity in decades of practice and has not received reports from colleagues either! This prompted him to say that the risk of allergic reactions to Arnica is overstated. (2)

In external applications, contact dermatitis can occur in sensitised individuals with the sesquiterpene lactones being the proven sensitising compound. For this reason people harvesting Arnica wear gloves. Even though contact dermatitis is extremely rare, it has led to the warning that Arnica should not be used on open wounds at all. However I have supervised many cases where a herbal fresh-plant cream or poultice containing Arnica has shown to be beneficial in superficial open wounds and grazes when used on a short term basis on individuals who do not have a sensitivity towards the *Asteraceae* family. I have used Arnica myself on open wounds many times and benefited from its antiseptic, anti-inflammatory and pain-reducing properties, when I sustained sprains with skin abrasions from falls in the mountains. External applications on open skin should be limited to a short term treatment and need to be discontinued if irritation and redness develops.

Therapeutic applications

There is a belief held by many native people that the natural environment will provide the remedy for health problems that can be encountered in that environment. Switzerland is no exception. Alpine people observed that when chamois fall and get hurt in the rugged mountains they eat Arnica and lay on their flowers, a behaviour that healthy animals do not display. From this observation it was a small step to finding out the beneficial properties of Arnica for humans. Arnica is covered for external use by a positive Commission E monograph with the following applications: injuries and accidents - haematomas, dislocations, sprains, bruising, oedema associated with fractures; in rheumatic muscle and joint complaints, inflammation of the mucous membranes of the mouth and throat (gargling with an Arnica solution for hoarsens or loss of the voice, throat infection, tonsillitis), furuncles, inflamed insect bites and surface phlebitis. Traditionally Arnica is also used in symptoms of varicose veins and haemorrhoids as Arnica stimulates the peripheral blood supply and has anti-inflammatory and oedema-reducing activity.

Arnica has been proven to be effective in a number of positive clinical trials including a high quality randomised, double-blind clinical trial performed to strict international guidelines for studies of multiple osteoarthritis of the fingers which demonstrated that Arnica gel is as good as a 5% ibuprofen gel. (3)

Arnica works best in the first 24 – 48 hours after an accident or during an acute phase of inflammation in chronic complaints like arthritis. In the recovery phase of an injury which can last anything from 6 weeks to several months and sometimes years it is best combined with complementing herbs like Comfrey, St. John's Wort, Rue and Willow bark, that further promote musculoskeletal healing.

Arnica is one of the most important botanical first aid remedies available and should be part of every family's medicine chest. ✨

References:

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Sandra is the founder and managing director of ARTEMIS Herbal Medicine. She is dedicated to offering a professional range of certified organic, health enhancing remedies based on traditional principles. Wholesale enquiries from Medical Herbalists welcome. In her blog (www.artemis.co.nz/blog) she shares her journey in the translation of the Renaissance Material Medica from 1588 and describes the old herbal knowledge in modern context.



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