

# A Review on the Food Supplements used in Nutricosmetic

Tarun Parashar, Bhupendra Kumar, Yogesh Tiwari

School of Pharmacy and Research, Dev Bhoomi Uttarakhand University, Dehradun, India

## ARTICLE INFO

### Article History:

Accepted: 20 March 2024

Published: 07 April 2024

### Publication Issue :

Volume 11, Issue 2

March-April-2024

### Page Number :

483-487

## ABSTRACT

The combination of two words i.e., Nutraceuticals and Cosmeceuticals. we can say combination of two words i.e., Nutrition and Cosmetics. These are the products which contain collagen, antioxidants, carotenoids, polyphenols, vitamins, omega 3 fatty acids, etc. These products or supplements are in the form of capsules, tablets, powder, or drinking vials. Normally we apply cosmetic products to our skin to enhance our beauty, but we forget that beauty comes from inside. The cosmetic products which we use to enhance our beauty only work on the upper layer of our skin. They form a layer on the outer layer of our skin. Like in market there are various cosmetic products like various types of creams such as anti -ageing cream, anti-inflammatory wrinkle cream, moisturizing creams etc., these creams form a layer on the epidermis. While Nutricosmetics works from the inside of our body. And enhance the beauty. There are various Nutricosmetics industries in India which manufacture various types of supplements which help our skin, like Nestle, Dabur, Himalaya, Ranbaxy, Amway, Lupin etc. It is a very easy and convenient solution to support beauty from within. The Indian beauty industry expanding at a very good rate. And as we know in India various types of plants or medicinal plants are found that's why it helps a lot. Carotenoids Lycopene, Flavonoids, Polyphenols, Collagen, Vitamins, Herbs are used in the manufacturing of the products at a very good rate. And these products really help our skin to become good.

Keywords- Nutraceuticals, Cosmeceuticals

## I. INTRODUCTION

India has a variety of plants which are used because of their beneficial properties. There are various plants which have various medicinal properties. Historically plant ingredients have been used in topical and oral

application. The cosmetic industry is in search of natural ingredients because of their effectiveness and low toxicity. Nutritional Supplements termed as Nutricosmetics are used for our Skin, Nails and Hair. These are the newest trends in skin care. Nutricosmetics involves dietary and nutritional

supplements which improve the health of our skin. Because of their high value cosmetic industries are now focusing to develop the nutricosmetic which contain collagen, carotenoids, omega 3 fatty acids, polyphenols, flavonoids, vitamins etc. Consumers are also taking interest in the natural supplements for skin and hair because this takes less time. The largest organ of the body is the skin. The outer layer is called epidermis, and the inner layer is called dermis or hypoderm. When we apply any cosmetic product to our skin it forms a layer on our skin. It only affects the epidermis and doesn't go through the hypoderm. But to make skin healthy we want something which works from the inside of our body and goes in the deeper layer of the skin. So, the nutricosmetic products help us here to make our skin healthy because as we know beauty comes from within. Nutricosmetics are generally come in the form of tablets, capsules, powders, candies, drinking vials, etc. These are very convenient, easy to use, easily absorbed and less time taken. In this busy life we don't have too much time for taking care of our skin, but these supplements save a lot of our time. Nutricosmetics works in the deeper layer, nourishes, and protects our skin from aging, wrinkles, etc. As we know nutrients like vitamins, minerals, collagen, herbs, antioxidants, etc. play a very important role in promoting the appearance of our skin so we must use them. Like for anti-aging supplements which contain collagen, vitamins, CoQ10 are used. Protection from the sun polyphenols, lycopene, flavonoids are used because they prevent the damage from the UV radiation etc., natural ingredients used in the nutricosmetics are:

1. Collagen
2. Vitamins
3. Carotenoids
4. Lycopene
5. Polyphenols
6. Flavonoids
7. Herbs like aloe Vera

| S. No. | Nutricosmetic Ingredients | Source   | Uses                          |
|--------|---------------------------|--|-------------------------------|
| 1.     | Carotenoids               | Fruits like carrots and oranges. Vegetables are like tomatoes. | Antioxidant                   |
| 2.     | Flavonoids                | Fruits, vegetables, chocolates, and Tea.                       | Anti-aging (reduce wrinkles). |
| 3.     | Vitamins                  | Carrot, Nuts, Meat, Fish, Citrus Fruits.                       | Antioxidants                  |
| 4.     | Herbs                     | Aloe Vera  | Anti-inflammatory             |
| 5.     | Curcumin                  | Turmeric (Curcuma longa)                                       | Skin whitening                |
| 6.     | Collagen                  | Meat (chicken)   | Anti-aging, skin softness.    |
| 7.     | Omega 3 fatty acids       | Fish, flax seeds   | Anti-inflammatory             |
| 8.     | Coenzyme Q 10             | Oily fish (salmon), whole grains, organ meat (liver).          | Antioxidants, Anti-aging.     |

#### 1. Collagen:

It is protein which is already present in the human body and found in bones muscles, skin etc. There are two types of collagens that are natural and synthetic. Natural collagen is already present in our body while synthetic is those which comes from outside sources like supplements which contain collagen. These are used for medicinal and Cosmetic purposes and repair the body tissues. Collagen which is present in our skin declines with age or when we meet ultraviolet light high sugar consumption, genetic changes, aging process etc. Topical applications which contain

collagen don't work properly because they contain large molecules which do not get easily absorbed into the skin. While the supplements which we take orally easily get absorbed and penetrate the skin. Collagen supplements can improve skin elasticity, wrinkles, roughness, and signs of aging.

## 2. Vitamins:

Vitamins are an organic molecule and an essential micronutrient. Vitamins are classified into two categories:

(i) Water soluble

(ii) Fat soluble

There are 13 vitamins in which four are fat soluble Vitamin A, Vitamin D, Vitamin E, and vitamin K and nine are water-soluble Vitamin C and 8 B vitamins. Vitamins which are water soluble get easily dissolved in water while the fat-soluble vitamins get absorbed with the help of lipids.

## 3. Carotenoids:

These are the group of pigments which are naturally present in our environment. Carotenoids are responsible for red, yellow, and orange color. These pigments are also used in food and cosmetic industries. The various sources of carotenoids are fruits and vegetables like orange, tomato, carrots, etc. These are also known as the best antioxidants.

Carotenoids which are present in our skin have a very important role. It has protection against UV radiation.

## 4. Lycopene:

It is a fat-soluble pigment. It is a carotenoid which is present in the tomato. It is also called acyclic carotenoids which are found in tomatoes, guava, apricots, etc. Lycopene provides photoprotection.

## 5. Polyphenols:

These are the group of antioxidants which are found in fruits, vegetables, chocolate, beverages like tea, coffee etc. Polyphenols are naturally present in the plants.

Polyphenols contain antioxidant and anti-aging properties.

## 6. Flavonoids:

Flavonoids are natural products which is found in fruits vegetables, grains, bark, root, stems, Flowers, tea wine and beverages. Flavonoids have antioxidant properties, and the products are extracted from plants. These natural products have very beneficial effects on health.

Flavonoids have antioxidant and anti-inflammatory properties.

## 7. Aloe Vera:

As we all know Aloe – Vera had various properties like antioxidant, anti-aging, anti-inflammatory etc. Aloe -Vera is widely used in cosmetic industry and in skin care products.

Aloe Vera provides hydration to our skin.

Aloe Vera makes our skin soft, flexible, wrinkle free, smooth. It gives us a beautiful appearance.

## Nutricosmetic Market have various classification

1. Based on product type the market of nutricosmetic is divided into two categories pill and liquid nutricosmetics:

Pill type nutricosmetics are ingested as pills for purposes like skin care an anti-aging while liquid nutricosmetics are taken in the form of liquid these are fortified with antioxidants, minerals and vitamins for better skin care and body health. Popular brands for pill type nutricosmetics are Imdeen by Ferrosan, Inneov by L'Oreal and Nestle. Popular brands for liquid nutricosmetics are Lumae by Coca Cola, Essensis by Danones.

2. Based on application, the nutricosmetic market is classified as follows:

(i) Personal care

(ii) Haircare

(iii) Skin care

(iv) Health care

(v) Weight management.

In our India there are various nutricosmetic industries:

(i) Dabur

(ii) Ranbaxy

- (iii) Lupin
- (iv) Himalaya herbal healthcare
- (v) Amway
- (vi) Nestle
- (vii) Danone's, etc.

Growing demand of nutricosmetic in India:

As we know nutricosmetic is a Fusion of nutrition and cosmetic. It contains natural ingredients and have very less side effects That's why it is increasing very rapidly.

Healthy lifestyle and increased beauty concerns.

Nutricosmetics is a convenient solution to support beauty from within.

#### **Supplements in the market:**

Glowell : As we know Nestle is the world's largest food and beverage company. It introduces a new beauty drink glowell . This is a beauty drink which helps to fight the signs of aging, protect and hydrate the inner as well as outer layers of the skin. It prevents skin aging effects, wrinkles, uneven skin tone. Glowell is made with fruit and botanical extract. First time India introduces nutricosmetic for skin lightning. glutathione and vitamin C (CME tablet) For skin whitening and age Defying.

The Indian beauty industry has been expanding at a very good rate. India is a home to almost all kinds of plants the advantages of knowledge based remedies give India tremendous leads in finding newer applications. Nutricosmetic market has added to the growth rate of the beauty industries nutricosmetic market has been doing well in the Indian market.

#### **Future trend of nutricosmetic in India:**

Historically plant ingredients have been used in topical and oral applications for various dermatological benefits. As we know large molecules cannot penetrate to the lower skin layers while orally ingesting nutrients get deeply penetrated the skin. The main purpose of the nutricosmetics is to slow down the aging process through Botanical ingredients. Nutricosmetics supplements work on our skin both from outside and inside. Beauty drinks and beverages

are the strongest growing segment in the market. Highly demanded products are herbal teas.

## **II. Conclusion**

Our nails, skin and hair are sensitive indicators of nutritional deficiencies. Food drinks and dietary supplements with anti-aging antioxidant benefits are currently the most innovative products on the beauty market. It is well known that a good balanced diet is important for our health. Nutricosmetic promises to support healthy skin, hair and nails with their supplements.

## **III. REFERENCES**

- [1]. Mahle Dhanashri, Dr. Gondkar Shital, Dr. Saudager Ravindra, "Nutricosmetic review articles", International journal of Universal pharmacy and bio science 6(2) march-april 2017 pg-no. 7,9,10,13,14
- [2]. Dini Irene, "Nutricosmetic : a brief overview" 2019 pg-no.1
- [3]. Aunciato Pizza Jalita , "Rocha Fila da Alvaes pedro , "Carotenoids & polyphenols in nutricosmetic, nutraceuticals & cosmoceuticals", volume II, issue I, feb 2012 pg-no. 1
- [4]. Kiokias.S, Proestos C Varzakas T., "A review of the structure , biosynthesis, absorption of carotenoids-analysis of properties of these common natural extracts" issue 1.03, 2016
- [5]. Mezzomo Natalia, Ferreira R.S Sandra, "Carotenoids functionality,sources & processing by supercritical technology. A review" vol 2016.
- [6]. Laneri Sonia, Lorenzo Di Ritamaria, Sacchi Antonia, Dini Irene," Dosage of Bioactive Molecules in the Nutricosmeceutical Helix aspersa Muller Mucus and formulation of new cosmetic cream with Moisturizing effect, 2019:1

- [7]. Rose Danielle, “ Nutricosmetics : Opportunities to meet modern Health needs, June 8 2018
- [8]. Jetly Tanvi, “Nutricosmetics - The game changes of the Indian Beauty Industry”, 21 july 2017
- [9]. Moloughney Sean , “Nutricosmetic: Beauty start beneath the surface”,06.01.16.
- [10].Taeymans Jan, Clarys Peter, Barrel O. Andre, “55 use of food supplements as Nutricosmetics in health to fitness : A Review, 01.05.2014
- [11].Panche A.N, Diwan A.D, Chandra S.R, “ Flavonoids: an overview” volume 5 , 2016.
- [12].Chacko M Sabu, Thambi T Priya, Kuttan Ramadasan, Nishigaki Ikuo, “ Beneficial effects of green tea: a literature review” vol.5 2010.
- [13].Singretary , Keith “ Turmeric Potential Health Benefits” vol.55, Issue 1, 2020, pg no.45-56.

**Cite this article as :**

Sh