

GENERAL INTRODUCTION TO COSMETIC PRODUCTS

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Abstract- A category of health and beauty items known as cosmetics is used to enhance or change a person's appearance, as well as to care for the face and body. Cosmetics are becoming increasingly prevalent in daily life; an increasing number of individuals use them frequently, and enormous amounts are consumed annually. we regularly use cosmetics in daily routine like tooth brush for cleaning purpose of teeth, use shampoo for cleansing purpose of hairs, hair oil or beard oil for proper care of hair, soap/face wash or other product for cleansing & beautifying the skin & many cosmetic products for beautifying, cleansing & care (nail polish, lacquer, eye shadow, eyelashes, lipstick, lip balm, moisturizer, deodorant, hair color, etc.).

Cosmetics have a history that dates back at least 7,000 years and are a part of practically every society in the world.

Keywords- Cosmetics, beauty product, skin, nail, hair, color, marketed product, etc.

INTRODUCTION

The definition of cosmetic under the law varies slightly between countries but in general terms "cosmetic" means any article intended to be used by means of rubbing, sprinkling or by similar application to the human body for cleansing, beautifying, promoting attractiveness, altering the appearance of the human body. (Stephen Barton, 23 September 2020) And for maintaining health of the skin and hair, provided that the action of the article on the human body is mild. (1)

The word "cosmetic" shares its roots with the word "cosmos," which is derived from the Greek word "kosmos," which means "order" or "ornament." The word "cosmetic," which refers to the outward look, has come to have a second connotation. They concentrate on maintaining the 'appearance' of the external body surfaces, such as the skin, hair, and teeth, as well as deodorizing or perfuming them to eliminate odors. Changing the appearance of these surfaces, safeguarding them, and maintaining their integrity, or, as in the other sense of "kosmos," keeping them in good "order," are also included in definitions. (2)

These kinds of products are also known as quasi-drugs & they should not be made to alter the body's structure or functions; rather, they should be used to treat physical ailments rather than to prevent and treat disease.

Since cosmetics and quasi-drugs are frequently used daily for extended periods, side-effect-free safety is of utmost importance, and they must be completely side-effect-free. In terms of use, intent, and effects, cosmetic & quasi-drugs differ significantly from pharmaceutical drugs. (1-2)

HISTORY

The history of cosmetics is present for at least 7000 years and it exists in almost every society around the world. (1) The earliest form of human cosmetic rituals should be body art that includes cosmetics. Cosmetics were not welcome in Rome, but they were used by some aristocratic Romans of the time. It was found that some Romans invented cosmetics in ancient times for example, Kohl used to cover their eye lining.

In 1888, a deodorant intended for cosmetic purposes was discovered by an anonymous American and was marketed under the name- "Mum". Even after 1900 AD, people did not accept cosmetics. Roll-on deodorant and aerosol deodorant were introduced to the market in 1952 and 1965.

Russian ballet and colorful makeup were performed around the same time in 1910. It should be noted that the year was started by the current cosmetic manufacturer's production around the beginning of the 20th century. (3)

Cosmetics in general are external preparations and are meant to be applied to external parts of the body. In other words, they may be applied to skin, hair, and nails to cover, color, soften, cleansing, nourishing, waving, setting, mollification, preservation, removal, and protection. Cosmetics are classified according to their site of application, i.e. (1-4)

A. Cosmetic for Skin

- B. Cosmetic for Hair
- C. Cosmetic for Nail
- D. Cosmetic for Hygienic

A) COSMETICS FOR SKIN (1-7)

Skin is the largest organ of the body. Besides the main protective part, the skin also takes care of many other important parts functions such as permeability, metabolism, and thermoregulation, and actively promotes sensory function. This structural and functional diversity is influenced by internal factors related to subjects, their ethnicity, age, and physiological, psychological, and pathological condition, and external factors related to the immediate environment such as e.g. dryness, sun exposure, temperature, and wind.

Numerous skin types have been proposed i.e., Normal skin, Dry skin, Oily skin, mixed skin & sensitive skin, etc. (1-4)

Cosmetic according to physical state:-

- a) Powder
- b) Cream
- c) Colorant

a) POWDER (5)

There are categories of powder as face powder, body powder, &compact.

FACE POWDER

Types of face powder,

1. Loose face powder
2. Compact face powder
3. Talcum powder
4. Baby powder

1. LOOSE FACE POWDER:

A good face powder should have the following qualities: covering power, slip, adhesion, absorbency, bloom, coloring, and perfume.

TYPES WITH PURPOSE & COMPOSITION:

- Light type powder: - dry skin; contain a large amount of talc.
- Medium type powder:-normal/moderately oily skins, lesser talc &zinc oxide
- Heavy type powder:- extremely oily skins, low talc but higher amount of zinc oxide

Marketed preparation: - ponds, lakme, mamaerth, white tone

2. COMPACT FACE POWDER:

It's a cake made of dry powder that has been crushed. To achieve compaction, pressure is crucial. When massaged with a puff, the powder should fall off with ease. Binder used for the preparation of compact powder. i.e. Zn\Mg state, CMC, cellulose, glycerol monostearate.etc

Marketed preparation: - lakme, ponds, myglamm.etc

3. TALCUM POWDER:

It is used as an adsorbent for making the skin from the excess moisture. Light magnesium carbonate added to mix perfume.

Marketed preparation: - Jonson's, Z powder,nivea, etc

4. BABY POWDER:

It is mostly composed of talc, with trace amounts of precipitated chalk, magnesium carbonate, and metallic stearate (light). Fungus infections and prickly heat can also be treated with talcum powders Or body powders that contain antiseptic ingredients. A natural antiseptic is boric acid.

Marketed preparation: - Jonson's, Dabar, Himalaya, etc.

b) CREAM (8)**DEFINITION:-**

Creams are semisolid dosage forms containing more than 20% water or volatile components and typically less than 50% hydrocarbons, waxes, as vehicles. They may also contain one or more drug Substances dissolved or dispersed in a suitable cream base.

TYPES OF CREAM

1. **Cleansing cream**
2. **Moisturizing cream**
3. **Vanishing cream**
4. **Cold cream**

1. CLEANSING CREAM (8)

Cleansing cream is necessary to effectively remove oil, water, oil-soluble filth, and surface grime, particularly from the face and throat, as well as makeup from the face.

Characteristics of a good cleansing cream:-

- Be able to effectively remove oil-soluble & water-soluble soil, and surface oil from skin.
- Should be stable & have good appearance.
- Should melt or soften on application to the skin
- Should spread easily without too much of drag
- Its physical action on skin & pore openings should be that of flushing rather than Absorption.

Marketed preparation: - Nivea, ponds, Noxzema, etc

2. MOISTURIZING CREAM (9)

A moisturizer, or emollient, is a cosmetic preparation used for protecting, moisturizing, and lubricating the skin. These functions are normally performed by sebum produced by healthy skin.

Moisturizers improve skin hydration and increase the water content of the stratum corneum by supplying water directly to the skin from its aqueous phase and increasing occlusion to reduce transepidermal water loss. It also covers small skin cracks, forms a soothing protective film, and protects the skin from friction.

BENEFITS OF MOISTURIZER:

- Prevent Dryness
- Slow The Signs of Aging
- Help Fight Acne
- Protection From The Sun

Marketed preparation: - Boroplus, Dove, Vaseline, Lakme, Ponds, Lotus, etc.

3. VANISHING CREAM (10)

They get their name because they seem to disappear when applied to the skin. A large amount of stearic acid is used as an oil phase. This gives an oil phase that melts above body temperature and crystallizes in a suitable form, making it invisible when used and forming a greasy film.

BENEFITS OF VANISHING CREAM:

- Use adhesive for makeup powder.
- Reduces loss of moisture from dry skin.
- Smoothen the skin & keep it soft.
- Prevent skin from roughening & chapping.

Marketed preparation: - nivea, plum, ponds, vicco, turmeric, cuticura, etc

4. COLD CREAM (11)

Cold cream is an emulsion of water and certain fats, usually, beeswax and various fragrances, designed to smooth the skin and remove make-up. Cold cream is a water-in-oil emulsion (an emulsion of a small amount of water in a large amount of oil).

BENEFITS OF COLD CREAM:

- The primary use of the cream for skin treatment.
- Mineral ingredients in the cream, work as a moisturizer.
- Generally useful for dry skin.
- It can also be used as an alternative to lip balm if you have very dry, chapped lips.
- It can be used as a makeup remover and cleanser.
- Sometimes it is applied to the face before putting on any makeup.
- It can be used as an alternative to shaving cream,
- With a hot washcloth it can help exfoliate the skin.

Marketed preparation: - nivea, garnier, lacto, etc

C) SKIN COLORANT

It includes a) Rouge b) Lipsticks

a) ROUGE: These cosmetic preparations are used to apply color to cheeks. The color can vary from pink to dark blue to red. I bring butter color can be achieved using water-insoluble dyes such as iron oxides and certain organic pigments or using water-soluble organic dyes that color the skin.

Types:

- Liquid rouges
- Emulsion cream rouges
- Wax based rouges
- Powder rouges

Marketed preparation: - velo, grizzly, etc.

b) LIPSTICK (12)

These are coloring dispersions in the base consisting of a suitable mixture of oils, fats, and waxes suitably perfumed and flavored formed into a stick.

Types of lipsticks:

- Transparent lipstick
- Liquid lipstick
- Lip rouge
- Lip salve
- Lip jelly

Marketed preparation: - clamy, lakme, chamel, etc

B) COSMETICS FOR HAIRS:-

Hair is one of the important parts of the body in which it plays an important role to beautifying human beings.

It includes following types of preparations:

1. Shampoo & conditioners
2. Hair colorants and hair color remover
3. Depilatory & Epilatory
4. Hair grooming preparations
5. Shaving soaps & creams
6. Hair wave sets & lacquers , rinses

1. SHAMPOO (13-14)

Shampoo is a hair care product used to clean the scalp and hair by removing dirt, oils, and other residues. It is typically a liquid or gel that creates a lather when mixed with water, allowing effective cleansing.

Ideal characteristics of a shampoo:

- Effectively wash hair.
- produce a good amount of foam
- effectively and completely remove the dust, and excessive sebum
- The shampoo should be easily removed by rinsing it with water
- Should leave the hair nondry, soft, and lustrous with good, manageability.
- Should impart a pleasant fragrance to the hair,.
- Should not have any side effects or irritate skin or eye
- Should not make the hand rough and chapped

TYPES OF SHAMPOO:

- 1) Liquid cream shampoo
- 2) Solid cream and gel shampoo
- 3) Powder shampoo
- 4) Antidandruff shampoo
- 5) Aerosol foam shampoo

Marketed preparation: - clinic plus, indulekha, onion, dove, bear, shikakai, etc

2. CONDITIONER

Conditioners are hair care products designed to improve the texture, appearance, and manageability of hair. They work by moisturizing and replenishing lost nutrients, providing smoothness, reducing frizz, and often containing ingredients that coat the hair shaft to enhance shine and protect against damage.

Marketed preparation: - Himalaya, dove, LOREAL, etc.

3. HAIR COLORANT (15)

Hair colorant are used either to hide gray hair or to change the color of the Hair.

IDEAL CHARECTORISTICKS

- Should be easy to apply
- The color imparted must be stable to air, light, water, and shampoo.
- Should not be a dermatitis sensitizer
- Should be nontoxic to the skin or hair, and should not impair natural gloss and texture.

Marketed preparation: - garnier, godrej exprt , nupur, nisha, hina, etc

4. HAIR GROOMING AIDS:-

These are important group of cosmetics which are used both by men and women to keep their hair in order for good looking, &enhance overall appearance.

Types of hair grooming:-

- Hair lacquers or sprays
- Hair creams
- Hair setting lotion
- Brilliantines & Hair oil

Marketed preparation: - pattern, kerastase, pureology, etc.

5. SHAVING SOAP & CREAM

Shaving cream and soap are both products used for lubrication during shaving. Shaving cream, typically in a aerosol or tube form, creates a lather when mixed with water and helps soften the hair, making it easier to shave while providing a smooth glide for the razor. Shaving soaps, usually in solid form, require a brush and water to create a rich lather and offer similar benefits, aiding in a comfortable shave by moisturizing the skin and hair follicles. Both products aim to reduce friction, prevent irritation, and improve the overall shaving experience.

Marketed preparation: - lexes, luxury, gillette,etc.

C) COSMEICS FOR NAILS

Cosmetics used for nail is as below,

1. Nail polish
2. Nail lacquers

1. NAIL POLISH (16)

The difference between nail polish and nail lacquer is that nail polish has abrasive substance activities Thanks to friction, it draws blood into the many capillaries under the nail and increases blood flow providing and stimulating effect on nail growth.

Marketed preparation: - red capret, perpaa, mersi, juice, lakme, etc

2. NAIL LAQUERS (17)

These are the preparations that cover the nail with a water and air impermeable layer, which normally remains for days.

IDEAL CHARECTORISTICKS OF LAQUERS

- Must be easy and inconvenient to apply
- The product should produce a good & satisfactory film
- Product should be stable on storage

Marketed preparation: - mia secret, gleevia, emigel, nail rox, cembra, etc.

D) COSMETICS FOR HYGIENE:-

It contains dental product and bath product,

DENTIFRICES:-

Dentifrice is a preparation for cleansing and polishing the teeth; it may contain a therapeutic agent, such as fluoride, to inhibit dental caries.

A substance such as paste or powder, for cleaning purpose of teeth.

TYPES OF DENTIFRICES:-

1. Toothpaste
2. Tooth powders
3. Mouth wash
4. Liquid preparations

1. TOOTH PASTE (18)

A pharmaceutical compound used with a toothbrush for cleaning and polishing the teeth. It typically contains a mild abrasive, detergent, flavoring agent, fluoride, and binder. Other common ingredients are deodorants, humectants, desensitizers, and various medications to prevent dental caries. Also called toothpaste.

IDEAL CHARECTORISTICKS OF TOOTH PAST:

It must clean the dental surface properly without any scratches.

- The consistency should remain constant in a wide range of temperatures during shelf life.
- Consistency should be such that it can be easily squeezed out of the tube to spread on the brush, but should not penetrate into the brush.
- It should be nontoxic and should not sensitize the buccal membrane.
- It should not interact with the container material.
- It should have a pleasant taste and odor.
- It should have a good appearance.

Marketed preparation: - dabur tooth paste, Colgate, patanjali, closup, vicco. Sensodyne, oral B, dabur red, etc

2. MOUTH WASH (19)

DEFINITION: - Mouthwash is an aqueous solution, which is most often used for the control of plaque and is a medicated liquid, which is held in the mouth and swished by the action of perioral musculature to eliminate the oral pathogens.

Or

Herbal mouthwashes are mouthwashes, which are prepared from natural plant extracts. The natural extract present in herbal mouthwashes is obtained from various plant leaves, fruits, seeds, and various tree oils.

Herbal mouthwashes can be used as an adjunct to various oral hygiene practices such as brushing and flossing. They have been shown to have effective anti-inflammatory and anti-plaque properties and can therefore be used as support in periodontal treatment. It does not contain alcohol, artificial preservatives, flavorings, or colors. Therefore, herbal mouthwashes can be considered as an alternative to chemical mouthwashes in maintaining oral hygiene, especially the additional benefits of herbal preparations.

TYPES OF MOUTHWASH:

Types of Mouthwash Here's an inventory of the various sorts of mouthwash,

- **Fluoride mouthwash:** - Fluoride in mouthwashes contains salt which helps protect the teeth from cavities and cavity. Since fluoride could also be found in toothpaste and water, it's advisable to require care when using this type of mouthwash since intake of an excessive amount of fluoride isn't good for your overall health & it may reason of tooth discoloration.

Marketed preparation: - Colgate, fluritop, proflo, Listerine, etc

- **Cosmetic mouthwash:** - Cosmetic mouthwash focuses on freshening breath and providing a temporary sensation of cleanliness. It doesn't typically contain fluoride or actively fight cavities. While it can be part of an oral hygiene routine, it is not a substitute for brushing and flossing.

Marketed preparation: - O wet, Enshine, Allfresh, Perfora, etc

- **Antiseptic mouthwash:** - This is the most common mouthwash. This mouthwash usually contains alcohol or chlorhexidine and is usually used by people who have oral infection to prevent bacterial growth. It is also often useful for people with halitosis or bad breath. It is often used next to the right brushing and flossing help prevent bacteria that cause mouth infections and bad breath. It is useful for reducing plaque, gingivitis & bad breath.

Marketed preparation: - Clostrine, Corsodyl, medshfresh, etc.

- **Natural mouthwash:** - it is also known as herbal mouthwash. Natural mouthwashes often contain ingredients like essential oils (such as tea tree, peppermint, or eucalyptus), aloe Vera, and plant-based compounds. They aim to provide freshness and may have antibacterial properties, though their effectiveness in preventing cavities might not match fluoride-based mouthwashes.

Marketed preparation: - Oralife, pepsodent, distil, etc.

IDEAL CHARACTERISTICS OF MOUTHWASH:-

- Reducing tooth decay using sodium fluoride.
- Fresh breath.
- Whitening teeth using a bleaching agent.
- Prevention of gum disease using an antiseptic or anti-plaque ingredient.
- Mouthwash prevents gingivitis and gum disease by killing bacteria that would otherwise infect the cavities and gums.
- It can prevent plaque buildup, strengthen enamel and demineralize teeth, allowing you to prevent tooth decay.

CONCLUSION

The diverse spectrum of cosmetic products, spanning skincare, hair care, nail care, and oral hygiene, embodies a fusion of scientific advancements and meticulous formulation. These products, designed to enhance aesthetics and promote personal hygiene, integrate a myriad of compounds, both natural and synthetic, tailored to specific physiological needs. Through continual innovation and stringent quality standards, cosmetics have evolved into indispensable elements of modern daily routines, contributing significantly to individual self-care and well-being within the realm of scientific precision and consumer choice.

REFERENCES:

1. Mitsui, T. (1997). *introduction of cosmetics* (Takeo Mitsui ed.). Netherland: Elsevier Science B.V. Page no: - 3-4
2. Stephen Barton, A. E. (23 September 2020). *Discovering Cosmetic Science* (illustrated ed.). (A. E. Stephen Barton, Ed.) United Kingdom: Royal Society of Chemistry, 2020. Page no: - 3-5
3. M.Surya. (2021, May 15). A Review on Recent Scenario of Cosmetics. *International Journal of Pharmaceutical Sciences Review and Research*, 190-197.
4. Pathak, D. K. (2021). *COSMETIC SCIENCE CONCEPTS AND PRINCIPLES* (fourth ed.). Pune, Maharashtra, India: NIRALI PRAKASHAN.
5. BAREL, A. O. (n.d.). *HANDBOOK OF COSMETIC & technology* (3 ed.). (A. O. BAREL, Ed.) Informa healthcare.
6. BAREL, A.O (n.d.) *HANDBOOK OF COSMETIC & technology* (4 e.d.). (A.O.BAREL, Ed.) CRC PRESS.
7. H.W.HIBBOTT. (n.d.). *HANDBOOK OF COSMETIC SCIENCE*. (H.W.HIBBOTT, Ed.) NEW YORK
8. Steiling, W. (2018, aug 17). Principles for the safety evaluation of cosmetic powders. (W. Steiling, Ed.) *Toxicology Letters*, 8-18.
9. Sethi, A. (2016). Moisturizers: The slippery road. (A. Sethi, Ed.) *indian journal of dermatology*, 61(3).
10. Purva, G. (2023, March 3). FORMULATION AND EVALUATION OF VANISHING HERBAL CREAM. (G. Purva, Ed.) *International Research Journal of Modernization in Engineering Technology and Science*, 05(03).
11. KiranYadav. (2023, june 3). A review article on formulation and evaluation of herbal cold. (iranYadav, Ed.) *International Journal of Pharmaceutical Research and Applications*, 8.
12. CHAURASIYA, I. C. (2021, jan 1). A REVIEW ON COSMETIC PRODUCT "LIPSTICK". (I. C. CHAURASIYA, Ed.) *internation journal of creative research thought (IJCRT)*, 9(1).
13. Singh, M. (2021, 1 1). A REVIEW ON COSMETIC PRODUCTS. (M. Singh, Ed.) *international journal of creative research thought (ijcrt)*, 9(1).
14. Sonawane Sneha K. (2021). shampoos hair cair products . (Sonawane Sneha K, Ed.) *research journey of topical & cosmetic science*, 12(2).
15. aparecida, s. (2015, 4 22). Types of Hair Dye and Their Mechanisms of Action. (s. aparecida, Ed.) *MDPI*, 2(2).
16. G, J. (2023, july 2). FORMULATION AND EVALUATION OF NAIL POLISH WITH. (J. G, Ed.) *World Journal of Pharmaceutical Research*, 12(12). doi: 10.20959/wjpr202312-28824
17. Goja, A. (2019, feb). NAIL LACQUER AS A TRANSUNGUAL DRUG. (A. Goja, Ed.) *JETIR*, 6.
18. Yadav, M. (2021, July). Review literature on Toothpaste. (M. Yadav, Ed.) *JETIR*, 8(7).
19. Uttarwar, s. s. (2022, Feb 2). formulation and evaluation of herbal mouthwash. (s. s. uttarwar, Ed.) *international journal of creative research thought (ijcrt)*, 10(2).
20. Yadav, V. (2021, June). Review literature on Mouthwash. (V. Yadav, Ed.) *JETIR*, 8(6).