NEWER TRENDS IN COSMETOLOGY

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ABSTRACT

World consumers are looking for personal care products that supply multiple benefits with minimal efforts. They also expect the latest technology advances to be incorporated into innovative formulations. The trend toward therapeutic cosmetics will lead to a better understanding of modern ingredients and their assessment techniques. To obtain skin care formulations with real consumer-perceivable benefits and to optimize sensory attributes, formulators are resorting to technology that until recently was exclusively used in cosmetic products. Various formulations come under special delivery systems like Vesicular, Particulate systems, emulsions type Particulate type and other delivery systems along with their applications are shown in this article, as it results in an economic uplift of cosmetic industry in various parts of the world.

Little evidence is seen that nanoparticles in cosmetics and sunscreen might be a problem at this time and its need is further explored for a better understanding of these novel technologies. Thus, novel cosmeceutical delivery systems reviewed here possess enormous potential as next-generation smarter carrier systems. Basically three main techniques are used viz.

1. Nutricosmetic.
2. Green cosmetic.
3. Nanotechnology in cosmeceutics.

KEYWORDS: Skin care formulations, Lastest cosmetics technologies, Safety control.

INTRODUCTION

Cosmetic product’ means any substance or mixture intended to be placed in contact with the external parts of the human body (epidermis, hair system, nails, lips and external genital
organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance, protecting them, keeping them in good condition or correcting body odours.

Today, consumers worldwide are looking for personal care products that supply multiple benefits with minimal efforts. Not only women but there is increasing number of males are using cosmetics usually to enhance their own facial features. Cosmetics are products that are created for application on the body for the purpose of cleansing, beautifying or altering appearance and enhancing attractive features. Cosmetics are substances used to enhance the appearance or odour of the human body. Cosmetic pharmaceuticals, or cosmeceuticals, are cosmetic products that contain biologically active ingredients and claim to have medicinal or drug-like benefits. Like cosmetics, cosmeceuticals are topically applied, but they contain ingredients that influence the biological function of the skin.

Nutrition has been defined as the biological process in animals and plants of food intake and its subsequent assimilation into the tissues. Nutritional (food) supplements are concentrated sources of nutrients (or other substances) with a nutritional or physiological effect that supplements the normal diet. Nutricosmetics can be described as a recent result of a convergence phenomenon between cosmetics and food industries, still unfamiliar to many consumers and sometimes even to foods and cosmetics experts. Nutricosmetics advertisements describe such oral supplementation of nutrients sometimes as “beauty pills,” “beauty from within,” “oral cosmetics,” or “eat yourself beautiful.”

Green cosmetics, also known as bio cosmetics or eco-friendly makeup, are cosmetics that are generally manufactured using all-natural, non-toxic ingredients. Many green cosmetics use naturally occurring mineral ingredients for coloring and sun protection purposes. Many people believe that these products are safer for human use and gentler to the environment. These products generally are manufactured in an environmentally sustainable way. Green cosmetics are often marketed to those with a concern for environmental sustainability.

Nanotechnologies use materials on an incredibly small scale so that they take on new properties compared to their larger form. Nano cosmetics is one area of particular interest as new types of products can be made using nano materials. UV filters used in sunscreens produced in nano form, for example, become clear rather than white when compared to their larger form. However, there’s uncertainty about whether, alongside the changes that bring
consumer benefits, some of these materials could present new risks. Materials could be more hazardous and behave differently in the body compared to larger forms.

Nutricosmetics
Nurturing Beauty through Nutrition examines the emerging market sector of nutricosmetics. Anyone in the beauty, food, beverage or nutritional supplements industries will get value from this report, to understand the developing global trends in the emerging market of nutricosmetics.

Nutricosmetics refers to innovative ingestible products that are marketed specifically for beauty benefits.

These products can be in the form of beauty food, beauty supplements, or beauty beverages and contain ingredients such as botanical actives, enzymes, proteins, and vitamins.

This budding phenomenon is blurring the boundaries between food, nutritional supplements, and beauty, and the innovations in nutricosmetics come as a result of the intersection of these fields. While some are still wondering if this is a gimmick or a valid new product category, others have been making news and winning market share. The nutricosmetics market has been demonstrating growth of 10 to 12% annually.

This report on nutricosmetics analyzes the different demand drivers for nutricosmetics in the key countries in Asia and Europe and offers insights on how to translate success into new markets, including the United States. It discusses the range of newly available nutricosmetic products, key active nutricosmetic ingredients, and the lessons learned from the current market leaders. It gives details about the product and marketing innovations in beauty food, beauty water, beauty supplements, and more.

The aging population spends billions of dollars each year on vitamins, minerals, botanical extracts, and antioxidants in an effort to maintain a youthful appearance of the skin and promote overall well-being. Hormonal imbalance, inflammation, smoking, exposure to UV radiation, and environmental stressors contribute to the aging of the skin by production of reactive oxygen species (ROS) that can potentially damage cell membranes, proteins, and DNA. This overload of oxidative stress and a production of free radicals can eventually break down connective tissues and collagen, and release chemicals that lead to cellular and molecular events that are evident as signs of aging, such as the formation of wrinkles, uneven
skin tone, dyspigmentation, inflammation, immunosuppression, photoaging, photocarcinogenesis, and sagging skin. Nutricosmetics provide nutritional antioxidant supplementation to support endogenous antioxidant enzymes that may help to internally regulate oxidative stress and help to achieve a healthier skin appearance from the inside out.

This article reviews the various theories behind the process of skin aging, the role of antioxidant enzymes in the prevention of skin aging, and the endogenous and exogenous antioxidants that may help to minimize the effects of oxidative stress.

Fig. Nutrition Pyramid for Nutricosmetics

**Nutricosmetics Blend Nutraceuticals and Cosmeceuticals to Create a New Type of Cosmetic**

Over the years, the demand for anti-aging *nutraceutical* and *cosmeceutical* products has increased as a result of the rise in the global aging population. Consumers, especially senior
citizens, are increasingly seeking methods and products to improve and maintain their appearance and to feel youthful.

However, consumers are a little pickier nowadays when it comes to choosing products. They are more aware about the harmful effects the chemicals used in various personal care products have on the human body and skin. They also have a desire to lead a healthy lifestyle and seek holistic regimes to manage aging. Hence, consumers abstain from using nutraceutical and cosmeceutical products that contain growth hormones, pesticides, preservatives, or artificial colors.

These health-conscious breed of consumer has spawned demand for products that have been fortified with vitamins and minerals. Natural Vitamin E formulations, which have been derived from non-genetically modified plants, have a high demand in Europe and countries such as Brazil.

Natural formulations of beta carotene (Vitamin A) are becoming popular in the market because of their effectiveness over other ingredients. In addition, there is an increase in demand for nutrients and minerals such as soya proteins, psyllium fibers, omega-3 fatty acids, and magnesium because of their widely accepted antioxidant properties and health benefits. The term "Nutricosmetics" is a result of the fusion of "Nutraceuticals" and "Cosmeceuticals." They are ingestible natural health products that enhance the function and appearance of an individual's skin, nails, and hair. They are a range of beauty supplements and functional foods and beverages that claim to contain active ingredients and nutrients such as botanical actives, sterol esters, lycopene, enzymes, proteins, minerals, and vitamins that enhance beauty and are beneficial to health.
The concept of nutricosmetics is still new to consumers and hence, awareness is lacking. But the marketing strategies undertaken by vendors are helping their products gain credibility and individuals to gain awareness.

**The Global Nutricosmetics Market** is expected to witness a rapid growth at a **CAGR of 9.76 percent** during the 2013-2018 period.

**Nutricosmetic Supplements**
Supplements contain nutrients (peptides, vitamins, minerals, proteins, carotenes, and omega-3 fatty acids) derived from food products, and are concentrated in a liquid, capsule, pill, or tablet form. Their ability to provide nutritional support for the skin has helped them take the place of personal care products that are applied on the face, body, or hair and are used to enhance beauty.

The Supplements segment dominated the market in 2013. They are widely available in the supplement format and are mostly sold as OTC products in the market. Supplements also provide the active ingredients in one full dose and hence, are convenient for end-users to consume. Most vendors manufacture only supplements as it is the preferred format for the consumption of nutricosmetics over food products and beverages. Overall, the segment is expected to grow rapidly during the forecast period.

**Nutricosmetic Food and Beverages**
Nutricosmetic food and beverages are functional foods that have added ingredients or components, which provide them not only with a nutritional effect, but also with specific medical or beauty benefits. These products contain nutritive ingredients such as herbs, vitamins, minerals, amino acids, and other active ingredients.

The concept of nutricosmetic food and beverages is not very popular worldwide. However, the increase in demand for functional foods and beverages along with awareness of the
functional benefits and availability of these products is encouraging the growth of this segment.

Ready-to-drink beauty beverages are one of the most popular products of this segment. These biologically fortified beverages provide natural hydration benefits to the skin. Some of the most popular beverages include herbal tea, fortified coffee, fruit and vegetable juices, and fortified water. Snack bars, confectioneries, and bakery products are also highly popular among consumers. For instance, the nutraceutical candy for acne by Frutels LLC is one of the most popular products in the market. Hence, continued product innovations and the use of new ingredients in food and beverages will drive the growth of this segment during the forecast period.

Fig- Nutricosmetics provide active nutritional ingredients that can be used in conjunction with topical skin care products and aesthetic procedures to promote healthy skin.
Nutricosmetics Marketed Preparations
Perceptions about different beauty supplements

Safi
Safi was known among all the respondents. 90% of the respondents have used Safi at least once. None of them knew it was a nutricosmetic though they were aware of the benefits that it is used to clear acne and acts as a blood purifier. No negative associations to the brand were there.

Seven Seas
Seven seas was also the brand where the awareness level among the respondents was quite high. They were aware of few benefits like maintaining healthy hair, skin and nails but were not aware of other benefits like maintaining strong bones & teeth, keeping the joints supple and flexible, release of energy etc. The benefits of post consumption of seven seas was positive. The other respondents who have not consumed it were willing to try it Positive associations to the brand were there.

Perceptions about different Health Supplements
ProteinX
Respondents who wanted to stay fit and build muscles were in favour of this product. The awareness of this brand was high among respondents. Respondents who used this brand stated that there was a positive difference in a moderate manner. The respondents also stated
that the product was taken more due to the taste rather than the benefit. Other respondents were willing to try this product.

**Coach formula**

Coach formula is also another protein supplement which is taken to build muscles. There are two types of Coach Formula. One is the normal protein and other is the whey protein. Coach Formula Creatine is the famous brand among the available brands under Coach formula. The respondent stated that if it is mixed with water and if consumed going before gym, it has a positive effect. In addition to the medicinal benefits, it creates a positive perception in the minds of people who consume the product that it will build more energy. The associations to the brand was positive.

**Nanotechnology**

Nanotechnologies use materials on an incredibly small scale so that they take on new properties compared to their larger form. The technology has the potential to transform many of the everyday consumer products that we use and a wide range of products are already on the market including tennis racquets, self-cleaning windows and stain proof clothing. Nano cosmetics is one area of particular interest as new types of products can be made using nano materials. UV filters used in sunscreens produced in nano form, for example, become clear rather than white when compared to their larger form. However, there’s uncertainty about whether, alongside the changes that bring consumer benefits, some of these materials could present new risks. Materials could be more hazardous and behave differently in the body compared to larger forms. It isn’t clear yet how and where nano materials are being used in cosmetics. Some products are promoted on this basis, but others using nanotechnology don’t reveal it. There is also uncertainty about how to assess them for safety. While some materials raise little concern, experts advising the Government have highlighted potential risks posed by others, particularly insoluble nano materials.

**Nanotechnology in Cosmetics**

Nanotechnology manipulates materials on an incredibly tiny scale so nano materials are used in cosmetics to give them new characteristics. Nanotechnology has the potential to be used in different ways in the cosmetics sector, creating nano materials with different properties and therefore different risks and benefits. The types of nano materials that are used include:
1. Sunscreens – UV filters, such as titanium dioxide and zinc oxide, are used in nano form rather than bulk form to make the sunscreen transparent rather than white. It is also claimed that they are more effective when used in nano form.
2. Nano emulsions and nanosomes – used to preserve active ingredients, such as vitamins and anti-oxidants, and their lightness and transparency.
3. Fullerenes – new types of materials can be produced using nanotechnology, such as carbonfullerenes. It is claimed that these tiny carbon spheres have anti-aging properties.
4. Other materials used in nano size – a whole range of materials can be used in nano size in order to give them different properties when compared with their larger form. We found, Forexample, an ‘energizing’ moisturiser using nano gold and products using nano silver because of its anti-bacterial properties.

Safety controls
Most people assume that if something is on the market it will have been checked for safety. The safety of nano materials falls under the EU’s Cosmetics Directive5 which is currently under review and will be replaced by a new Regulation. There is a legal responsibility for manufacturers to put only safe products on the market. There does not, however, have to be any independent assessment to confirm this before they go on the market, other than in the case of materials used as UV filters in sunscreens.

The companies that responded to our survey told us that safety was a concern for them. Their trade body, the European Cosmetics Association (COLIPA) assured us that safety is the number one priority of the cosmetics industry and that it “can reassure experts and consumers that all cosmetic products are subject to rigorous safety testing and evaluation”. Our survey showed the difference in approach adopted by different companies. While some told us that they have conducted their own risk assessments, others rely on safety data sheets provided by their suppliers. Some companies have clearly set boundaries for where they will and will not use the technology. For example, L’Oréal told us that it would not use fullerenes, nano tubes or nano particles in aerosols. But some companies do use these type of nano materials – as well as others that raise safety questions. Enforcement of the legislation is the responsibility of local trading standards departments but they are only likely to follow up an issue once a concern has been raised about a product already on the market.
Nanomaterials
For the purposes of cosmetics “Nanomaterial “means an insoluble or biopersistant and intentionally manufactured material with one or more external dimensions, or an internal structure, on the scale from 1 to 100 nm.”
1. Nanomaterials used in cosmetics differ from nanomaterials used by other industries.
2. They differ by their shape, their molecular structure, their mode of use and their specific interactions with the living world and the environment.
3. Nanomaterials in cosmetics are **nanoemulsions**, **nanosomes** and **nanopigments**.
4. These nanomaterials are used for example in sunscreens, skin creams and oral hygiene products.

Nanoemulsions and Nanosomes
**Nanoemulsions** are macroscopic preparations which contain droplets of water and oil reduced to the nanometric size to increase the content of nourishing oil, and to preserve the transparency and the lightness of the formula.

Sometimes active ingredients that are fragile in air — such as vitamins — are protected and kept fresh inside nanometric bubbles (capsules) or **nanosomes** (liposomes).

The active ingredients are released upon contact with the skin at the time of the application where the nanoemulsions and nanosomes open Nanoemulsions and nanosomes are not included in the legal definition of a nanomaterial for cosmetics.

Regulation of the use of nanomaterials in cosmetics
1. For every cosmetic product that contains nanomaterials, a high level of protection of human health shall be ensured. Cosmetic manufacturers have to demonstrate the safety of any ingredient used in cosmetics. SCCS guidelines for safety assessment of nanomaterials. Cosmetics industry guidelines for nanomaterials.
2. In addition to the normal notification, cosmetic products containing nanomaterials shall be notified to the Commission by the responsible person by electronic means six months prior to being placed on the market.
Marketed preparations

L’Oreal Indian Market

L’Oreal Group entered in Indian market in 1991. L’Oreal marketing strategy in India is to have Market Segmentation. Indian market was segmented into two categories.

Gender Segmentation: - L’Oreal segmented Indian population on basis of different sex as Group believe that their products are combination of low price and natural ingredients that would easily fit Indian market, where women use herbs and plants as part of their cosmetic culture”.

Income Segmentation: - Group segmented Indian market into 2 main categories: the poorer masses and the rest. They marketed their products as low in cost so that it can attract the poorer masses, and by reducing ingredients quantity help them to minimize the product cost as much as possible. At that point, their main focus was on middle class, they wasn’t targeting the upper class which can be separately segmented as whole entity.

How L’Oreal differ from its competitor is that it follow the concept of more for more while home brands uses less for less” concept. Home brands sought to sell the most basic shampoo with the lowest quality ingredients in order to offer the lowest prices, while L’Oreal justified their high prices by using high quality ingredients. L’Oreal’s strategy targeted the more affluent that were more educated and had more disposable income to splurge on luxury items if they justified their price.
Green cosmetics

Green cosmetics, also known as Bio cosmetics or eco-friendly makeup, are cosmetics that are generally manufactured using all-natural, non-toxic ingredients. Many green cosmetics use naturally occurring mineral ingredients for coloring and sun protection purposes. Many people believe that these products are safer for human use and gentler to the environment.

These products generally are manufactured in an environmentally sustainable way. Green cosmetics are often marketed to those with a concern for environmental sustainability.

Eco-friendly makeup and beauty products generally include face makeup, such as foundation, cosmetic powder, eyeshadow, rouge, lipsticks, and lip glosses. Many manufacturers of green cosmetics also produce hair products, such as shampoos, conditioners and styling gels or mousses. Lotions, lip balms, facial masques, soaps, cleansers, and even toothpaste are available from some manufacturers of green cosmetics. Almost any cosmetic or hygiene product used on the skin or hair is available in a green form.

These products are often made with plant extracts and oils, naturally occurring minerals, non-toxic dyes and natural ingredients such as beeswax or shea butter. Products made with such ingredients as chamomile, rosewater, and apple cider are common. Butter, rose hips, mica, lemon, coffee, and carrot are some additional ingredients commonly used in these products. It's usually possible to make one's own green cosmetic products, since the ingredients are typically common and affordable. Experts recommend carefully reading the ingredients list on any manufactured green cosmetic product, to ensure that it does not contain synthetic chemicals.

While many green cosmetics, such as lipsticks, mascaras, and facial powders enhance the appearance, these products can also be useful for skin care and health. Lotions, soaps, facial masques, and other products that can exfoliate, moisturize, and soften the skin are available. Some manufacturers of green cosmetics have produced products designed to minimize the signs of aging. Some products contain mineral ingredients that can help prevent sun burn and sun damage, while others contain vitamins and nutrients said to support the health and vitality of the skin.

People with sensitive skin may benefit from the use of green cosmetics, since the all-natural ingredients used in them are often gentler on the skin. These products may also be more
appropriate for those who are allergic to the synthetic ingredients used in many traditionally manufactured cosmetics.

"The FDA doesn't provide guidance on natural personal-care products, be they toothpaste or mascara, and there is no legal or medical definition of 'natural,' either," says New York City dermatologist Anne Chapas, M.D. Consumers will have more help if the Cosmetics Safety Act, currently under congressional review, becomes law; it will "mandate that the FDA regulate chemicals in cosmetic products, as it does in drugs and food," says Dr. Chapas. In the meantime — and it may be a long meantime — it's up to you to figure out which synthetic ingredients you want to avoid. To help you decide, Good Housekeeping surveyed 900-plus readers to find out which synthetic ingredients topped their list of concerns. Then we asked experts to weigh in on which are simply annoying (for example, merely skin-irritating) and which may lead to more serious trouble (endocrine problems, or even cancer). Unfortunately, because research in humans tends to be scant, the risks in many cases are not well-known. But here is what we do know, and what you can do about five of the ingredients that worry you most.

**Natural Cosmetics For Radiant, Healthy Skin**

Green Beauty Cosmetics offers a line of natural cosmetics that will keep your skin looking youthful and radiant without ever compromising your health with toxic chemicals.
Green Cosmetic Marketed Preparations

1. Auravedic

Using the knowledge in the vedas and the best of the local ingredients, **Auravedic** formulates products that bring a harmonious balance to the body and mind. They have many products with solutions for common skin problems like ageing, acne, pigmentation and hair problems like dandruff, hair fall and hair dullness. The body polishes and the lip butters from Auravedic are very popular. They also have a wide variety of handmade soaps in enamoring fragrances like sandalwood, lavender, lemongrass and jasmine.
2. Omved

Omved lives by the motto of conscious living. Their products are natural, eco-friendly, sourced fairly and are handcrafted keeping the well-being and the satisfaction of the customers. Omved has soaps, face washes, scrubs and soaks to pamper your skin. They also have many natural oils infused with essential oils that have therapeutic properties. They also have many all-natural face packs and masks to keep all your skin problems at bay. Their range also consists of many products especially made from men and children.

3. Rustic Art

Rustic art is one of the most popular organic brand that sells beauty and wellness products. Their hand-crafted bath soaps that are infused with essential oils like geranium, sandalwood, vetiver, orange and cinnamon are their hot sellers. Their website has a complete guide about the various skin conditions each soap can treat. They also have biodegradable shampoos that are free from parabens and sulphates and give you gorgeous hair after each wash. If you are looking at pampering your skin, try their range of body lotions and oils and you won’t be disappointed.
4. Tatha

The brand has recently undergone rebranding and is known as the “Vedic collection” now. All their products are completely natural and free from parabens and SLES. They have face care solutions based on the skin type or problem. Their massage oils and bath salts are extremely popular among women who indulge in the weekly ritual of pampering the skin with a rubdown. They also have wide range of healing essential oils.

5. Aaranya

Aaranya is a brand that uses the ancient ayurvedic knowledge to manufacture products using natural ingredients which nourish the skin and hair and get rid of all of their problems. They have a number of exfoliating face and body scrubs, skin toners and healing face packs that are popular in the online stores. One of their most sold products is their foot scrub with menthol that leaves your feet tingly fresh.

SUMMARY

The objective of the compiled literature is to add information to the Knowledge Bank regarding Cosmeceuticals, Nutricosmetics & Health Supplements. The study is done to
understand the market scenario that is prevailing for this category in the Indian Scenario. The study is substantiated by detailed secondary and primary research. The aim of the report is to aid marketers and academicians in understanding the usage pattern that is prevailing for this category and the key drivers that are instrumental in the purchase.

The thesis at first dwells into the current scenario of the selected category of Cosmeceuticals, Nutricosmetics and Health Supplements at global level and the innovative approaches taken by various companies to enhance the beauty factor of million people worldwide. Need for the beauty care is identified through the projective techniques like word association. The need for the category and product is established through structured secondary and primary research pattern.

The primary research is done among different gender groups and the respondents are selected based on a specific recruitment pattern that involves young people of age 22-28 and those who are extremely image conscious. The research helps the marketer understand the various parameters that are considered when a beauty supplement is bought or when a dermatologist or cosmetologist or professional beauty expert is consulted. The respondents are questioned on the parameters like Form of consumption, benefits sought, price range preferred etc. To conclude, a hypothesis is formed stating the set of parameters that are preferred by the image conscious people and based on this the suggestion is made to the marketers which will include the techniques to target efficiently.

CONCLUSION

The usage pattern has been studied. This has been done by initially understanding the need for the beauty care for an individual. The awareness level of the category and the brands has also been studied. It has been observed that the majority of the people are aware of the products but not the term ‘Cosmeceuticals’ & ‘Nutricosmetics’. People who favoured ‘Herbal Teas’ for its medicinal purpose rather than the different taste were also willing to try Nutricosmetic. People who were fine with the concept of Nutricosmetics also favoured the application of both Nutricosmetics and Cosmeceuticals simultaneously as they believed that the effect will be higher and the cure will be achieved in a shorter span of time. People who were running short of time and who valued convenience more preferred oral consumption than topical application. People who valued security preferred topical application more than the oral consumption. People preferred natural methods for getting slimmer rather than the consumption of medicines. As the majority of people preferred convenience and looking
good to a significant level, there is a high potential for the marketers to launch Nutricosmetic products. There was a set of very few people who were against the concept of cosmeceuticals and hence we can derive the fact that there is high potential for cosmeceutical products also. Health supplements are favoured only by a niche set of population and hence it is better for the marketers to identify and target specified set of people. But since the concept of building six abs has been a rage amidst men recently, there is high potential for health supplements like ProteinX and Coach Formula in the market. The distribution channel must be ensured strong enough so that the products must be made available in speciality stores like ‘Health & Wellness’ and the pharmacies. The medium chosen must be highly credible, hence rather than concentrating on Above the line activities, marketer must prefer blog marketing or Influencer marketing strategies.

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