G. glabra has been traditionally used for promotion of wound healing.

Licorice root extracts protect the skin against oxidative stress

injuries [10,11], accelerate wound epithelization, ameliorate remodeling at the wound site [12], and efficiently reduce the symptoms of atopic dermatitis (AD).

What Is Licorice Root Extract?

The root of the licorice plant comprises phytochemical constituents that help protect and brighten your skin. It is a plant that grows in Southern Europe and West Asia and has been used to treat various health conditions.

Its extract contains nearly 300 compounds that have antiviral [1], anti-bacterial, and anti-inflammatory properties. It is derived from the root of the licorice plant - Glycyrrhiza glabra. It is extensively used in the food, medicine, beverage, and skin care industries.

Benefits Of Licorice Root Extract For Skin

Licorice root extract is known to contain a compound known as glycyrrhizin [2], which has anti-inflammatory [3] and antimicrobial properties. It is used to treat skin conditions like eczema [4] and acne [5]. As a rich source of antioxidants, it also offers skin lightening and anti-aging benefits.

According to studies, licorice root extract, or Glycyrrhiza glabra extract, may help fight bacteria that infect the skin. Its antimicrobial [6] properties help combat Staphylococcus aureus, a bacteria, which causes skin infections such as folliculitis [7], impetigo [8], and cellulitis [9].

1. Works As An Anti-Inflammatory Agent

Studies [10] conducted on 60 adults who had eczema over two weeks revealed that when a topical gel containing licorice root extract was applied, their condition improved to quite an extent.

Glycyrrhizin has anti-inflammatory properties [11], which can reduce irritation, itching, and redness on the skin when used topically in formulations. It is extensively used to treat psoriasis [12], rosacea [13], and atopic dermatitis.

2. Reduces Hyperpigmentation

When your skin cells produce <u>excessive melanin</u> only in certain areas and normal amounts in others, it gives the skin a patchy appearance known as hyperpigmentation.

When the skin is exposed to free radicals in the body, the cells that generate melanin get damaged and produce more melanin than usual.

Licorice root extract fights the free radicals by inhibiting their production and preventing excess melanin from being produced.

Most formulations that work to <u>remove dark spots</u> or treat hyperpigmentation, therefore, contain licorice root extract. It effectively helps remove dark spots and lightens them to give you an even <u>skin tone</u>.

3. Glycyrrhizin And Anti-Ageing

Licorice root extract contains glycyrrhizin, which is a very potent antioxidant. When used topically, the antioxidants protect your skin against damage from the sun's UV rays and free radicals. This, in turn, prevents premature aging.

4. Glabridin And Skin Lightening

One of the most potent and active compounds of licorice root extract is glabridin [14]. It has skin lightening properties and prevents the production of the enzyme tyrosinase [15], which makes the skin go dark after exposure to the sun.

It is also known to prevent pigmentation that occurs due to the UVB rays of the sun. It may be used in sunscreens to provide both benefits in one formulation.

Another compound in licorice root extract known as liquiritin helps with skin lightening. It works to disintegrate the existing excess melanin and breaks it down, thereby reducing skin pigmentation.

5. Licochalcone A And Skin Protection

Licochalcone A [16] is an active ingredient present in licorice root extract that protects your skin by strengthening its defense mechanisms.

When applied, it increases antioxidant production in the skin, preventing damage from the sun's rays even if you are not wearing sunscreen.

Licochalcone A also helps in controlling oil production, which can, in turn, <u>reduce acne</u>. It also delays the appearance of fine lines and wrinkles.

How To Use Licorice Root Extract?

Licorice root extract helps to brighten and soothe itchy and irritated skin. It can be used in formulations that are specifically made to treat dark spots.

A formulation with licorice in skin brightening serums and sheet masks can give you brighter, glowing skin over a period with regular use. Serums being concentrated may contain higher quantities of the extract.

When licorice root extract is used in combination with vitamin C, it can protect the skin from sun damage and <u>reduce pigmentation</u> significantly. However, it must be used before you apply sunscreen.

If you have itchy, irritated, or <u>inflamed skin</u>, choose a topical gel with licorice root extract. It soothes skin conditions that cause itchiness.

You can even create your own formula by mixing licorice root extract powder with aloe vera gel.

Who Should Use Licorice Root Extract?

You can use licorice root extract to treat skin conditions like melasma, hyperpigmentation, dark spots, <u>dull skin</u>, eczema, <u>rosacea</u>, acne, and atopic dermatitis.

How Often Should You Use Licorice Root Extract?

Though it depends on the instructions on the product's packaging, usually, applying a formulation with licorice root extract once or twice a day should suffice. If it is a medicated topical cream or gel, check with your dermatologist.

Side Effects Of Licorice Root Extract

On its own, licorice root extract rarely causes an allergy. It may lead to an allergic reaction when mixed with other ingredients that the skin may be sensitive to.

Licorice root extract is known to be effective when mixed with vitamin C and <u>niacinamide</u> -- which are proven skin brightening agents and antioxidants.

To avoid an allergic reaction or irritation, avoid using a licorice based formulation with hydroquinone and <u>retinol</u>.

Adverse Interactions Of Licorice Root Extract

Licorice extract is not known to cause adverse reactions on its own. However, certain medications like diuretics, birth control pills or hormone therapy, corticosteroids, medicines to regulate blood pressure, and lower potassium levels may interact with licorice.

If taken orally, it is safer to consult your doctor before taking it regularly.

Wrapping Up

Licorice root extract can be used to treat a variety of skin conditions. You can even use it to undo the damage caused by the UV rays of the sun. In powder form or as part of a topical gel or lotion, it is an effective herbal remedy.

Reference; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6826613/

What is licorice root and what are its skincare benefits? Derived from the glycyrrhiza glabra plant, licorice has long been prized in Japan due to its medicinal properties and health benefits. Scientists more recently discovered that licorice root extract is an emulsifier, which allows both water and oil-based ingredients to mix effectively. This can be a challenge, since water and oil tend to separate, and natural emulsifiers are even harder to come across in skincare. But licorice root extract improves the consistency of products and more importantly, allows our skincare products to deliver benefits to our skin! No wonder it's sought-after in product formulations. Here are some other reasons you'll want to check out licorice.

1. Brightening and treating dark spots

Have you had any friends tell you that you should use skincare products with some licorice roots for dark spots? While melanin formation is a complex process, the main enzyme responsible for discoloration is tyrosinase. Licorice root extract is known to inhibit the secretion of tyrosinase, which helps to prevent dark spots from forming on the skin. But licorice root extract not only stops new dark spots in their tracks, but it is said to help fade existing ones. The root also contains a flavonoid, a plant polyphenol with antioxidant properties that can protect the skin from pre-mature discoloration, aging, and environmental stress.

These same properties make licorice excellent for reversing hyperpigmentation, a condition where the skin forms dark spots on the skin that makes it look uneven in tone

and texture. It also helps to reduce melasma, which can happen due to sun exposure or hormonal changes during pregnancy.

While hydroquinone is usually the ingredient of choice when it comes to depigmentation, it comes with several drawbacks, including potential side effects like dryness, irritation, and redness. Licorice presents an attractive natural alternative if you're looking to brighten your skin in a milder way.

2. Sun defense

Licorice root in skincare also plays a role in sun defense. In addition to helping brighten skin already affected by sun damage, licorice contains glabridin, which is known to help stop discoloration in its tracks during and immediately after sun exposure. <u>UV rays</u> are the primary cause of skin discoloration, but glabridin contains UV blocking enzymes that prevent new skin damage from occurring.

3. Healing acne scars

Licorice root is also a go-to for treating acne scars. Sometimes we experience scars from breakouts or injuries that occurred due to no fault of our own. Licorice can speed up the healing process by inhibiting the production of melanin, an amino acid responsible for pigmentation in the skin. Although melanin does help to guard the skin from UV ray damage, too much melanin is a whole other issue. Excess melanin production during sun exposure can result in unwanted effects, including dark scars and even skin cancer.

4. Calms Inflammation

Licorice is said to have a soothing effect on skin and helps to ease inflammation. The glycyrrhizin found in licorice can reduce redness, irritation and swelling, and is used to treat skin conditions like atopic dermatitis and eczema.

5. Softens skin

Licorice can help the regeneration of our skin's collagen and elastin supply, both of which are necessary to keep our skin elastic, smooth, and baby-soft. Not only that, but licorice helps to preserve <u>hyaluronic acid</u>, a sugar molecule with the ability to retain up to 1000 times its weight in water and keeps skin plump and bouncy.

Side effects of licorice on the skin

Licorice extract is non-comedogenic, which means that it doesn't clog pores. It is also an unlikely allergen, meaning that only in rare cases does it cause an allergic reaction, but some people could experience a reaction depending on the other ingredients that licorice root extract is combined with. As with all cosmetics, you should always patch test skincare products before applying them to your whole face.

While licorice extract is usually considered a non-irritating and safe ingredient, it may not be safe during pregnancy. Studies suggest that glycyrrhizinate, the very component that gives the root its skin healing properties, could potentially be linked with children experiencing developmental and behavioral issues. For the same reason, herbal teas, supplements, and snacks containing licorice are ill advised for pregnant mothers. The jury is still out on just how much licorice consumption would be harmful, so if you're expecting, it's best to steer clear of the ingredient altogether.