



AGEING

from an Ayurvedic Perspective

Ayurvedic cosmeceuticals date back to the Indus Valley Civilization. Modern research trends mainly revolve around principles of anti-ageing activity described in Ayurveda:

- Vayasthapana (age defying),
- Varnya (brighten skin-glow),
- Sandhaniya (cell regeneration),
- Vranaropana (healing),
- Tvachya (nurturing),
- Shothahara (anti-inflammatory),
- Tvachagnivardhani (strengthening skin metabolism) and
- Tvagrasayana (retarding ageing).

Ayurveda, the Indian traditional system of medicine provides guidelines on the management of ageing. The most obvious signs of ageing skin are atrophy, laxity, wrinkling, sagging, dryness, pigmented or other 'blemish' conditions, and sparse and/or grey hair. Symptoms of chronological ageing include dry and thin skin, fine wrinkles, abnormal blood vessels, age spots, benign and malignant skin tumors due to the deterioration of the skins immune system. Skin ageing is determined primarily by genetic and hormonal factors. Photo ageing is a separate process and largely involves damage to the collagen and elastin fibres in the skin.

AYURVEDIC PERSPECTIVE

Ageing is known as 'Jār' defined as that which has become old by the act of wearing out 'j ryati iti jar'. Its synonym 'v rdhakya' means increasing age. Ayurveda divides human life into various stages:

- Childhood (up to the age 16 years);
- Youth and middle age, from 16 to 60 years (charaka) or 70 years (sushruta);
- 16 to 20 (vivardhamana) exhibits progressively the signs of growth,
- 20 to 30 (youvana) youth,
- 30 to 40 (sampoornata) maturity,
- 40 to 60 (parihani) weakening, which gradually sets in up to 60 years,
- 60 to 70 old age, wherein later years the body's elements, sense organs and strength begin to decline.

These are general descriptions and are dependent on prana (life energy that performs respiration, oxygenation and circulation). It governs two other subtle essence ojas and tejas. Ojas (the essence of the seven dhatus or bodily tissues) are responsible for the auto-immune system and mental intelligence and are necessary for longevity. Imbalanced ojas can create kapha related disorders and decreased ojas - vata-related reactions. Tejas (the essence of a subtle fire or energy) governs

metabolism. Agni (central fire or energy source in the body) promotes digestion, absorption and assimilation of food. Tejas is necessary for the nourishing and transformation of each dhatu. Aggravated tejas, burns away ojas reducing immunity and over stimulating pranic activity. Aggravated prana produces degenerative disorders in the dhatus. Lack of tejas results in over production of unhealthy tissue and obstructs the flow of pranic energy. Just as it is essential to maintain balance amongst the tridosha—vata, pitta, kapha principles of motion, metabolism, structure, respectively, the dhatus and the three malas (bodily wastes); it is also important for longevity that prana, ojas and tejas remain in balance. The tridosha play a very important role in the maintenance of cellular health and longevity. Kapha maintains longevity on the cellular level. Pitta governs digestion and nutrition. Vata, which is closely related to pranic life energy, governs all life functions. Proper diet, exercise and lifestyle can create a balance among these three subtle essences.

In Ayurveda, the outermost layer reflects the complexion and the quality of the Rasa Dhatu (nutrient fluid, the first of the seven tissues of the body). It also acts as a mirror as it indicates whether the physiology as a whole is balanced or imbalanced, and whether there is inner

The association between Ayurveda, anti-ageing and cosmeceuticals is gaining importance in the beauty, health and wellness sector.

health or disorder; it also reflects the aura of the individual. Mamsadhara is the innermost layer is the platform for the skin's elasticity and firmness. When this layer is in balance, the skin looks young and supple. A skin product that has *vayasthapana* (maintaining youthfulness) properties nourishes this layer to help slow the ageing process. Vata skin which is dry, thin, fine pored, delicate and cool to touch tends to develop wrinkles earlier than the other skin types. Pitta skin which is fair, soft, warm and medium thickness is photosensitive and has least tolerance to sun and is most likely to accumulate sun damage over time. Kapha skin is thick, oily, soft and cool to touch tends to develop wrinkles much later in life than vata or pitta type but because of its thickness and oiliness, is more prone to accumulate *ama* (toxins) under the skin

WRINKLES

The human skin loses its anti-oxidation ability with age, by exposure to the environment the skin undergoes emaciation as a result of the formation of peroxylipids which can lead to the formation of wrinkles. Hence use of products, which enhance anti-oxidation, should help to improve the skin. Even brief exposure to UV radiation increases the activity of enzymes that break down the proteins, collagen and elastin that provide structural support for the skin. Prevention can be achieved by regular herbal treatments, and home care using creams containing actives that can reduce the activation of these enzymes is used in Ayurvedic herbal formulations.

ANTI-AGEING THEORIES

Topical Agents Vitamin C can accelerate wound healing; it is a potent antioxidant that protects fatty tissues from oxidation damage and plays an integral role in elastic and collagen synthesis. It is capable of controlling inflammatory responses associated with UV exposure. Vitamin E found in has significant moisturizing properties, anti-inflammatory effects and may provide protection from UV damage. It acts as an anti-oxidant and inhibits the formation of lipid peroxides and thus prevents skin ageing. It is known to improve decreased function of the sebaceous gland and ameliorate excessive pigmentation in the skin. Wheat is rich in Vitamin E and also contains azelic acid which helps to reduce pigmentation. Topical antioxidants include Eucalyptus and Prunus (almond), the seeds of black rice,

leaves of barley, sesame seeds, turmeric, beta-carotene, aloe, etc. Natural antioxidants include flavonoids (blueberries, strawberries), quercetin (onions, apple skins, berries, and broccoli), carotenoids (carrots, sweet peppers, and oranges) and lycopene (tomatoes). Physical sun blocks, such as magnesium silicate, zinc oxide and kaolinum place a coating on the skin that reflects the light.

AYURVEDA AND HEALTHY SKIN

According to Ayurveda, the factors that display healthy skin include proper moisture balance (*kapha* in balance), effective functioning of the metabolism and hormonal of the skin (*pitta* in balance), and efficient circulation of blood and nutrients to the different layers of the skin (*vata* in balance). The balance of the three *dhatu*s (tissues) are especially reflected in the skin: nutritional fluid (*Rasa*), blood (*Rakta*) and muscle (*Mamsa*). To be effective, an anti-ageing application has to provide support to all of these areas. As an example if there is an imbalance in circulation (low *Vata*) to the peripheries (*rasa*, *rakta*, and *mamsa*) vital nutrients cannot travel to the skin to keep it moist and warm. This reflects in a dry skin, cold to touch and the formation of wrinkles. To improve this condition, treatments should include herbs that will help to improve circulation and help the vital nutrients to travel to the tissues improving elasticity and giving the skin a healthy glow.

Anti-ageing treatment includes two types of therapies *Urjaskara* (promotive) and *Vyadhihara* (curative). For *Vata* skin to stay youthful products that can nourish, warm and rehydrate the skin should be used otherwise it may be prone to wrinkles and premature ageing. For *pitta* skin protection from the sun, and products that have a cooling effect. *Pitta* skin should be protected from the heat – sun, steam, heated rooms and stimulating foods and drinks. *Kapha* skin benefits from warm stimulating and detoxifying treatments that help to invigorate a sluggish system.

REJUVENATION THERAPY

Pancha Karma is one of the popular rejuvenation and detoxification treatments that consists of three stages including *Purva Karma* (pre-treatment), *Pradhana Karma* (primary treatment) and *Paschat Karma* (post treatment). *Snehana* (oleation) and *Swedana* (sudation) are the two *Purva Karma* procedures. The four *Pradhan Karma*

include *Vamana* (medical emesis), *Virechana* (purgation), *Nasya* (nasal administration), and *Basti* (enema). *Paschat Karma* (post treatment) mainly deals with *Ahar* (diet) regimens, *Vihar* (exercise) and use of health-promoting *Rasayana* and other medicines.

Ayurveda describes various rejuvenative therapies with help of special class of medicinal herbal preparations called *Rasayana* that are said to rebuild the body, mind, prevent degeneration and delay ageing or rather reverse the ageing process. *Charaka* has described two methods of rejuvenation, the first method—*intramural* (*kutipravesika*) required the subject to remain inside a chamber in isolation and second method which was less rigorous and was carried out in open air—*extramural* (*vatatapika*). *Kutipravesika* method is suitable for healthy, self-controlled, wise, strong and affluent persons where a special cottage is constructed on an auspicious land facing east or north, with all the necessary articles for treatment and is started on an auspicious day. *Vatatapika* is for everyone where the use of various medicinal plant formulations is used to balance the individual. The treatments are individualised based on the imbalances presented. In Ayurveda, the practice of yoga is a disciplined science of life and can be individualised as a very important, natural, preventive measure to ensure good health.

CONCLUSION

The ageing process is a challenging human experience common to everyone, and the desire to look young prevails in the majority of us. The latest trends in beauty, health and wellness sectors are giving rise to a new realm of possibilities by fusing anti-ageing cosmeceuticals with traditional Indian medicinal herbs. Ayurveda offers vast amounts of information on principles of anti-ageing activity, skin care and anti-ageing herbs.

While there are various theories and approaches to management of ageing, the traditional Ayurvedic knowledge remains important both in understanding the process and effective management. *OmVeda* has tapped into the vast information available in Ayurvedic literature on ageing and skin care and has developed anti-ageing and anti-wrinkle treatments with natural ingredients for topical applications.

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