

Review on Face Serum

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Abstract:

Facial wrinkles and skin aging are undesirable outcomes of photodamage and ultraviolet (UV) rays. Currently, there are no effective strategies available to delay the skin aging process. Aloe Vera, glycerin, and honeybee venom face serum is a highly concentrated cosmetic product. When using Aloe Vera, we not only achieve quick cosmetic effects but also experience psychological satisfaction. The serum has the property of rapid absorption and the ability to penetrate into deeper layers of the skin. Aloe Vera gel is commonly utilized to treat various skin diseases, sunburn, minor cuts, insect bites, and as a wound healing agent with anti-inflammatory, antibacterial, and antifungal effects.

The face serum was assessed for its physicochemical parameters, including pH, globule size, and consistency. Stability study results indicated that there was no alteration in visual appearance, homogeneity, and globule size. Herbal medicine has been extensively used worldwide, including in India, for primary healthcare. Aloe vera is utilized for its medicinal and skincare properties. Skin aging, acne, and facial wrinkles are major skin issues due to photodamage and ultraviolet rays.

Currently, there are no effective cosmetics available to counter skin aging and acne. Aloe vera, vitamin E, glycerin, and citric acid constitute a highly concentrated cosmetic product in the form of face serum. The serum demonstrates the ability to penetrate into deeper layers of the skin. Aloe vera contains numerous vitamins such as vitamin B12, vitamin A, vitamin C, vitamin E, as well as folic acid, enzymes, anthraquinones, minerals, carbohydrates, proteins, hormones, saponins, and lignin. Aloe vera's anti-inflammatory and antibacterial properties can reduce acne and skin inflammation. Citric acid, derived from oranges, exhibits antioxidant properties that combat infections and maintain toxin-free skin due to the presence of vitamin C. Citric acid present in Aloe Vera aids in controlling skin aging, unclogs pores, and moisturizes the skin.

Keyword: Face serum, Anti- bacterial, Anti-ageing, Acne

INTRODUCTION:

The examination of human skin represents a vital realm of exploration and advancement in dermatology, toxicology, pharmacology, and cosmetology, aimed at evaluating the impacts of external agents, their interaction, absorption mechanisms, and/or toxicity towards various cutaneous structures. The significance of enhancing appearance has been recognized since ancient times, and the societal inclination towards achieving beauty and wellness has continued to evolve.

Cosmetology entails the study and practice of beauty enhancement. It encompasses the art or science of enhancing and refining the skin, nails, and hair, along with the analysis of cosmetics and their utilization. A skincare formulation must possess the capability to effectively deliver potent ingredients into the skin to achieve the desired objectives. Facial serum emerges as a solution for delivering valuable active components into the skin, thus negating the need for harmful chemicals while yielding immediate results. Serums, being

concentrated products, are extensively employed in the field of cosmetology. The term itself underscores its professional application in cosmetology.

SERUM:

It gets rapidly absorbed and easily penetrate into the deeper layers of the skin .Also has non-greasy finish and intensive formula which contain high concentration of active substances. It contains skin smoothing ingredients which enhance skin texture and makes skin soft, silky smooth and fair. The formulation has good spreadability and makes the pores appear smaller and increase moisture level.

Advantages

- Improves skin texture
- Minimizes the skin pores.
- Hydrates and nourishes the skin.
- Improve skin elasticity.

Disadvantages

- Limited shelf life: Serum has a relatively short shelf life compared to other skincare products, as it can degrade over time, especially when exposed to air and light.
- Risk of contamination: Serum products often come in bottles with droppers or pumps, which can introduce bacteria or other contaminants if not properly handled or stored.
- Potential for skin irritation: Some serums contain active ingredients like acids or retinoids that may cause irritation or sensitivity in some individuals, especially those with sensitive skin.
- Higher cost: Quality serums with effective ingredients can be expensive compared to other skincare products, making them less accessible to some consumers.

TYPES OF FACE SERUM:

1. oil serum.
2. gel serum.
3. Water based serum.
4. The emulsion serum.
5. pressed balm serum

1. Oil serum:

The oil serum is the easiest to create among all facial serums. Typically, it begins with a foundation of high-quality, rapidly absorbing carrier oils, often termed as "dry" oils. Alongside providing moisturizing and barrier-repairing properties, these premium oils incorporated into the serum also encompass polyphenols, essential fatty acids, and other compounds that can be assimilated by the skin



2. Gel serum: Gel serums provide the skin a "tightening" sensation, giving your consumer the impression that their skin is momentarily lifted or tightened in particular regions of the face.



3. Water based serum: Water-based serums are akin to gel serums, though they may contain minimal or no gums and thickeners. To deliver potent hydrophilic plant extracts that adhere to the skin beneath a cream or lotion, you would utilize a water-based facial serum. Layering an anti-aging facial mist beneath an emulsion and subsequently beneath an oil is the optimal method to enhance the penetration of water-based compounds into the skin.



4. The emulsion serum: An emulsion-based facial serum acts as a moisturizer that fortifies the skin's barrier function while also imparting potent ingredients to the skin. Emulsions combine two "immiscible" phases—such as oil and water—that naturally resist mixing. The most effective method for deeply delivering high-performance actives into the skin's tissues is through an emulsion. Despite the skin's resilient barrier function, penetrating the dermis with cosmetic components remains a formidable task, yet an emulsion of oil and water is uniquely equipped to achieve this remarkable feat. Additionally, the moisturizing properties of the emulsion further enhance the skin's barrier function.



5. pressed balm serum: A balm serum features a traditional balm foundation comprising of various butters, waxes, and oils, alongside active ingredients that are oil-soluble (lipophilic) and offer potential skin benefits. The combination of butters and waxes creates a protective barrier on the skin, providing hydration and nourishment, while enabling the active components of the pressed serum to effectively perform their functions. Within a balm serum, numerous captivating unique butters and waxes can be blended with a vast array of exceptional plant oils.



Ideal Qualities of Face Serum:

1.Calms irritated skin: Aloe vera is renowned for its antiviral properties and ability to regenerate cells. Its soothing effects on irritated skin can be likened to the relief experienced when applying it to a sunburn.

2.Intensive moisturization: Possessing a unique capability to elevate and regulate skin moisture levels.

3.Combats Acne and diminishes blemishes: Bael fruit hinders bacterial overgrowth, which is the main culprit behind acne and pimples.

4.Reduces dark circles and puffiness: Abundant in Vitamin E and antioxidants, it aids in addressing eyelid discoloration, while its cooling effect alleviates puffiness. This diminishes the appearance of under-eye circles and exfoliates dead skin cells, promoting collagen synthesis.

4.It boasts antioxidant properties that promote a vibrant complexion.

Active ingredient used in herbal face serum:

- 1.Aloe vera
- 2.Sandalwood oil
- 3.olive oil
- 4.coconut oil
- 5.Rose water

1 Aloe Vera:



Aloe vera helps hydrate the skin without clogging pores and can alleviate inflammation and redness. Aloe vera is a popular herbal ingredient found in many skincare products, including face serums, due to its numerous beneficial properties for the skin.

Kingdom: Plantae

Order: Asparagales

Family: Asphodelaceae

Subfamily: Asphodeloideae

Genus: Aloe

Species: Aloe vera

Botanical name: Aloe barbadensis miller

•English: India aloe

Here are some of the benefits of aloe vera in face serums:

1. Moisturizing
2. Soothing and Calming
3. Acne Treatment
4. Anti-Aging

- It contains healthful plant compounds.
- It has antioxidant and antibacterial properties.
- It accelerates wound healing.
- It reduces dental plaque.
- It helps treat canker sores.
- It reduces constipation.
- It lowers blood sugar levels.

2. Sandalwood oil:

Sandalwood oil is a highly valued essential oil derived from the wood of the sandalwood tree (*Santalum album*). It has been used for centuries in various cultures for its aromatic, therapeutic, and skincare properties.

With its anti-inflammatory and skin clearing properties. Sandalwood essential oil can help clear acne and pimple and soothe skin.

3. olive oil :

Help to decrease our acne by killing off the bacteria that cause the acne. Olive oil is also known to moisturize and hydrate your skin.

4. Coconut oil:

Coconut oil is a versatile oil derived from the meat or kernel of mature coconuts harvested from the coconut palm (*Cocos nucifera*). It is known for its distinct flavor, aroma, and various uses in cooking, beauty, and healthcare.

It contain nourishing fatty acid and linoleic acid which help retain the moisture in the skin .

5. Rose water:

Rose water is said to be a natural skin toner due to this amazing pH- balancing properties. Rose water is a fragrant floral water made by distilling rose petals with steam. It has been used for centuries in various cultures for its aromatic, culinary, cosmetic, and medicinal properties

Application of face serum

- 1.Cleanse: Start with a clean face.
- 2.Tone (optional): If you use a toner as part of your skincare routine, apply it now. Toners help to balance the skin's pH and prepare it for better absorption of subsequent products.
- 3.Dispense Serum: Dispense a small amount of face serum onto your fingertips. A pea-sized amount is usually sufficient for the entire face, but you can adjust the amount based on your needs.
- 4.Apply: Gently dab the serum onto different areas of your face - cheeks, forehead, chin, and nose. Avoid getting the serum too close to your eyes unless it is specifically labeled as eye-safe.
- 5.Massage: Use your fingertips to gently massage the serum into your skin using upward and outward motions.
- 6.Allow Absorption: Let the serum absorb into your skin for a few minutes before applying any additional products.
- 7.Moisturize (optional): Depending on your skincare routine, you may choose to follow up with a moisturizer to lock in the serum and provide additional hydration to your skin.

8.Sun Protection: If applying in the morning, follow up with a broad-spectrum sunscreen to protect your skin from UV damage.

Conclusion:

face serum is a versatile and potent skincare product that can address a variety of skin concerns and promote overall skin health. Whether you're looking to hydrate dry skin, reduce the appearance of fine lines and wrinkles, control oiliness, or even out skin tone, there's likely a serum formulated with active ingredients to target your specific needs.

By incorporating face serum into your daily skincare routine and following best practices such as applying to clean, dry skin, using a small amount, and layering with compatible products, you can effectively reap the benefits of this concentrated formula. Consistency is key, as regular use over time can lead to visible improvements in skin texture, tone, and overall appearance.

It's important to choose a serum that suits your skin type and concerns, and to patch test new products, especially if you have sensitive skin. Additionally, while face serum can complement other skincare products, including moisturizers and sunscreen, it's not a substitute for sun protection, so be sure to apply sunscreen daily to protect your skin from harmful UV rays.

Overall, by understanding how to properly use and incorporate face serum into your skincare routine, consulting with skincare professionals when needed, and practicing patience and consistency, you can achieve healthier, more radiant skin and address your specific skincare concerns effectively.

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