



## A Review on Herbal Face Washes

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### Abstract:

The hydroalcoholic extract of turmeric, orange peels, and coffee was used to create the herbal face cleanser, which is very beneficial and has no negative side effects impact. The plants used in this study have stronger anti-inflammatory, antibacterial, and antioxidant qualities. Every herbal component used in this recipe is readily accessible at the local market. The skin on the body is most sensitive on the face, where it is also crucial for one's appearance. Both therapeutic and cosmetic qualities can be obtained from the use of herbal plants in formulations. Plants like aloe vera, turmeric, and others that are used in face washes have the ability to soften skin, get rid of acne, and speed up healing. The herbal formulation was assessed using a variety of parameters, including appearance, colour, pH, viscosity, odour, and solubility. Evaluation of the formulation is necessary to determine the safety and effectiveness of the formulated product, as it may have adverse effects.

### INTRODUCTION:

One of the world's oldest medical care systems is thought to be the Indian herbal medication industry. Its origins can be found in ancient India, where the Vedas, a prehistoric holy book, mentioned the use of herbs as medicines. Herbs and natural items were used by two ancient medical systems, Ayurveda and Unani, to treat a variety of illnesses<sup>(1)</sup>. Plant extracts are still often utilised in the majority of prescribed medications today, despite the perception of Western medical professionals that they are a recent trend. The demand for Indian herbal medications has significantly increased as a result of the world community's growing recognition of the advantages of this age-old medical practice. This industry has grown at a pace of around thirty percent each year because to the increase in demand for cosmetics, skincare products, and herbal remedies<sup>(2,3,4,5)</sup>. There has been a noticeable increase in the demand for natural products in recent years. The skin is an extensive and essential organ of the body that defines a person's personality, particularly the sensitive skin on the face, which is frequently seen as a typical parameter. An individual's general health may also be indicated by the state of their skin. Lipids, amino acids, and carbohydrates are some of the elements that make up the skin. A variety of skin issues, including minimising wrinkles, combating acne, and regulating oil production, have led to the development of cosmetics. These products are meant to make the skin look and feel better, which will result in a complexion that seems younger and healthier. Nonetheless, it's critical to select safe and effective cosmetics because some can contain dangerous ingredients that over time could injure skin<sup>(6-8)</sup>.

### Skin care preparation for face:

- Face pack and masks
- Cleansing creams and lotion
- Rouges
- Face washes
- Compact powder

The biggest organ in the body, the skin makes up 15% of the adult body weight. It carries out numerous essential tasks, including as preventing the body from losing too much water and aiding in thermoregulation. It also provides defence against external physical, chemical, and biological threats. Six Females experience acne more frequently than boys, indicating that female puberty begins earlier and that the severity of the diseases varies based on a number of circumstances<sup>(11)</sup>. It affects the pilosebaceous units and is a chronic inflammatory condition. Acne commonly manifests as comedone, inflammatory papules, and pustules. psychological distress and scarring from cysts and nodules.

### Advantages of face wash<sup>(13)</sup>:

- It aids in the replacement of old skin cells with new ones by removing dead skin cells.
- It promotes healthy, youthful skin.
- It gives the skin a glowing appearance.
- The combination of dead skin cells and excess oil clogs pores, resulting in the appearance of fatigue and whiteheads and blackheads in acne. Frequent pore exfoliation helps prevent all of the aforementioned skin issues.
- Eliminating dead skin cells, which will cause wrinkles to appear more slowly.

### Types of Face Wash:

All skin types can benefit from face washes, but there are now many products available that are designed to cater to different skin types. For example, an oily skin face wash is made for those with oily skin types; it leaves a thin layer of oil on the skin instead of containing oils. Face washes come in a wide range of variations, with options for oily, dry, and normal skin.

### Herbs Used in Face Wash:

Azadirachta indica is an indigenous Meliaceae tree that is cultivated practically everywhere in India. Locally and globally, it's called "neem" or "vembu." The chemical components of this plant product that have been identified are flavonoids and saponin. It contains the bitter alkaloid margosine. Seeds contain 10-31 percent of a yellow, bitter fixed oil. Ingredients in Action The nimbidin component of neem seed oil has been found to include a significant amount of stearic and palmitic acid<sup>(14)</sup>.

### MATERIALS:

**Table: 1 List of ingredients.**

| Sr.No. | Name of Ingredients               | Quantity for 100 ml | Property                     |
|--------|-----------------------------------|---------------------|------------------------------|
| 1      | Extract of tulsi                  | 1 gm                | Antibacterial                |
| 2      | Ethanollic extract of neem leaves | 1 gm                | Kills acne causing bacteria, |
| 3      | Ethanollic extract of orange peel | 1 gm                | Antioxidant                  |
| 4      | Carbopol 940                      | 1.5gm               | Gelling agent                |
| 5      | Methyl paraben                    | 1gm                 | Preservative                 |
| 6      | Propyl paraben                    | 0.5gm               | Preservative                 |

|    |                        |        |               |
|----|------------------------|--------|---------------|
| 7  | Triethanolamine        | 0.4 ml | Neutralizer   |
| 8  | Propylene glycol       | 2 ml   | Humectant     |
| 9  | Sodium lauryl sulphate | 2 gm   | Foaming Agent |
| 10 | Distilled Water        | Q.S.   | Vehicle       |

## METHODS:

### FORMULATION OF HERBAL FACE WASH<sup>(19)</sup>:

leaves extract and orange peel extract to achieve anti-acne property. We were formulated face wash gel for that purpose Carbopol was used as gelling agent. Methyl and propyl paraben were used as preservatives. Triethanolamine was used as alkalizing agent to achieve good stability. Propylene glycol was added it also gives emollient effect on skin. Sodium lauryl sulphate was added to produce foam. While is application. The formulation ingredient and its concentration shown in Table no. 1. Mature Neem leaves, orange peel is selected. They were washed and sundried for 3 days and subsequently crushed mechanically via the use of a manual grinder to particulate sizes of 2mm to obtain a larger surface area. Finally, resulting samples were artificially dried using a tray drier at a temperature of 50°C for two hours. A little quantity of water was added with preservatives Then propylene glycol and sodium lauryl sulphate were dissolved well in above solution. To the above solution Carbopol was added little by little and stirred well until a gel like dispersion was obtained. To this the extracts were added one by one to get a complete gel like consistency.

### EVALUATION OF FORMULATION<sup>(25)</sup>:

#### 1) Physical Evaluation:

Visual inspection was done for physical characteristics such colour, appearance, and uniformity.

#### 2) Washability:

After applying formulations to the skin, the degree and ease of water washing were physically assessed.

#### 3) pH:

A calibrated digital pH metre was used to measure the pH of a 1% aqueous solution of the formulation at a constant temperature.

#### 4) Spreadability:

The term "spreadability" refers to how easily the gel spreads across the skin or afflicted area after being applied. The spreading value of a gel formulation affects its bioavailability efficiency as well. The spreadability is measured in terms of the number of seconds it takes for two slides separated by gel under a specific load to separate from one another. Better spreadability results from separating two slides in less time. Standard-sized glass slides were taken in two sets. Over one of the slides was the formulation for the herbal gel. The other slide was positioned over the gel so that a space of six centimetres was occupied by the gel sandwiched between the two slides. In order to push the gel between the two slides uniformly to form a thin layer, a 100g weight was placed on top of the slide. The excess gel that was sticking to the slides was scraped off after the weight was removed. The two slides were positioned so that only the upper slide could fall off freely due to the force of the weight attached to it, and they were fastened to stand without the slightest disruption. A 20g weight was cautiously fastened to the upper slide. Under the impact of the weight, the time it took for the higher slide to move 6 cm<sup>7</sup> apart from the lower slide was recorded. Three iterations of the experiment were conducted using both marketed and formulated gels, and in the interim for calculation.

Spreadability was calculated by using the following formula,

$$S=M \times L/T$$

Were, S- Spreadability

M- Weight tied to the upper slide (20gm).

L- Length of the glass (6.5cm).

T- Time in sec.

### Conclusion :

Herbal face wash gel containing, neem leaves extract, Tulsi leaves extract, orange peel extract was formulated successfully by using Carbopol as a gelling agent. Prepared formulation was evaluated for colour, odour, consistency, PH, Spreadability, was ability, grittiness, foam ability studies and it shows acceptable results. So performed studies it can conclude that prepared formulation may effectively used for facial care still further studies related to effectiveness and adverse effect of formulation are required to perform before to bring it in real use.

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