

## Cosmeceuticals: Are they truly worth the cost?

Virendra S. Ligade, D. Sreedhar, J. Manthan, N. Udupa

Cosmeceuticals are the advances made within the world of dermatological products and the new beckon in skincare. Cosmeceuticals are topical cosmetic-pharmaceutical hybrids intended to enhance the health and beauty of skin. The concept propounded by Dr. Albert Kligman states that “The Cosmeceuticals are topical agents that are distributed across a broad spectrum of materials lying somewhere between pure cosmetics (lipstick and rouge) and pure drugs (antibiotics, corticosteroids). They partake of both categories”.<sup>[1]</sup> Consumers are always interested in maintaining a youthful appearance; over 560 million people in India are in the age group of 18–35 years. As median age increases, the market is going to boom, especially a growing number of women in the workforce feeling the hassle to maintain a youthful and vibrant appearance.

There is little research carried out in India to prove the use and benefits of cosmeceuticals. However many companies, such as Procter and Gamble, Biersdorf, and L’Oreal, at global level are advancing and understanding the skin structure and role of cosmeceuticals. They have extremely rigid research standards and evaluate cosmeceuticals in the same manner as drugs. None of this work is being done in academic dermatology.<sup>[2]</sup> Little research has been carried out to prove the effectiveness, efficacy, and safety of these products, and many questions remain unanswered. It is primarily viewed as marketing efforts to increase the use of these products.

Now the concept of beautifying is not restricted to women alone, even men have become cognizant about the way they look, and the recent advertisements of

many anti-wrinkle and fairness creams are aimed at men. Recently, the market is swamped with too many cosmeceutical products like anti-wrinkle creams, sunscreens, moisturizers, bleaching agents, medicated lotions, hair growth stimulants, antidandruff shampoos, eye wrinkle creams, collagen injections, etc. The consumers are often a confused lot when it comes to choose any of these products, because one does not know which product can do the trick for them. Certain plant-based substances have been claimed to be used in cosmeceutical products by companies marketing them. Retinol (vitamin A) and the retinoids have a long track record of efficacy in the management of aging skin. Retinoids have been shown to stimulate collagen synthesis by increasing transforming growth factor (TGF)-beta and procollagen. Growth factors represent an increasingly popular component of cosmeceuticals. Results of *in vitro* studies have shown that by adding kinetin, a plant growth factor, to human fibroblasts in culture, biologic and morphologic changes associated with cellular aging may be retarded. Antioxidants such as alpha-lipoic acid penetrate cellular lipid membranes and have intracellular free radical scavenging capability. Copper peptide is gaining popularity; and in recent studies, improvement in skin roughness, fine lines, wrinkles, elasticity, and overall photodamage versus control were documented by ultrasound evaluation.<sup>[3]</sup>

Regulatory agencies have not yet formally recognized cosmeceuticals. The US Federal Drug Administration (USFDA) does not recognize the term ‘cosmeceutical’. According to USFDA, a product can be a drug, a cosmetic, or a combination of both, but the term cosmeceutical has no meaning under the law. Cosmeceuticals are considered cosmetics and so are not regulated by the FDA. The cosmetics industry uses this word to refer to everything from cosmetic products that have medicinal or drug-like benefits to topical cosmetic-pharmaceutical hybrids intended to enhance the health and beauty of skin. Some experts are calling for increased regulation of cosmeceuticals with help

---

Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal, India

**Address for correspondence:**

Dr. Virendra S Ligade, Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal, India. E-mail: virendra.sl@manipal.edu

**How to cite this article:** Ligade VS, Sreedhar D, Manthan J, Udupa N. Cosmeceuticals: Are they truly worth the cost?. Indian J Dermatol Venereol Leprol 2009;75:8-9.

**Received:** March, 2008. **Accepted:** July, 2008. **Source of Support:** Nil. **Conflict of Interest:** None declared.

of scientists, dermatologists, corporate leaders, and government representatives that would require only proof of safety, which is not mandatory for cosmetics but would be mandatory for cosmeceuticals.<sup>[4]</sup>

Sunscreens, anti-wrinkle creams, serums, or moisturizers are typically the most expensive products available in the market. What makes these products so expensive? Most cosmetic companies say that the high cost is due to expensive special ingredients, unique manufacturing procedures, and research and development costs.<sup>[5]</sup> On the contrary, marketing cost would also contribute considerably to the overall cost of cosmeceuticals. The hideous truth behind cosmeceutical marketing is more of advertisement of products highlighting the “science” and “technologies” used.

If we think from an average consumer’s perspective, are these high-priced cosmeceutical products worth buying? Before buying any of the cosmeceutical products, one should think whether they actually need them. Many people get trapped into buying

these products which they do not really need. Most of consumers get impressed by elegant packaging of the products and exaggerated advertisements. Consumers can save money by identifying the cosmeceuticals which they really need and avoid those they don’t really need. As a consumer doesn’t know what really works for him/her and what does not, it is better to seek the help of a dermatologist to differentiate the good, bad, and useless.

## REFERENCES

1. Kligman AM. Cosmetics A dermatologists looks to the future: Promises and problems. *Dermatol Clin* 2000;18:699-709.
2. Kligman A. The future of cosmeceuticals: An Interview with Albert Kligman, MD, PhD: Interview by Zoe Diana Draelos. *Dermatol Surg* 2005;31 (7 pt 2):890-1.
3. Sadick NS. Their role in dermatology practice (Focus On: Cosmeceuticals). *Journal of Drugs in Dermatology* 2003. Available from: [http://www.accessmylibrary.com/coms2/summary-0286-286-2351396\\_ITM](http://www.accessmylibrary.com/coms2/summary-0286-286-2351396_ITM). [last accessed on 2007 Dec 10].
4. Vermeer BJ, Gilchrest BA. Cosmeceuticals: A proposal for rational definition, evaluation, and regulation. *Arch Dermatol* 1996;132:337-40.
5. Geria NM. Anti-Aging and Cosmeceutical corner. *Happi* 2006;43:38-42.