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**Review Article** 

# Herbal Soap- Trends, Benefits and Preparation: A Review

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## Abstract

Herbal soap is a natural alternative to conventional soap that is often made using botanical herbs and plant-based ingredients. The rising popularity of herbal soap can be attributed to its skin-friendly and environmentally conscious characteristics. By being devoid of harsh chemicals and artificial fragrances, these soaps are particularly well-suited for individuals with sensitive skin. Furthermore, their use of natural ingredients makes them an eco-friendly choice, appealing to those seeking a more sustainable and gentle option for personal care. Herbal soap is also eco-friendly. It is made using natural ingredients that are biodegradable and do not harm the environment. Herbal soap is cruelty-free, as it is crafted without the use of any animal products or by-products, making it a compassionate and ethical choice for conscientious consumers. The use of herbs in herbal soap provides various benefits, such as soothing and healing the skin, providing a natural fragrance, and reducing stress and anxiety through aromatherapy. The natural components found in herbal soap possess antibacterial, antifungal, and anti-inflammatory properties, which make them effective in addressing various skin conditions like acne, eczema, and psoriasis. Herbal soap comes in a variety of scents and formulations, making it easy to find one that suits your individual needs. Some of the most commonly used herbs in herbal soap include lavender, chamomile, peppermint, rosemary, lemongrass, tea tree, calendula, oatmeal, aloe vera, clove, neem, turmeric, sage, and comfrey. Every herb posses unique properties which is beneficial for the skin and overall health. With the growing concern over synthetic and chemical-laden products, herbal soap is gaining more popularity as a safe and eco-friendly option for personal care.

Keywords: Herbal Soap; Herbs; Skin Health; Heavy Metals

## Introduction



Figure 1

Herbal soap is a type of soap made using natural ingredients derived from various herbs and plants. Herbs such as lavender, mint, rosemary, and chamomile are commonly used in making herbal soap. These herbs are rich in essential oils, vitamins, and minerals that have various therapeutic benefits for the skin. Herbal soap is known for its soothing, rejuvenating, and healing properties, making a popular choice for people with sensitive or dry skin.

Currently, a significant number of cosmetic products are adulterated, and numerous other beauty preparations available in the market are of inferior quality, posing potential risks of side effects such as skin rashes, allergic reactions, and even the development of skin diseases [8].

Herbal soaps basically consist of plant parts such as seeds, rhizomes, and roots. It has antibacterial, anti-aging, antioxidant, and antiseptic effects. Herbal soap contains none of the synthetic dyes, flavors, fluorides, or other additives typically found in commercial soap [9]. The majority of individuals lack awareness regarding the extended ramifications of using commercial soaps. According to Aiello., *et al.* (2007), commercial products contain certain substances that are deemed unhealthy and have the potential to cause harm to the body over time. Herbs and essential oils that are used in the herbal product should not be intended to penetrate beyond the superficial layer of the skin. The inclusion of extracts in topical formulations can minimize oxidative stress in the skin, which has been associated with delaying the aging process.

The inclusion of extracts in topical formulations can minimize oxidative stress in the skin, which has been associated with delaying the aging process. They are less allergic and safe to use.

Herbal soap is free of synthetic dyes, Flavors, fluorides, and other additives which is present is present in commercial soap.

Herbal soaps possess significant therapeutic value as they harness the power of natural herbs, which are widely employed in the treatment of various ailments and skin conditions. Value, affordability, accessibility, and compatibility. The global market for herbal cosmetics is experiencing a rapid increase in demand, showcasing the priceless treasures bestowed upon us by Mother Nature [7].

Herbal soap preparations are medicines or pharmaceuticals because they include antibacterial and antifungal agents [9]. They often use plant parts including leaves, roots, stems, and fruit to cure wounds, prevent disease or promote health. Soap has a variety of qualities, including good moisturizing benefits and long-lasting aroma.

Embracing herbal soap as part of your skincare routine offers a natural and effective approach to nurturing your skin. This wonderful product delivers a wide array of benefits, leading to a radiant and healthy complexion. It not only addresses skin infections like ringworm but also promotes smoothness, even tone, and overall tenderness for your skin.

The presence of chemicals in soaps can lead to dry skin, skin damage, and skin allergies, as they impede the skin's natural regeneration process, clog pores, limit cell respiration, and accelerate the aging of the skin.

Some herbs provide product natural colour which some provide reliving stress. Certain plants contain an extensive array of essential vitamins and minerals that offer valuable benefits to human health.

#### **Composition of herbal soap**



Figure 2

Herbal soaps are made using a combination of natural ingredients that offer various benefits to the skin. While the specific composition can vary depending on the brand and the desired properties, here are some common ingredients found in herbal soaps

- Base oils: Herbal soaps are typically made with a blend of different base oils, such as olive oil, coconut oil, palm oil, or castor oil. These oils provide moisturizing properties and help to create a rich lather.
- Essential oils: Essential oils are derived from various plants and are used in herbal soaps to provide fragrance and therapeutic benefits. Examples include lavender oil for relaxation, tea tree oil for its antibacterial properties, or eucalyptus oil for its soothing effects.
- Herbs or botanicals: Dried herbs or botanicals are often added to herbal soaps for their healing or exfoliating properties. Examples include chamomile flowers for soothing, calendula petals for their anti- inflammatory properties, or oatmeal for gentle exfoliation.
- Natural colorants: Some herbal soaps may use natural colorants derived from plants or minerals, such as turmeric powder for a yellow color, spirulina powder for green, or activated charcoal for black.
- Additional ingredients: Depending on the desired properties, other ingredients may be added to herbal soaps, such as shea butter for extra moisture, aloe vera gel for soothing, or honey for its antibacterial and moisturizing properties.

# Current Scenario of Herbal Soap







Figure 4

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In the 2021-2022 period, the global Herbal Soap market reached a value of USD 181.31 million, and it is projected to grow at a CAGR of 5.9% throughout the forecast period, reaching USD 255.7 million by 2030.

Global export market share on herbal drug of India is less than 0.5% (Jain. 2019). Herbal soap finds widespread usage in hospitals and clinics for purposes such as handwashing, patient bathing, and general cleaning. Its skin-friendly nature ensures it is gentle on the skin, avoiding any irritations or allergic reactions. Additionally, the refreshing scent of herbal soaps aids in promoting relaxation of the mind and body.

Herbal soap is common in homes across the world due to its variety of benefits. The demand for natural and organic products has increased over the years.

#### Effect of COVID- 19 on the beauty market

In February, China experienced a significant drop in sales, reaching up to an 80% decline when compared to the sales of 2019 [5]. However, in March, there was a notable recovery, with a year-onyear decline of 20%, indicating a rapid rebound despite the prevailing circumstances.

Many beauty product sales have shifted to online but the beauty stores are at stake. People's expenditure on online shopping platform has increased a lot all over the globe. To enhance consumer satisfaction, there is a need to expedite the product delivery process to the customer.

The market structure has changed due to the pandemic. There is a rise of global middle class on online shopping platform.

#### **Preparation of Herbal Soap**

- Collection of the necessary ingredients: A high-quality soap base, such as goat milk or shea butter is needed. The herbal ingredients, such as essential oils, dried herbs, and botanical powders are collected.
- Melt the soap base: Cut the soap base into small pieces and melt it in a double boiler or microwave. Stir the soap base until it has melted to a smooth consistency.
- **3.Addition of the herbs:** After melting the soap base, take it off the heat and incorporate the herbal ingredients by stirring them in.
- Dried herbs, essential oils, or powders are used. Add the herbs slowly and stir continuously to ensure they are evenly distributed throughout the soap.
- Pour into Moulds: Once the herbs are added, pour the soap mixture into moulds. Silicone melds or plastic containers coated with cooking spray are used. Let it cool and harden for hours or overnight.
- **Cut and store the soap:** Once the soap is fully cooled and hardened, remove it from the melds and cut it into desired shapes and sizes. Store the soap in a cool, dry place until ready to use.

Uses



Figure 5

Herbal soap being a natural product has variety of purposes. Uses of herbal soap include

- **Cleansing:** Herbal soap serves as a potent cleanser, proficiently eliminating dirt, oil, and impurities from the skin. It aids in unclogging pores and mitigating the risk of breakouts.
- **Nourishing:** Herbal soap is enriched with natural oils and moisturizing components that effectively hydrate and nourish the skin. It can help prevent dryness and keep the skin soft and smooth.
- **Exfoliation:** Some herbal soaps contain natural exfoliants, such as oatmeal or ground herbs, that can help remove dead skin cells and promote cell renewal.
- Aromatherapy: Aromatherapy: Herbal soap frequently incorporates natural essential oils, offering a diverse array of aromatherapy advantages. For example, lavender oil can help promote relaxation, while peppermint oil can help energize and refresh the mind and body.
- Skin conditioning: Herbal soap is infused with natural ingredients that possess the ability to soothe and condition the skin. Chamomile, for instance, aids in calming irritated skin, while aloe vera provides relief for sunburned skin. In summary, herbal soap stands as a versatile and natural product, offering a diverse range of benefits for the skin.

#### Varieties of herbs used in the making herbal soap

Varieties of herbs are used in the making of herbal soap.

- **Lavender:** Lavender renowned for its calming and soothing properties, is a favored herb commonly used in herbal soap formulations.
- **Chamomile:** Chamomile is a frequent inclusion in herbal soap due to its anti-inflammatory properties, effectively soothing and calming irritated skin.
- **Peppermint:** This refreshing and invigorating herb is known for its ability to stimulate circulation and encourage the wellbeing of the skin.
- Eucalyptus: Eucalyptus is a natural antiseptic and antimicrobial agent that can help soothe and heal skin conditions like acne and eczema. Eucalyptus oil is collected by steam distillation.

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- **Tea tree:** Herbal soap frequently incorporates tea tree oil for its potent antibacterial and antifungal properties, making it effective in both preventing and treating skin infections. It helps in reducing acne [11].
- **Rosemary:** With its natural astringent properties, rosemary plays a vital role in tightening and toning the skin. Additionally, its rich antioxidant content aids in safeguarding the skin from potential free Radical Damage.
- **Calendula:** It is renowned for its natural anti-inflammatory and antiseptic qualities, calendula serves as an effective herb for soothing and healing irritated skin.
- **Oatmeal:** Oatmeal is often used in herbal soap for its moisturizing and soothing properties, providing relief for dry or itchy skin.
- Aloe vera: Aloe extract is rich in anthraquinone glycosides and moisturizing and hydrating polysaccharides. It has shown excellent performance on skin diseases, wrinkles, marks and pigmentations. Aloe vera gel contains two hormones, macro and micronutrients, along with anthraquinones, which contribute to its wound healing and anti-inflammatory properties, making it effective in healing acne. Aloevera contains saponins, which are natural soapy substances known for their cleansing abilities and antiseptic properties [10]. Additionally, its moisturizing and soothing properties offer a cooling effect to the skin. It posses moisturizing property [9].
- **Clove:** It is an antiseptic and anti-inflammatory herb, clove proves beneficial for individuals with acne-prone skin.
- Neem: Neem leaf extract mainly yields quercetin and betasitosterol as well as number of limonoids and many antimicrobial constituents. Neem oil with its natural anti-bacterial properties helps to deep cleanse the skin. Neem possesses antibacterial and antifungal properties, rendering it a highly effective herb for addressing skin infections.
- **Turmeric:** Turmeric's anti-inflammatory and antibacterial properties make it an excellent choice for individuals with acne-prone or inflamed skin. Turmeric's bioactive component is curcumin which is an excellent antiseptic agent [6].
- **Sage:** Sage has antimicrobial properties, making it helpful for oily or acne-prone skin.
- **Yarrow:** Yarrow is valuable for sensitive or irritated skin due to its anti-inflammatory and antiseptic properties.
- **Comfrey:** Comfrey contains allantoin, making it an excellent herb for soothing and promoting skin healing.
- **Vanilla bean:** It contains a bio active compound called vanillin. It moisturizes the skin and has calming effect.
- **Orange peel:** It has refreshing aroma and have antioxidant properties.
- Sandalwood: It has anti-inflammatory properties and calming effect.
- **Germanium:** It has calming effect and balances oil production of skin.
- **Thyme:** It consists of anti-bacterial properties and reduces acne.
- **Basil:** It soothes the skin and has anti-inflammatory property. It posses anti-bacterial properties [4].

- **Rosemary oil:** Rosemary oil primarily contains three main chemical components, namely 1,8-cineol, linalool, and pinene. Among its beneficial compounds, carnosic acid, a phenolic compound, plays a key role in relieving congestion, reducing puffiness and swelling. Additionally, this compound can effectively address skin issues such as acne, dermatitis, and eczema. Rosemary is effective in preventing cutaneous photo damage of skin by UV radiations.
- **Green tea:** Green tea helps against ravaging effects of the sun or photoprotection because of the presence of polyphenolic compounds. Green tea extract is more antioxidant than Vitamin C which controls the acne by skin sebum production, hormonal balance.
- **Saffron:** Saffron flower is effective in treatment of psoriasis and useful for glowing skin. Saffron is rich in Vitamin A, Vitamin B2. Vitamin B3 and Vitamin C [6]. It lightens skin tone, reduce dark circles and tackle light pigments. It helps in combatting acne and moisturizing effect. It posses antifungal effect.



Figure 6



Figure 7



Figure 8



Figure 9



Figure 10

## **Benefits**

Crafted with natural ingredients and plant extracts, herbal soaps provide a diverse array of advantages for both skin health and overall well-being. Benefits of herbal soaps

- **Gentle and mild**: Herbal soaps are typically gentle and mild on the skin, making them suitable for individuals with sensitive skin. Herbal soaps present a healthier alternative to conventional soaps, as they are devoid of harsh chemicals, artificial fragrances, and synthetic additives that may lead to skin irritation.
- Natural ingredients: Formulated using natural ingredients like herbs, botanical extracts, essential oils, and plant-based oils, herbal soaps offer a wholesome approach to skincare.. These ingredients are often chosen for their nourishing, soothing, and healing properties. They provide the skin with beneficial nutrients, vitamins, and antioxidants.
- **Moisturizing:** Many herbal soaps contain natural oils, such as olive oil, coconut oil, shea butter, or cocoa butter, which help moisturize and hydrate the skin. These oils helps in forming a protective barrier preventing dryness. It makes the skin soft, supple, and smooth.
- **Soothing and calming:** Herbal soaps frequently include herbs and botanical extracts renowned for their soothing and calming attributes. Ingredients like chamomile, lavender, calendula, and aloe vera can help alleviate skin irritation, redness, and inflammation, providing relief for conditions like eczema, psoriasis, or sunburn.
- Anti-aging effects: Numerous herbal soaps incorporate antioxidant-rich ingredients like green tea, rosemary, or turmeric, which effectively combat free radicals and diminish the signs

of aging. These antioxidants shield the skin from oxidative stress, contributing to a youthful and glowing complexion.

- **Cleansing and detoxifying:** Herbal soaps cleanse the skin with great efficacy by eliminating impurities, excess oil, and dirt, all while preserving its natural oils Some herbs, like neem or tea tree, possess antibacterial and antifungal properties, which help purify the skin, prevent acne breakouts, and promote a healthier complexion.
- Aromatherapy benefits: Herbal soaps often contain essential oils that provide aromatherapy benefits during shower or bathing. The natural fragrances from essential oils, such as lavender, peppermint, or citrus, can uplift the mood, relax the mind, and create a spa-like experience.
- Environmentally friendly: Herbal soaps are usually biodegradable and environmentally friendly.

Herbal soaps are commonly manufactured using sustainable practices, ensuring they do not contribute to water pollution or harm aquatic life, a concern associated with certain commercial soaps.

## Conclusion

Herbal soap is a natural and eco-friendly alternative to conventional soap that is gaining popularity due to its numerous benefits. It is made from herbs and plant-based ingredients that provide natural fragrances and healing properties, making it ideal for sensitive skin. The various herbs used in herbal soap can soothe and heal the skin, enhance aromatherapy benefits, and provide other health benefits such as reducing stress and anxiety.

As people become more concerned about the use of synthetic and chemical-based products, herbal soap is becoming increasingly popular as a safe and effective option for personal care. With its many advantages, herbal soap is an excellent choice for anyone seeking a natural, healthy, and environmentally-conscious way to care for their skin.

The preparation of herbal soap is a simple process that involves melting a high-quality soap base, adding herbal ingredients, pouring into melds, and allowing it to cool and harden. The resulting soap is a nontoxic, gentle, and effective cleanser that can nourish the skin, improve complexion, and promote overall well-being.

Herbal soap is an excellent option for those with skin sensitivities or allergies. The natural ingredients in herbal soap reduces irritation or an allergic reaction than the harsh chemicals which are found in commercial soap. Additionally, the soothing properties of many herbs and botanicals can even help calm skin irritations and inform, including eczema and psoriasis.

Herbal soap is a great choice for anyone seeking a natural, healthy, and environmentally conscious way to care for their skin. It is a great alternative starting from its natural fragrances and healing properties to its gentle and effective cleansing abilities there are many reasons to make the switch to herbal soap.

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