

A Review on Homemade Herbal Face Wash

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Abstract: *The most essential elements for face care are found in our homes: Tulsi, turmeric, lemon juice, shahi jeera, nutmeg seeds, xanthan gum, liquorice root, orange peel extract, honey, rose water, walnuts. All of those are beneficial for both dry and oily skin types because they are readily available natural components.*

Face-related issues plague humans in several ways. Some people have black bags under their eyes, wrinkles, white heads, back heads, etc. that all issues are appropriately resolved by using homemade or herbal face treatments, cleansers, packs, etc. The greatest results for skin radiance can also be achieved using homemade treatments. The herbs (turmeric, tulsi, shahi jeera, lemon juice, nutmeg seeds, xanthan gum, liquorice root, orange peel extract, honey, rose water, walnuts, etc.) combine to make the herbal goods. They generate benefits such as anti-inflammatory, anti-irritant, and glowing agent, among others..

Keywords: face wash, Rose water, Turmaric, Irritancy Test, Spreadability

I. INTRODUCTION

The majority of the body is made of skin, and the skin on the face is one of the most delicate and indicative aspects of a person's personality. The skin makes up almost 15% of an adult's total body weight, making it the biggest organ in the body. It carries out numerous essential tasks, such as defense against physical, chemical, biological, and external threats. For skin to be clear, shiny, and healthy, a balanced diet is necessary.[1]

It contains the following ingredients in major amounts: aloe vera, propyl paraben, methyl paraben, rose water, turmeric, and neem leaves. It demonstrates several qualities, including antimicrobial, antifungal, and various skin issues.

Face washes are products that clean your face without leaving it feeling dry. There is also another common name for it: "cleanser." It has been shown that all skin types can use this product. Your face can be cleansed to get rid of surplus oil, makeup, and debris. These impurities dissolve in oil. You can also try using a face cleanser to get rid of them, albeit it may not work as well. Because facial skin is so delicate, using regular soaps may cause it to dry out. A face wash is a mild cleanser that does the vital job of keeping skin clean, sterile, smooth, and fresh while also successfully moisturizing the horny layer of the skin without endangering it in order for the skin to appear young and vibrant.

A face wash is a facial cleansing solution that removes debris, oil, filth, dead skin cells, and makeup from the face. This helps to prevent skin problems like acne and cleans the pores. As part of a skin care regimen, one can use a cleanser, toner, and moisturizer.

Face washes can be used to provide skin-fairness, moisture, anti-wrinkle, and anti-acne benefits. It is believed that skin-lightening agents function by inhibiting the generation of melanin in melanocytes, hence lowering the amount of melanin on the skin's metabolism and melanin production. Kojic acid, arbutin, vitamin C and its derivatives, and other substances that inhibit the production of melanin are utilized in whitening cosmetics because of their low toxicity to melanocytes

Categories of therapeutic agents used in face wash :[9]

Antibacterial:

Cleaners with antibacterial properties prevent bacteria from growing on skin. In addition to effectively cleansing your face, antibacterial face washes aid in the removal of acne and other skin outbreaks, which are frequently experienced by those with greasy or oily skin types.

Anti acne:

Acne cleansers work wonders at removing extra sebum without drying out your skin. Depending on the severity of the illness, different kinds of antiacne medications are utilized for different kinds of treatments.

Anti-inflammatory:

Reduction of swelling or inflammation is a characteristic of a substance or treatment. About half of analgesics are anti-inflammatory medications, which treat pain by decreasing inflammation as opposed to opioids, which act on the central nervous system to prevent pain signals from reaching the brain.

Advantages of face wash:-

- Dead skin cells are assisted in being removed, allowing new skin cells to grow in their stead.
- It supports healthy, youthful skin.
- Dead skin cells and too much oil block pores, resulting in whiteheads, blackheads, and a generally tired appearance. Regularly exfoliate your pores to prevent all of the aforementioned skin issues.
- It gives the skin a glowing appearance.
- Eliminating dead skin cells, which will cause wrinkles to appear more slowly.
- It maintains skin moisturized, smooth, supple, and youthful-looking.
- Dead skin cells, makeup, contaminants, and grime are all removed with its assistance.
- Dead skin cells and too much oil can clog pores, resulting in whiteheads, blackheads, and a generally tired appearance from acne.

Properties of face wash:

- Herbal and herbal cleansers that unclog pores and lessen oil accumulation are ideal for oily skin types.
- Both stability and aesthetic appeal are important.
- It shouldn't feel oily or greasy while applying.
- The residue of the cream shouldn't get thick when the water evaporates.
- It ought to spread without dragging at all.
- After use, the skin should have a thin layer of emollient left on it.
- Rather than absorb, its physical impact should be to open the pores and flush the skin

Uses:

- To get rid of all remnants of makeup, bacteria, and pollutants for daily use.
- Anti-aging.
- For washing the skin.
- It facilitates the appropriate skin penetration of other products.
- Encourages the production and regeneration of skin cells.
- Shower Rejuvenate maintains clear and glowing skin.
- Stimulates the synthesis and regeneration of skin cells.

Additives used in face wash:[10][11][12]

Gelling agent:

A gelling agent is a material that can slightly but significantly increase a liquid's viscosity. Gelling agents are substances that will cause your water or oil to phase into a thicker, less rigid gel. Due to the force (thixotropy), some of these gels thin down. Xanthan gum, for instance

Preservative:

The substances that are used to extend a product's shelf life are called preservatives. Toxins are compounds that some of these species are capable of secreting. For instance, propyl and methyl paraben

Humectant:

The opposite of a desiccant, a humectant is a hygroscopic material that is used to keep objects moist. It is usually a molecule with several hydrophilic groups, mostly hydroxyl groups. Humectants attract water vapor into and/or beneath the surface of organisms and things by absorbing and retaining moisture from surrounding air.

Numerous physiological elements play a role in the molecular pathogenesis, such as Follicular Hyperproliferation, the development of organisms that proliferate as a result of elevated testosterone levels, and the biosystems *subprunteabernium annees* and *staphylococcus epidermidis*. The idea behind hypotheses is to aid in the improvement of pathogenesis, encompassing the distinctions between target cell sensitivity, biomarker, neuroendocrine, genetic, and environmental components. When combined with synthetic and herbal components, *Vulgaris* has a substantial positive impact on several pimples.

They may have different mechanism like,

- Limit the secretion of sebum.
- antibiotics that suppress the primary acne-causing bacteria, *Propionibacterium acne* and *Staphylococcus epidermidis*.
- Keratolytic: the sebum that becomes trapped beneath the skin.
- anti-inflammatory, which stops inflammation, redness, etc. from making a situation worse.

The market offers a variety of contracts for futures for different medicinal components. The market offers the following technical formulations: gel, cream, lotion, face wash or cloner, face mask, or mask. Turmeric (*Curcuma longa*), nutmeg (*Myristica scent*, *Myristicaceae*), and tulsi (*Ocimum sanctum*, *Lamiaceae*). A number of chemical compounds' anti-inflammatory, antioxidant, and microbiological properties have been shown to have a positive impact on pimples.

INGREDIENTS USED IN HOMEMDE HERBAL FACE WASH

Turmeric

Scientific name: *Curcuma longa*

Family: zingiberaceae.



Fig 1. Turmeric

Uses:

- Turmeric is often used in face washes for its anti-inflammatory and antibacterial properties.
- Turmeric is often used in face washes for its anti-inflammatory and antibacterial properties.
- Additionally, turmeric is rich in antioxidants, which can protect the skin from damage and promote a healthy glow.
- When using turmeric in face washes, it's important to ensure it's mixed well with other soothing ingredients to avoid irritation

Tulsi

Scientific name: *Ocimum sanctum*

Family: lamiaceae

Uses : Anti-inflammatory properties can soothe your skin and target your pores. It is also known that turmeric lessens scarring.



Fig 2. Tulsi

Tulsi is also known as holy basil. It is commonly used in face washes for its numerous skin benefits. It has antibacterial, antifungal and anti-inflammatory properties, making it effective for acne-prone skin. Tulsi can help purify the skin, reduce excess oil, and soothe irritation.

In face wash formulations, tulsi is often incorporated in the form of extracts, powders, or essential oil. It can also provide a refreshing scent and contribute to an overall sense of well-being. As with any new product, it's advisable to do a patch test to ensure there's no adverse reaction

Shahi jeera

Scientific name: Bunium persicum

Family: Apiaceae

Use: As perfume



Fig 3. Shahi jeera

Shahi jeera, also known as black cumin or kalonji, is often used in traditional skincare due to its anti-inflammatory and antibacterial properties. When included in face washes, it can help with acne, soothe irritated skin and provide a natural glow. Its antioxidants can also assist in protecting the skin from environmental damage. If you're considering using products with shahi jeera, look for formulations that suit your skin type for the best results

Lemon juice

Scientific name: Rutaceae

Uses: help lessen skin blurring or lack of definition. It is also successful because of the way the murals and roots are treated. In cosmetics, as a natural pH adjuster



Fig 4. Lemon juice

Lemon juice is commonly used in face washes for its natural astringent and brightening properties. It can help reduce excess oil, unclog pores, and lighten dark spots due to its high vitamin C content. However, lemon juice can also be irritating to sensitive skin and may increase photosensitivity, so it's best to use it with **caution** and follow up with sunscreen

Nutmeg seeds

Scientific name: Rutaceae

Uses: help lessen skin blurring or lack of definition. It is also successful because of the way the murals and roots are treated. In cosmetics, as a natural pH adjuster



Fig 5. Nutmeg seeds

Nutmeg seed can be beneficial in face wash formulations due to its antibacterial and anti-inflammatory properties. It can help with acne, reduce blemishes, and improve skin tone. When used in a face wash, nutmeg is typically ground into a fine powder and combined with other ingredients like honey, yogurt or aloe vera to enhance its effects and provide gentle exfoliation.

If you're considering making a DIY face wash with nutmeg, be sure to patch-test it first to avoid any potential irritation

Xanthan gum



Fig 6. Xanthan gum

Xanthan gum is a polysaccharide gum derived from *Xanthomonas campestris* by a pure-culture fermentation process and purified by recovery with isopropyl alcohol.

Xanthan gum is often used in face washes as a thickening agent and stabilizer. It helps to create a smooth, gel-like texture, improving the product's application and spreadability.

Additionally, xanthan gum can enhance the formulation's consistency and prevent separation of ingredients. It's considered safe for skin and is generally well-tolerated.

Liquorice root

Scientific name: legumes/*Glycyrrhiza glabra*

Family : Fabaceae

Uses : give the delicate skin its prior characteristics. The characteristics are highly nutritious and resuscitative.



Fig 7. Liquorice root

Liquorice root is used in face washes for its soothing and anti-inflammatory properties. It can help brighten the skin, reduce hyperpigmentation, and even out skin tone. Additionally, it has antibacterial for acne-prone skin. Its gentle nature makes it suitable for sensitive skin types as well.

Orange peel extract

Scientific name: citrus sinensis

Family : Rutaceae



Fig 8. Orange peel extract

Orange peel extract is often used in face washes for its various skin benefits. It is rich in vitamin C, which can help brighten the skin and reduce dark spots. The extract also has natural astringent properties that can tighten pores and control oil production, making it suitable for oily or acne-prone skin. Additionally its antioxidant properties can help protect the skin from environmental damage.

When looking for a face wash with orange peel extract, check for additional ingredients that complements its benefits, like gentle exfoliants or hydrating agents, to ensure a balanced formula

Honey

Scientific name: Apis mellifera

Family : Apidae.

Uses : You get bodily fluids like an elephant from the sand, lotion, and light lotion in addition to a nourishing material that is utilized to provide the appearance of liquid.



Fig 9. Honey

Honey is often used in face washes and skincare products due to its natural antibacterial properties, moisturizing benefits, and ability to soothe the skin. It can help to hydrate, reduce inflammation, and promote a healthy complexion. When choosing a face wash with honey, look for natural or organic formulations to maximize its benefits

Rose water

Scientific name: Rose damascene

Family : Rosaceae.

Uses : utilized as a solvent and possesses antimicrobial and antiseptic qualities that help treat acne



Fig 10. Rose water

Rose water is commonly used in herbal face washes for its soothing and hydrating properties. It helps balance the skin's pH, reduces redness and irritation, and provides a refreshing sensation. Additionally, its anti-inflammatory and antioxidant qualities can contribute to a brighter, more even complexion, making it a popular choice in natural skincare formulations

Walnuts

Scientific name : Juglans regia

Family : Juglandaceae.

Uses : Dead skin cells and debris are cleaned, and soft oils are disinfected with the aid of the Scraping Granule Scraping Action.



Fig 11. Walnuts

Walnut is often included in herbal face washes due to its exfoliating properties. Ground walnut shells can help remove dead skin cells, promoting a smoother and brighter complexion. Additionally, walnuts are rich in antioxidants and fatty acids, which can nourish the skin and provide hydration. However, it's important to ensure that the walnut particles are finely ground to avoid irritation

Evaluation parameters of herbal face wash

When evaluating herbal face washes, consider the following factors:

1. pH Balance: Ensures compatibility with the skin's natural acidity.
2. Ingredients: Quality and source of herbal ingredients, including their effectiveness and potential allergens.
3. Efficacy: How well it cleanses, removes impurities, and addresses specific skin concerns.
4. Skin Compatibility: Suitability for various skin types (oily, dry, sensitive).
5. Sensory Properties: Texture, fragrance, and overall user experience.
6. Preservatives: Safety and necessity of preservatives in the formulation.
7. Stability: Shelf life and how well the product maintains its effectiveness over time.
8. Packaging: Impact on product stability and ease of use.
9. Environmental Impact: Eco-friendliness of ingredients and packaging.
10. Consumer Reviews: Feedback on effectiveness and user satisfaction.

These factors help determine the overall quality and suitability of a herbal face wash. Here's a simple recipe to prepare a herbal face wash using the ingredients you mentioned:

Recipe of herbal face wash

Ingredients:

1. 1 tablespoon dried Tulsi (Holy Basil) leaves
2. 1 teaspoon turmeric powder
3. 1teaspoon Shahi jeera (caraway seeds)
4. 1tablespoon lemon juice
5. 1 teaspoon grated nutmeg seeds
6. 1 teaspoon xanthan gum
7. 1 tablespoon powdered liquorice root
8. 1 tablespoon dried orange peel powder
9. 1 tablespoon honey
10. 2 tablespoons rose water
11. 1 tablespoon crushed walnut (for gentle exfoliation)

Instructions:

1. Prepare the Ingredients: Grind the dried Tulsi, Shahi jeera, and orange peel into a fine powder. If using whole nutmeg seeds, grate them finely.
2. Mix Dry Ingredients: In a bowl, combine the ground Tulsi, turmeric, Shahi jeera, nutmeg, liquorice root powder, orange peel powder, and xanthan gum.
3. Combine Wet Ingredients: In another bowl, mix honey, lemon juice, and rose water until smooth.
4. Combine Mixtures: Gradually add the dry mixture to the wet ingredients, stirring continuously to avoid lumps. Adjust the consistency with a little water if needed.
5. Add Walnut: Fold in the crushed walnut for gentle exfoliation
6. Storage: Transfer the mixture to a clean, airtight container. Store it in the refrigerator for up to a week.

Usage:

Apply a small amount to damp skin, gently massaging in circular motions. Rinse off with lukewarm water. Use 2-3 times a week for best results.

Note:

Conduct a patch test before using to check for any allergic reactions. Adjust quantities based on your skin type and preferences.

Results :

After all steps are completed, the solution has a consistency of semi-solid. They are found in homogeneous and are readily washable. They also have a pH that is typical. It's quite beneficial for the skin on our faces.

II. CONCLUSION

We employ elements from daily life interaction in that herbal face wash. It really helps with the skin on our faces. Additionally, the pimples, acne, bark circle, etc. They are also reasonably priced. In our home, we're also ready. as we have all of the components at our house. In that instance, the face wash can only be made entirely of herbs without the need for preservatives

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