

Review



Incorporation of Traditional Wisdom in Cosmetology for Sustainable Beauty Care

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ABSTRACT:

Background: The use of cosmetics has been known for ages. The widespread use of these cosmetics has led to advancement in the field. Knowledge of herbal and natural products can be utilized for sustainable beauty care. **Aim & Objective:** This work aims to understand various Ayurvedic concepts like *Dinacharya* (Daily regimen), *Rithucharya* (Seasonal regimen) and *Rasayana Chikitsa* (Rejuvenation therapy) that can be used effectively in maintaining the beauty of an individual for longer duration. **Methods:** Ayurvedic literature including *Sushruta Samhitha*, *Charaka Samhitha*, *Ashtanga Sangraha*, *Ashtanga Hridaya* etc, were reviewed to analyze various Ayurvedic regimens, treatments and formulations that can be executed proficiently for holistic beauty. Literature search was conducted in PubMed, Scopus, AYUSH Portal and Google Scholar till April 2025 to identify studies on influence of herbs and herbal products on skin and body. **Result:** Presence of various phytoconstituents in herbs can be effectively used for protection from ultraviolet rays, reducing oxidative stress and inhibiting tyrosinase enzyme there by reducing melanin production. Seasonal and daily regimens also play a key role in maintaining skin texture and health thereby retaining youth. **Conclusion:** Ayurvedic literature explains various strategies for sustainable beauty care. Following *Dinacharya*, *Rithucharya*, *Rasayana Chikitsa* can be effective in maintaining beauty.

KEYWORDS: Cosmetology, Sustainable Beauty, *Dinacharya*, *Rithucharya*, *Rasayana*, Cosmeceuticals

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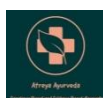
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1. INTRODUCTION

Beauty is a feature that can give pleasure, improve self-esteem and confidence of oneself. The primary concept of well-being may include maintaining physical and mental well-being, health and body. [1] Prioritizing beauty and rejuvenation therapies led to the rapid development of cosmetic industries over the past few decades.

According to The Drug & Cosmetic Act 1940, Cosmetics are defined as "any article intended to be rubbed, poured, sprinkled or sprayed on, or introduced into, or otherwise applied to the human body, any part thereof for cleansing, beautifying promoting attractiveness, or altering the appearance, and includes any article intended for use as a component of cosmetic". [2]

In terms of purchase volume, Indian beauty market ranks the 4th in the world. [3] The overall market share is expected to grow to US\$20 billion by 2025 with a Compound Annual Growth Rate of 25%. The global cosmetic Industry is growing at 4.3%. CAGR will reach US\$ 450 billion by 2025. [4] It is also expected to expand considerably by 2026.

The word cosmetic is derived from the Greek word "Kosmtikos" which means power, arrangement. [5] These are pharmaceutical preparations that can be used topically in the form of creams, gels, lotions, serum etc., prepared by utilizing various components that can augment the appearance of hair and skin.

3. METHODOLOGY

Table 1: Search Strategy Used for Identifying Relevant Literature

Database/Source	Search Terms Used	Inclusion criteria	Exclusion criteria
PubMed	(Cosmetics) OR (Adverse effects)	In vitro, In-vivo and clinical	Abstracts without full

One of the main aims of Ayurveda, an ancient system of Medicine, is to maintain the health of a healthy individual. [6] According to Science, balance of *Sharira* (body) and *Manas* (mind) along with internal health can maintain as well as enhance beauty of an individual. Classical Ayurveda textbooks such as Sushruta Samhitha, Charaka Samhitha, Ashtanga Sangraha and Ashtanga Hridaya describes numerous herbs, herbal formulations and methods for the maintenance of beauty and rejuvenation. The products that are manufactured using herbal or natural ingredients added with necessary bases are considered as herbal cosmetics. They may have cosmetic as well as pharmaceutical properties and can be used as both cosmetic products as well as pharmaceutical medicament. [7] Health and habit of an individual, climatic conditions one is exposed to, food and diet consumed, may influence the skin, hair and body. Ayurveda also emphasizes the importance and ability of *Rasayana Chikitsa* (Rejuvenation Therapy) in the maintenance of the same.

2. AIM & OBJECTIVE

This work aims to understand various Ayurvedic concepts like *Dinacharya* (Daily regimen), *Rithucharya* (Seasonal regimen) and *Rasayana Chikitsa* (Rejuvenation therapy) that can be used effectively in maintaining the beauty of an individual for longer duration.

	(Cosmetics) AND (Side effects) (Cosmetology) AND (Adverse effects)	studies, review articles	text
Google Scholar	“Cosmetology In Ayurveda” OR “Cosmetics” And “Rasayana Therapy” OR “Cosmetics” AND “Ayurveda”	In vitro, In-vivo and clinical studies, review articles	Articles after first 50 search

*Timeframe Covered: 2000 to April 2025

Impact of Cosmetics:

Social media plays an important role in rising the demand and popularity of skin care products among the

society. These products can enhance the appearance and improve self-confidence at times, but can also have adverse events.

Table 2: Adverse effect of certain compound in cosmetics.

Compound	Cosmetic	Adverse effect
Bisphenol. [8,9]	Packaging material for cosmetics	Impact on sperm motility, viability, concentration, abnormality
Diethanolamine (DEA). [10]	Soap, Shampoo, Hair dyes	Liver Cancer, Precancerous changes of skin and thyroid, skin and eye irritation
Diethyl Phthalates. [11]	Hair products	Endocrine disruptor, Asthma
Parabens. [12]	Moisturizer, hair products, face wash	Metabolic disorder
Benzophenone. [13,14]	Sunscreen, lotions, conditioners	Hampers estrogen mechanism.

+ Effect of different compounds in cosmetics on humans

According certain studies, the use of some compounds in cosmetic products may have varying effects on humans; hence more studies can be done to fully understand their safety and efficacy.

History of Ayurveda Cosmeceuticals:

Usage of Ayurveda cosmetics and cosmeceuticals date back to Indus Valley Civilization.

Mohen-jo-Daro and Harappan civilization had evidences of various cosmetic and ornaments used at times, like application of “Kohl” to the eyelashes, eyelids and eyebrows. In Mohan-jo-Daro different types of razors were used for depilation. Reference of various cosmetic and beauty products is available from ancient sources like Rigveda, Atharvaveda. [15]

Haramekhala:

A classical book written by Madhuka in 9th Century AD, is also known as Prayogamala. The book has references of different cosmeceutical preparation like formulations for *Khalithya* (baldness), *Indralupta* (alopecia), *Dharunaka* (Dandruff), *Dhanthadhavana choorna* (powder for brushing), *Mukhavasagulika* (tablet for odour of mouth) etc. [15]

Over 200 herbs and minerals are discussed in Ayurvedic literature, many of which can enhance the beauty of skin. [16] There are many formulations as well as group of herbs described which can aid the process.

Table 3: Group of herbs mentioned in different classical textbooks in the field of cosmetology

<i>Samhitha</i>	Group of herbs	Some herbs	Modern mechanisms
<i>Sushruta Samhitha</i>	<i>Rodradi gana.</i> [17] <i>Eladi Gana.</i> [18]	<i>Lodra</i>	Salireposides treat acne prone skin [16], disorders of eyes [19]
<i>Charaka Samhitha</i>	<i>Varnya Mahakashaya.</i> [20]	<i>Manjista</i>	Inhibit tyrosinase [16]
<i>Ashtanga Sangraha</i>	<i>Varnya Mahakashaya</i> [21] <i>Vayasthapana</i> [22]	<i>Madhuka</i>	De-tanning, depigmentation, inhibit melanin production [23,24]
<i>Ashtanga Hridaya</i>	<i>Lodradi Gana</i> [25] <i>Eladi Gana</i> [26]	<i>Chandana</i>	Tyrosinase enzyme-inhibit melanin production [16]

Kumari (Aloe vera) can give a soothing effect on skin. [27] It can be used effectively against the scorching summer. Constituents like aloin, barbaloin, aloe-emodin protects skin from ultraviolet rays. The presence of abundant antioxidants enhances the *vrana ropana* property of the herb. [28] *Varnya* and *twak doshahara* property of *Haridra* explained by *Bhavaprakasha* can be correlated to the ability to suppress the melanogenesis and anti-irritant property. Inhibition of tyrosinase activity was observed in a study conducted where curcumin inspired compounds were prepared. [29] Extracts of *Moringa oleifera* Lam can be used for preparation of creams, which can be used as moisturizer as well as Sunscreens due to its ability to give photoprotection and UV protection. [30,31]

Acharya Sushruta had described various surgical and non-surgical procedures for the management of different ailments of skin, hair, ears, nose. He had mentioned about *shasti upakramas* (60 managements) which include *Aalepa* (application of paste of medicine), *Abhyanga* (Oil massage), *Sweda* (fomentation), *Krshna Karma* (Inducing black color) i.e., making skin normal in

hypopigmented areas, *Pandu Karma* (making white color), *Pratisarana* (rubbing of rough powder of medicinal herb on soft skin), *Romasanjanana* (measures to enable growth of new hairs), *Loma apaharana* (Removal of unnecessary hairs. [32]

Rasayana Chikitsa:

Rasayana is a branch of *Ayurveda* which explains ways to attain or maintain excellence of *Rasadi Saptadhatu's*. By undergoing *Rasayana Chikitsa* one attain longevity, memory, freedom from illness, youthfulness, excellence of luster, complexion and voice, optimum strength of physique and sense organs. [33]

Table 4: Role of Dhatu and Mala in Cosmetology. [34]

<i>Dhatu/Mala</i>	Role in cosmetics
<i>Rakta Kshaya</i>	Roughness of Skin
<i>Asthi Kshaya</i>	Roughness of skin Falling of hair, nail, eyebrows
<i>Sweda Kshaya</i>	Frinkles of skin

Regulatory Framework for Cosmetics

Regulation of cosmetics are essential to ensure product safety, quality and consumer trust including herbal

medicines. However regulatory approaches vary significantly across regions.

Key Regulatory Bodies in India

1. Central Drug Standard Control Organization (CDSCO)
2. Drug and Cosmetic Act 1940
3. The cosmetic Rule 2020
4. Bureau of Indian Standards (BIS)

4. DISCUSSION

Cosmetic products have become an important part in the daily life of all individuals, irrespective of age, sex and race. Apart from the long-term effect of products on the body, individuals are more concerned for quick and fast results. These instant results may sometimes have undesirable effects on the skin. [35,36] Natural products were in use for the purpose of beautification since many years and is gaining greater attention now-a-days and a transitional shift towards natural and herbal cosmetic products have been observed. *Ayurveda* believes in the concept of *Chaya, Varna, Prabha* [37] from *garbhavastha* itself. *Varna prasada* can be attained by maintaining *rakta dhatu* which is nourished by *Rasa dhatu*. [38] *Twacha* (skin) which is the seat of *Bhrajaka pitta* (type of *Pitta*) is responsible for luster of skin, [39] especially the first layer of skin i.e., *Avabhasini*. [40] Hence depletion in *pitta dhatu* can lead to *Nishprabha Avastha* or loose of lusture of skin and nourishment of *Raktha dhatu* is essential to prevent roughness of skin. Hence the use of herbs that can maintain *pitta* and *rakta* can be considered good for skin.

Concept of Dinacharya (daily routine)

Dinacharya is a term covering activities related to diet, lifestyle, work and recreation from the time an

individual wakes up through to sleep. It is the daily routine that one should follow to maintain a healthy living. [41]

Anjana (Application of Collyrium) is the process of administration of medication into the lower conjunctival fornixes moving from the inner to outer canthus and vice versa using an applicator. It not only promote attractiveness of eyes but can also alleviate *kapha* disorders and improve clarity. [42, 43]

Practicing *Abhyanga* (application of oil to body) can delay aging, tiredness. It can improve skin tone and complexion, nourishes the body tissues and improve vision. *Abhyanga* can also induce good sleep thereby reducing stress, thus delaying aging. [44] *Abhyanga* is advised to be performed over ears, head and feet.

Beauty is not only the color, complexion and luster. Physical fitness is also a part of maintaining beauty which can be achieved by regular exercise or *vyayama*. *Vyayama* can burn excess fat and bring body into good shape. Exercise can also alleviate the risk of other health consequences. [45, 46]

Udwarthana (Powder massage) before bath can also burn fat and mitigate *kapha* and improves strength and skin complexion. [41] Even though *dinacharya* plays an important role in the maintenance of health of skin and hair, care has to be taken according to the *rithu* (season).

Concept of Rithucharya [47, 48]

As per seasonal and climatic changes, skin texture may also change. Hence it is mandatory to follow the seasonal regimens to maintain and enhance beauty with the changing climatic conditions. In *Hemantha rithu*

(Winter season) individuals have more strength, hence exercise should be done regularly. Application of *Kumkuma* and *Kasturi* powder over body can protect the skin and fumes of *agaru* is recommended in *Hemantha Rithu* to protect the skin from the extreme cold. During *Greeshma Rithu* (Summer), there will be decrease in *Kapha* dosha as well as vitiation of *vata dosha* leading to dryness and roughness of skin. In *shishira rithu* *Acharya* had mentioned about the use of *Chandhana* and *Agaru Lepa* to protect the skin during the season.

Concept of Rasayana Chikitsa

Rasayana, a unique branch of *Ayurveda* have significant role in rejuvenation of whole body of an individual. *Acharya* had mentioned different *Rasayana yogas* like *Brahma Rasayana*, *Chyavanaprasha* [49], *Amalaka Rasayana* [50], *Amalaka Avaleham* etc. These formulations can influence skin and hair internally by digestion, absorption and assimilation of major constituents nourishing *saptha dhatus*. Administration of these medicaments with proper person specific can prevent various diseases as well as rejuvenating the skin. Evidences, assessment show that *Amalaki* is rich in Vitamin C which has significant impact on skin and vitality. *Amalaki* can reduce oxidative stress of cells there by decreasing the progression on wrinkles on skin. It can sustain homeostasis. The properties of *Amalaki* is almost like that of *harithaki* (*Terminalia chebula*). It has inhibitory activities against melanogenesis, thus can be effective to maintain the tone of skin.

There are many cost-effective routines and regimes as well as natural herbs that can effectively protect skin

and keep skin and hair young, fresh and rejuvenated which can be adopted without much difficulty. *Ayurveda* had mentioned different combinations of herbs to be used effectively for acne [51], melasma, depilation, alopecia, premature greying of hair, enhance lusture of skin and many more. Scientific validation is essential to effectively develop them into various cosmetic and cosmeceutical preparations.

5. CONCLUSION

Cosmetology in *Ayurveda* is rich and varied. *Ayurveda* has limitless scope in the field of cosmetics and rejuvenation. To sustain beauty, the vast knowledge from various classical textbooks of *Ayurveda* can be adopted to develop new cosmetic products. In order to ensure quality of cosmetics, strict and stringent law enforcement is necessary. Exploring the possibilities of *Ayurveda* which are time tested, the formulations and herbs can contribute towards sustainable beauty care. However, there is a need for cosmeto-vigilance to observe the adverse effects of products. Insights from *Ayurveda Dinacharya* and *Rithucharya* are contributory and aid the purpose of cosmetics. *Rasayana* therapy, a unique system of health maintenance, designed for longevity will be very useful for enriching and revolutionizing the cosmetic field.

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