



## A REVIEW ON AYURVEDIC COSMETICS AND NEUTRACEUTICS

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### ABSTRACT

**Background:** The word cosmetics have been derived from the term "COSMETIKOS" which means the skill to decorate. Beauty is the desire of every person to offer pleasure to the sense. Beauty is not only a source of joy, but to some degree it gives trust and pride. Personal beauty offers a perceptual experience of joy or fulfillment. The involvement of mental and spiritual well-being in Ayurveda is never separated from the idea of beauty. The idea of beauty and makeup is in reality, as old as humanity and culture. As a major contributor to the global cosmetic industry, India could emerge. The present review discusses the benefits of Ayurveda in cosmetology, meaning nutraceuticals, nutritious + pharmaceuticals: a foodstuff that offers health benefits (as a fortified food or dietary supplement). The definition of functional food can be defined as "Food items to be taken as part of the normal diet to have beneficial effects that go beyond the basic nutritional feature" Nutraceuticals have benefit over the medication because they prevent side effects, have dietary supplements naturally, etc. Herbal nutraceuticals are used as an effective weapon for preserving health and working against acute and chronic diseases caused by diet, encouraging good health, longevity and quality of life. **Aims & Objectives:** To study ayurvedic cosmetics and neutraceuticals. **Methodology:** Reviewing ayurvedic literature regarding the study of drugs used in cosmetics and neutraceuticals. **Conclusion:** Cosmetics and neutraceuticals are one of the major important factors of Ayurveda in global market.

**KEYWORDS:** Ayurveda, Dietary supplement, nutraceuticals, cosmetics, Beauty.

### INTRODUCTION

The two most evolving branches of future Ayurveda are Cosmetics and Nutraceuticals. The focus of Ayurveda is on external and internal beauty. Cosmetics and nutraceuticals are dependable on each other, one can't be beautiful without internal health. Our health parameters should be suitable for achieving outward attractiveness. Beauty is not always related to women, but men are more mindful of beauty, as nature demonstrates that male species are more attractive. Some are beauty by birth, and some want to become beautiful. In Ayurveda, the notion of using herbs for embellishment is well established.<sup>[1]</sup> Since the Vedic period, cosmetic preparations in India have been used for worship and sensual enjoyment. The science of alternation of appearance and attractiveness alteration is cosmetology.<sup>[2]</sup> Any material or preparation intended to be put in contact with the various external sections of the human body (epidermis, hair, nails, lips and external genitals) or with the teeth and mucous membranes of the oral cavity for the sole or primary purpose of washing, altering the appearance and/or correcting and/or preserving the odor of the body or maintaining it in good

condition.<sup>[3]</sup> Cosmetics may be defined as any substance intended to be rubbed, poured, sprinkled, or otherwise applied to human beings for washing, beautifying, promoting beauty, in accordance with the Drugs and Cosmetics Act (India) 1940. Ayurveda, in other words, focuses on external and internal beauty. There has been an exponential growth in the field of herbal medicine in the last few years, and because of their natural origin and fewer side effects, these drugs are gaining popularity both in developing and developed countries. Medicinal plants, minerals and organic matter are the origins of many conventional medicines in use.<sup>[4]</sup>

In herbal preparations of traditional Indian health systems, a number of medicinal plants historically used for more than 1000 years are present, called rasayana.<sup>[5]</sup> In Indian medicine systems, most practitioners create and dispense their own recipes. 21,000 plants that are used for medicinal purposes around the world have been listed by the World Health Organization (WHO). There are 2500 of these species in India, of which 150 species are commercially used on a fairly large scale. India is the world's largest producer of herbs and is considered as the

botanical garden of the world.<sup>7</sup>

The word nutraceutical is a nutritional and pharmaceutical combination and was invented by De Felice in 1989, who laid the groundwork for medical innovation.<sup>[8]</sup> It has been described as any substance that can be considered a food or a part of a food and has medical or health benefits, including disease prevention and treatment. These products can range from isolated nutrients, nutritional supplements and diets to genetically modified foods, herbal products and processed foods such as cereals, soups and drinks. Health Canada notes that nutraceuticals are products that are made from food, but are marketed in tablets or powders or in other medical types that are not normally food-associated. It is shown that a nutraceutical has a physiological advantage or provides protection against chronic disease. The same definition as Swasthurrjaskar Chikitsa,<sup>[9]</sup> has also been mentioned by Ayurveda, which implies the different ways by which optimal tissues can be preserved to achieve health. It can therefore be claimed that Rasayan mainly helps to achieve a safe state and can also be used for treatment secondarily. Further, as per the statement Rasaynam Cha Tat Gyeyam Tat Jara Vyadhi Nashnam.<sup>[10]</sup> Nutraceuticals are distinct from functional foods.

When food is prepared or processed using "scientific intelligence," with or without knowledge of how or why it is used the food is called "functional food." Functional food thus gives the body the number of vitamins, fats, carbohydrates, etc. needed for safe survival. It is considered a nutraceutical when functional food helps in the prevention and/or treatment of disease(s) and/or disorder(s) other than anemia. E.g; fortified dairy products (e.g., Milk), and citrus fruits (e.g., Orange juice).<sup>[11]</sup>

Ayurveda's classical texts are full of scattered references to the presence of food items in different disease entities. Ayurveda is considered to be holistic; it takes body, mind and spirit as a whole into account.<sup>[12]</sup>

It also requires rejuvenation principles. 'Rasayana' is considered the primary tool for preserving health and vigor among the eight branches of Ayurvedic science. Therapy for rejuvenation will help the elderly recover vigor and youthfulness.<sup>[13]</sup>

Rasayanas constitute a group of single or polyherbal preparations, widely used to enhance health and longevity, made from plant extracts. Memory, intellect, youthfulness, lustre, complexion and efficiency have been recorded to enhance them.<sup>[14]</sup> Rasayana is the

measure that also develops good health and strengthens mental abilities,<sup>[15]</sup> and offers resistance to illnesses,<sup>[16]</sup> or Rasayana is regarded as the medications that kill the aging process and disease.<sup>[17]</sup>

**AIMS AND OBJECTIVES:** To study ayurvedic cosmetics and neutraceuticals.

## MATERIAL AND METHODS

In Ayurveda, Charaka Samhita, Shusrut Samhita are the grants in which our acharayas stated detailed knowledge about cosmetics-related drugs 1000 years ago. These drugs were referred to as varnya drvyas (drugs used for fairness), keshya dravya (drugs used for hair care), dantya dravya (drugs used for dental care), etc. We had extensive details about the name of the drug, drug action, medicinal application, cosmetic drug side effects. Here we will study about the drugs which were used as cosmetic drugs. The cosmetic drugs classified by Charak samhita<sup>18</sup> were Varnya, Kustagna, Kandugna, Vayasthapak, Udardaprasamana, etc. In Susruta Samhita<sup>19</sup> and Astanga Hrudaya, many alepam (poultice) Pradeha, Upnaha, Anjana oil in the sense of Twak roga are mentioned. Kungkumadi lepam, Dashanga lepam, Chandanadi lepam, Dasana samskar churna, Kukummadi taila, Nilibringaraj taila, Himasagar taila, etc. are very wellknown medicine in Ayurveda. Sesame Oil is used in many Ayurvedic oils as a foundation. They have the ability to be used as anti-oxidant compounds and have a hydrating effect. Buttermilk and goat's milk powders have calming and emollient properties that are traditionally used in Indian face mask preparations. They include vitamin A, B6, B12 and E as well. Chemical bases and emollients can be useful alternatives to them. Shikakai is a common herb used in hair shampoos and the ingredient is derived from the Acacia Concinna shrub's Shikakai pods and Shikakai nuts. Pods are rich in saponins and create a mild detergent with a neutral pH. Saponins, which act as a foaming agent, are also found in aritha powder, extracted from soapnuts (Sapindus Pericarp). In the Ayurvedic tradition, it was used as soap. Significant evidence of vitiligo, psoriasis, eczema and acne vulgaris<sup>20</sup> has already been developed for Ayurveda skin care. Cosmetics from Ayurveda can be grouped under.<sup>[20,21]</sup>

1. Cosmetics for enhancing the appearance of facial skin
2. Cosmetics for hair growth and care
3. Cosmetics for skin care, especially in teenager (acne, pimples and sustaining)
4. Shampoos, soaps, powders and perfumery, etc.
5. Miscellaneous products

**Table 1: Botanicals Used For Skin Care.**<sup>[22]</sup>

S. No.	Botanical Name/ Family	Common Name	Uses
1	<i>Adhatoda vasica</i> <i>Acanthaceae</i>	Vasaca	Fresh leaves juice / extract is used for skin affection and control of scabies
2	<i>Ailanthus excels</i>	Maharukh	Leaves extract checks skin eruption and useful in skin creams and

	<i>Simaroubaceae</i>		lotions.
3	<i>Allium sativum</i> <i>Alliaceae</i>	Garlic	Garlic oil is useful to control sores, pimples and acne. It may be used in skin lotions and creams.
4	<i>Aloe vera</i> <i>Liliaceae</i>	Ghikanwar	Leaves juice, its pulp or extracted material is applied on skin for smoothness, healing controlling skin burn, sun burn and injury Used in moisturizers, lotions, creams, hair tonic, shaving creams, etc.
5	<i>Andropogon muricatus</i> <i>Poaceae</i>	Khas	Powdered root paste with red sandal wood is used to cure irritated skin and allergies.
6	<i>Azadirachta indica</i> <i>Meliaceae</i>	Neem	Bark, seed, fruits and leaves contain diterpenes and highly oxidized tetraner warmer parts triterpenoids including azadirachtin; antiseptic agent; useful in curing wounds, skin diseases, leprosy, ulcers etc.
7	<i>Butea frondosa</i> <i>Fabaceae</i>	Dhak	Leaves extract is useful in pimples and seed extract for fungal infection and bruises.
8	<i>Carica papaya</i> <i>Caricaceae</i>	Papaya	Milky juice of unripe fruit is a good ingredient for facial and face cream; fruit pulps make skin soft and remove blemishes.
9	<i>Cassia tora</i> <i>Caesalpiniaceae</i>	Panwar	Leaves and seed extract are useful for skin infection, ringworm, eruption, etc.
10	<i>Citrus limon</i> <i>Rutaceae</i>	Nimbu	Potential source of vitamin C; oil is used in various preparation to reduce skin itching and skin nourishment, pulp left after extraction of juice is useful as a facial ingredient.
11	<i>Cocos nucifera</i> <i>Areaceae</i>	Nariyal	Coconut oil is useful for skin itching and rashes.
12	<i>Cucumis sativus</i> <i>Cucurbitaceae</i>	Khira	Water extract of fruits and seeds protect skin from sunburn.
13	<i>Curcuma longa</i> <i>Zingiberaceae</i>	Haldi	Rhizome powder possesses anti-inflammatory and anti-oxidant properties; used in facial, face creams and ointments.
14	<i>Cuscutare flexa</i> <i>Convolvulaceae</i>	Akashbel	Plant extract is useful to control dermatitis, itching and ringworm.
15	<i>Cydonia Oblonga</i> <i>Rosaceae</i>	Bile	Seed extract is used for beautification and protection of skin.
16	<i>Eclipta alba</i> <i>Asteraceae</i>	Bhringraj	Paste of herb is useful to control skin diseases and eczema.
17	<i>Euphorbia thymifolia</i> <i>Euphorbiaceae</i>	Choti Dhudhi	Plant extract is useful to control ringworm and skin infections.
18	<i>Jasminum grandiflorum</i> <i>Oleaceae</i>	Chameli	Essential oil extracted from flowers is used in skin creams and lotions to control skin diseases. Essential oil extracted from plant is used in creams for the protection from sunburn.
19	<i>Juniperus communis</i> <i>Cupressaceae</i>	Aaraar	Whole plant extract is useful in skin creams to control skin rejuvenation.
20	<i>Lavandula vera</i> <i>Lamiaceae</i>	Lavender	Essential oil is used in skin anti-acne.
21	<i>Leucas aspera</i> <i>Lamiaceae</i>	Hul Khusa	Juice of leaves is applied to control scabies, skin psoriasis, chronic skin, skin eruption and eczema.
22	<i>Mallotus philippensis</i> <i>Euphorbiaceae</i>	Kamala	Flower powder is useful to control scabies ringworm, leprous eruption, etc.
23	<i>Mangifera Indica</i> <i>Anacardiaceae</i>	Aam	Plant extract possesses anti-oxidant properties.
24	<i>Matricaria chamomilla</i> <i>Asteraceae</i>	Babuna	Leaves extract is applied in anti-acne cream.
25	<i>Mimosa pudica</i> <i>Mimosaceae</i>	Lajwanti	Herb extract applied in skin creams and lotions to control itching.
26	<i>Ocimum sanctum</i> <i>Lamiaceae</i>	Tulsi	Leaves extract is useful to control skin infection and rejuvenation.
27	<i>Phyllanthus emblica</i> <i>Euphorbiaceae</i>	Amla	Fruit extract possesses anti-oxidant properties.
28	<i>Pistia stratiotes</i> <i>Araceae</i>	Water lettuce	Leaves extract is applied to control chronic skin disorders.

29	<i>Prunus amygdalus</i> Rosaceae	Badam	Kernel extract is used in sun creams and other formulations to make the skin fair and beautification creams.
30	<i>Psoralea corylifolia</i> Fabaceae	Babchi	Seeds extract possesses potential to control skin diseases.
31	<i>Rosa damascene</i> Rosaceae	Lal gulab	Essential oil extracted from flowers is used in skin creams, lotions and ointment for beautification, smoothness and protection from sunburns.
32	<i>Santalum album</i> Santalaceae	Chandan	Paste of hardwood is used in face pack; essential oil used in preparation of creams, ointments and lotions for skin beautification and protection from sunburn; possesses anti-oxidant properties.
33	<i>Saussurea lappa</i> Asteraceae	Kuth	Roots extract is used in ointments for chronic skin diseases.
34	<i>Sesamum indicum</i> Pedaliaceae	Til	Seed extract is useful for skin protection and rejuvenation.
35	<i>Swertia chirayita</i> Gentianaceae	Cheretta	Bark powder extract controls skin affections; possesses antioxidant properties.
36	<i>Withania somnifera</i> Solanaceae	Aswagandha	Whole plant extract is used in skin cleansing formulations and possesses antioxidant properties.
37	<i>Zea mays Makka</i>	Makka	Stigma extract is used in creams and lotions for skin rejuvenation.

Table 2: Botanicals Used For Hair Care.

S. No.	Botanical Name/ Family	Common Name	Uses
1	<i>Acacia concinna</i> Mimosaceae	Shikakai	Pods extract is used as hair cleanser and for control of dandruff.
2	<i>Arnica montana</i> Asteraceae	Arnica	Flowers extract is used in hair oil as a tonic material. It stimulates the hair follicles.
3	<i>Betula pendula</i> Betulaceae	Birch	Extract of leaves is used as anti-dandruff.
4	<i>Brassica spp.</i> Brassicaceae	Mustard	Seed oil is used as hair oil and useful for hair nourishment
5	<i>Calendula officinalis</i> Asteraceae	Marigold	Flowers extract is used in hair creams for smoothening effect
6	<i>Carthamus Tinctorius</i> Asteraceae	Safflower	Alcoholic extract is used in hair tonics.
7	<i>Centella asiatica</i> Apiaceae	Mandukaparni	Whole plant extract is used for the growth and maintenance of hairs.
8	<i>Cocos nucifera</i> Arecaceae	Nariyal	Kernel oil is well-established hair oil, which is used as such or as a basic raw material for preparing hair oils and tonics.
9	<i>Eclipta alba</i> Asteraceae	Bhangra	Whole plant extract is useful for hair's nourishment and dyeing.
10	<i>Ficus racemose</i> Moraceae	Bargad	Aerial root powder is mixed with coconut oil for massage to check falling hairs.
11	<i>Juglans regia</i> Juglandaceae	Akhroot	Leaves and hull of fruits is used for hair dyeing.
12	<i>Lawsonia Inermis</i> Lythraceae	Henna	Leaves paste is used for hair dyeing and nourishment.
13	<i>Nardostachys jatamansi</i> Valerianaceae	Jatamansi	Extract of rhizome is used in hair tonics for their growth.
14	<i>Phyllanthus emblica</i> Euphorbiaceae	Amla	Fruit extract is used in oils for promotion of hair growth.
15	<i>Salvia officinalis</i> Lamiaceae	Sage	Aqueous extract is used as hair conditioner.
16	<i>Sapindus mukorossi</i> Sapindaceae	Ritha	Extract of fruit coat works as natural shampoo: used in herbal shampoo as hair cleanser.
17	<i>Saussurea lappa</i> Asteraceae	Kuth	Roots extract is used in hair dyeing.



18	<i>Sesamum indicum</i> <i>Pedaliaceae</i>	Til	Seed oil is one of the major sources of hair oils, which is used as such or a base for preparing specific hair oils.
19	<i>Terminalia bellirica</i> <i>Combretaceae</i>	Behera	Seed extract and oil is good for hair dyeing preparation.
20	<i>Terminalia chebula</i> <i>Combretaceae</i>	Harra	Seed extract is used in hair care formulations.
21	<i>Thymus serpyllum</i> <i>Lamiaceae</i>	Banajwain	Whole herb extract is useful for preparing hair tonics.

### Neutraceuticals

Ayurveda plays a significant role in the quality of nutritious food.

- Preventing ageing-induced degenerative changes (Rasayana).
- Nutrition post-illness (Balya).
- Immunity enhancement (Vyadhi Kshamatva).
- Vitality Maintenance (Vajikarana).

The notion of Ahara, Pathya- apathya, Hita-ahitya, Satmya-Asatmya differs from person to individual in Ayurveda neutraceuticals.

Rasayanas constitute a group of single or polyherbal preparations, widely used to enhance health and longevity, made from plant extracts. Memory, intellect, youthfulness, lustre, sophistication and productivity have been reported to be improved.

### Neutraceuticals & Rasayana Chikitsa

In the area of Neutraceuticals, the idea of Rasayana has a lot of significance.

The Rasayana definition is the most advanced type of preventive application that is close to current neutraceutical practice, unique to disease, age, environment, etc.

*Dirghamayu smruti medhamarogyam tarunam vayaha / Prabhavarnaswarodarya dehindrayabalam param // (charak samhita, chikitsasthanam 1/7-8)*

Rasayana helps to enhance metabolic processes, resulting in the best possible biotransformation to form tissues of the highest quality (dhatus) and helps to avoid elderly senility and other diseases. Rasayana therapy also involves medicinal plants, with the exception of Ajasric Rasayan containing food only the mixture of food and

drugs is other Rasayan Kalpanas, Vajikaran Kalpanas. It also notes that Rasayana Sevan (consumption) must be started at an early age, for the different seasons and different ages, and different diseased conditions, different Rasayanas are prescribed.<sup>[23]</sup>

Many of the rasayana drugs and Ayurvedic preparations have neutraceutical action.

### Classification of Rasayanas<sup>[24]</sup>

#### According to Method of Use

1. Kutipravesik Rasayana (Indoor regimen)
2. Vatatapika Rasayana (Outdoor regimen)

#### According to Purpose

1. Aajasrika Rasayana (drug Rasayana)
2. Naimittika Rasayana (promoter of specific vitality in specific disease)
3. Kamyas Rasayana (promoter of normal health).

#### According to content of Rasayana

1. Aajasrika Rasayana (dietary Rasayana)
2. Aachar Rasayana (conduct Rasayana)

#### Dhatu

Rasa  
Rakta  
Mamsa  
Meda  
Asthi  
Majja  
Shukra

#### Rasayana

Draksha, Kharjura, Kashmari  
Aamlaki, Palandu, Lauha  
Ashwagandha, Bala  
Haritaki, Guggulu, Amrita  
Laksha, Shuk ti, Shankha  
Lauha, Majja, Vasa  
Aatmag upta, Pippali, Nagbala

#### Deha Prakriti

Vatika  
Paitika  
Kaphaja  
Rasayana Drugs

#### Rasayana

Bala, Ghrita  
Aamlaki, Shatavari  
Bhallataka, Guggulu, Pippali

#### Srotas

Pranavaha Srotas  
Udakavaha Srotas  
Annavaha Srotas  
Rasavaha Srotas  
Raktavaha Srotas  
Mansavaha Srotas  
Medovaha Srotas  
Asthiavaha Srotas  
Majjavaha Srotas  
Shukravaha Srotas  
Mutravaha Srotas

#### Rasayana

Pippali, Bhallataka, Amalaki, Maricha, Kasturi  
Sarva jaliya Padartha  
Panchkola, Kapardi ka, Shankha Bhasma, Hingu, Nagkesara  
Kharjur Mantha, Laja Manda, Guduchi  
Loha Bhasma, Ghrita, Gorochana, Kushthag hna Dravyas  
Karaskara, Swarna Bhasma  
Guggulu, Shilaja  
Abha  
Vacha, Bringraja, Roupya Bhasma  
Gudha, Vanga Bhasma  
Shilajatu, Gokshura, Punarnava

Purishvaha Srotas  
Swedavaha Srotas

Kutaja, Bilwa, Har itaki  
Vanga Bhasma

#### Disease

Prameha  
Amavata  
Hridroga  
Medoroga  
Shwasa  
Kustha  
Pandu

#### Rasayana

Shilajatu, Haridra, Aamlaki  
Amrita, Bhallataka  
Shalparni, Arjuna  
Guggulu, Harithaki  
Bhallataka  
Tuvaraka  
Lauha

Kamya Rasayana, which includes Pranakamya, Medhakamya, and Srikamya,<sup>[25]</sup> in particular, are targeted for health maintenance and promotion, although different classifications and objectives of Rasayana have been listed. Of these, Prana Kamya Rasayan is administered to promote the resilience and longevity of life and Amalaki Rasayana, Triphala Rasayana, Chyavanprash Rasayana, Brahm Rasayana are drugs used in single or combination for this purpose. Shankhpushpi, mandookparni, Guduchi, Yashtimadhu, Ashwagandha, Vacha, Jyotishmati are examples of Medhakamya Rasayana, which is administered to encourage intelligence. Srikamya Rasayana, such as Amalaki Rasayan, is administered to encourage lustre. Ayurveda also claimed about Rasayan that everyone must take on a regular routine known as Ajasrik Rasayan, Ghrita and milk are examples. Furthermore, Aachar Rasayana has also stated that it implies adopting positive behavior that ultimately reduces stress and provides mental wellbeing.<sup>[26-27]</sup>

#### DISCUSSION AND CONCLUSION

The demand is rising rapidly for Ayurvedic beauty products. In categories such as skin care, hair care, soaps and essential oils, several businesses have joined the market with branded products. Market interest in natural cosmetics has been boosted by concern about toxic additives in beauty products. Herbal and botanical ingredients are now used in more and more items. Today India has greatly captivated the mainstream cosmetics industry. It starts from high-end brands that produce make-up shades based on the vibrant colors of the countries to skin and hair care lines that capitalize on Ayurveda, an ancient herbal medicinal method and other natural ingredients. Indian herbs and Ayurveda products are sourced and checked for use in beauty parlours and practiced in the cosmetics industry. There is however a long way to go before herbs can be turned into usable botanical items as ingredients.

Nutraceuticals have proven health benefits in the same way, and their ingestion (within their appropriate prescribed dietary intakes) can keep diseases at bay and allow humans to maintain good overall health. Although nutraceuticals have substantial promises to promote human health and the prevention of diseases, health practitioners, nutritionists and regulatory toxicologists should work together strategically to prepare effective

legislation to provide humanity with the ultimate health and therapeutic advantage. That is why it is important to introduce a regulatory body to standardize the nutraceutical industry. This subject must also be checked because the nutraceutical industry in the food and pharmaceutical industries is rising at a pace far exceeding expansion. Herbal nutraceuticals are an effective tool for preserving health and working against acute and chronic diseases caused by diet, thereby promoting good health, longevity and quality of life.

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