IS BEING FAIR SYNONYMOUS WITH BEING BEAUTIFUL?

Unfortunately, in our society, this belief has come to stay!

Girls grow up listening to Fairy tales where you have characters like Snow White who asks "Mirror Mirror on the wall who is fairest of them all?!!?"

The matrimonial columns are full of advertisements stating "wanted Fair, Slim and Beautiful Bride; making the not so fair person feel that they have to do something to become fair skinned lest they lose the chance of finding a suitable groom!

This Psychology has become the trading point of the Fairness Cream Industry!!

This craze to make the colour of one's skin fair has become more prevalent in the past three decades or so. Fairness is considered equal to attractiveness by majority of the populace. With the advancement in science and technology there are plenty of ingredients available for the formulators to formulate a wide range of skin lightening products.

The fascination for Fairness has been portrayed by the media, especially by the television in a manner that will enhance product consumption, to build up a strong brand image in the consumers' mind and to promote the idea that fairness is to be sought after, at any cost!

Skin is the outer covering of the body which serves to protect the body against physical and chemical injury, control evaporative loss of body water, assist in maintaining the body temperature, and provide defence against infectious organisms,

Exposing the skin to various factors, including environmental and workplace chemicals, pollutants, smoke, microorganisms, aggressive and potentially irritating cleansing and antiaging regimens and extreme environmental temperatures may cause skin abnormalities and dermatological disorders. These untoward changes can result in a degraded and unhealthy appearance of the skin and; if severe enough, may compromise skin functions.

Composition of the skin:

Skin consists of the upper layer - the epidermis and the lower layer called the dermis. Melanin is the primary determinant of skin colour, which is located on the basal layer of epidermis.

How does our skin get its colour?

Melanin is produced in specialized cells called melanocytes. The increased production of melanin is called as melanogenesis. Melanin production is due to action of the Enzyme Tyrosinase, whose activity is affected by UV Rays, and intensifies on Exposure to Sunlight.

Types of Melanin:

Eumelanin and Pheomelanin both are responsible for different skin tones.

Eumelanin is a black or brown pigment concerned with the protection of skin by absorbing incoming UV radiation.

Pheomelanin is a reddish pigment which is a weak absorptive of UV radiation. It acts as a photo sensitizer, increases sun sensitivity and skin ageing. Skin colour is determined by the absolute amount, concentration and the dispersion of melanin in the skin

What is a healthy skin?

Healthy skin should be:

- 1. Clear, Elastic, Smooth, Soft, Supple, Uniformly Pigmented, free from disorders
- 2. Surface should be Translucent
- 3. Sebum & Sweat Secretion should be balanced according to Seasons
- 4. Should not have: Noticeable fine lines, Wrinkles, Patches, Scars & Pimples
- 5. Should not Sag

SKIN TYPES

Skin can be grouped based on:

- a. **Sebum (oil) levels** Sebum is the oil secreted by the skin. Dry Skin, Normal Skin, Oily Skin lesser the sebum drier the skin; greater the sebum more oily is the skin.
- b. **Complexion/ Colour** Fair, Wheatish, Dark determined by the amount of Pigment Melanin present in one's skin; fairer the skin lesser the melanin, darker the skin greater the melanin.

Complexion:

Everyone would love to look younger and beautiful. Complexion of one's skin is one of the most noticeable factors. Fair skin has always been a desire of people, with the assumption of fair skin as a sign of beauty. There has been a bias on complexion since ages, mostly amongst Asians and Africans. Five or more decades ago people used to make home made preparations to lighten their skin, with their own recipes using the available herbs / naturals.

To satisfy this need of consumers' in today's scenario, a lot of personal care companies have started manufacturing skin lightening / complexion promoting products as "Fairness products." Number of skin fairness creams are available in the Indian market and are widely advertised. People have started using such complexion promoting / skin lightening products to improve their complexion, irrespective of their complexion.

SKIN WHITENING / LIGHTENING / FAIRNESS PRODUCTS

The colour of the skin may have a major impact on an individual's psychological profile and makeup; there are products available to treat both hypo and hyper pigmentation. India, being a tropical country has predominantly dark-skinned people. A number of products to enhance "skin fairness" are available as cosmetic creams in the market and these are advertised widely. Most products are aimed at young women and their advertisements show how use of these creams may result in fairer skin if used for a specific duration of time.

WHAT DOES THE SKIN WHITENING/LIGHTENING CREAM DO?

Skin lightening products refers to the practice of using substances to lighten skin tone or provide an even skin complexion by lessening the concentration of melanin. These are usually in the form of creams or gels or lotions. Fairness creams contain agents that act by decreasing melanin synthesis thus modifying physiological systems.

They therefore tend to:

- Lighten the Skin
- Depigment the Skin by: destroying Melanocytes / Inhibit Tyrosinase activity / inhibit formation of Melanin
- Reducing the Production of Melanin
- Affecting the Formation of Tyrosinase

When a product claims that its use will result in making the skin fair, it implies that using it will actually decrease the natural skin coloration of an individual. Most of these products also have a sunscreen element, as protection from sunlight is an important factor in lightening the colour of the skin.

Skin whitening, skin lightening and skin bleaching ingredients – Synthetic & Natural:

These are substances, synthetic or natural which help to lighten the skin tone or provide an even complexion by lessening the concentration of melanin. Many have proven to be effective in skin whitening, while some have proved to be toxic, with questionable safety profiles.

Long term use of skin whiteners can lead to pigmentation increasing in the joints of the fingers, toes, buttocks and ears. The skin of the face can become thinned and the area around the eyes can have increased pigmentation causing a "bleach panda effect." Facial skin can even become hyper pigmented.

Most skin-lightening treatments, which can reduce or block some amount of melanin production, are aimed at inhibiting tyrosinase activity, the melanin synthesizing enzyme. Many treatments use a combination of topical lotions or gels containing melanin-inhibiting ingredients along with a sunscreen. Depending on how the skin responds to these treatments, exfoliants either in the form of topical cosmetic or chemical peels may be used.

Synthetic Ingredients that help in skin lightening:

Tretinoin

Research has shown that the use of Tretinoin (also known as all-trans retinoic acid) can be effective in treating skin discolorations. Users of tretinoin have to avoid sunlight, as the skin can tan. Using tretinoin makes the skin more sensitive to UVA and UVB rays.

Hydroquinone:

In medical literature, hydroquinone is considered the primary topical ingredient for inhibiting melanin production. Its components have potent antioxidant abilities. Topical hydroquinone comes in 2% (available in cosmetics) to 6% concentrations (available from a physician or by prescription), either alone or in combination with tretinoin in 0.05% to 0.1% concentrations. Research has shown hydroquinone and tretinoin to prevent sun- or hormone-induced melasma (tan or dark skin discoloration).

Hydroquinone is a strong inhibitor of melanin production, can disrupt the synthesis and production of melanin. It has been banned in some countries (e.g. France) because of fears of a cancer risk. Hydroquinone has been shown to cause leukemia in mice and other animals. Any perceived risk is most likely applicable for African women. The European Union has also banned it from cosmetics in 2001, Because of hydroquinone's action on the skin, it can be an irritant, particularly in higher concentrations of 4% or greater and predictably when combined with tretinoin.

Arbutin

Some alternative skin lighteners are natural sources of hydroquinone.

Arbutin (technically known as hydroquinone-beta-D-glucoside), which can inhibit melanin production. Pure forms of arbutin are considered more potent for affecting skin lightening (alpha-arbutin, beta-arbutin, and deoxy-arbutin). Beta-Arbutin is also known by its more common name of Bearberry extract. Arbutin is derived from the leaves of bearberry, cranberry, mulberry or blueberry shrubs, and is also present in most types of pears. It can have melanin-inhibiting properties.

Arbutin and other plant extracts are considered safe alternatives to commonly used depigmenting agents to make the skin fairer. Medical studies have shown the efficiency of Arbutin for skin lightening. There are patents controlling its use for skin lightening.

Kojic acid

Kojic acid is a by-product in the fermentation process of malting rice for use in the manufacturing of Sake, the Japanese rice wine. Some research shows Kojic acid to be effective for inhibiting melanin production. However, Kojic acid is an unstable ingredient in cosmetic formulations. Upon exposure to air or sunlight it can turn brown and lose its efficacy. Many cosmetic companies use Kojic di-palmitate as an alternative because it is more stable in formulations. However, there is no research showing Kojic di-palmitate to be

as effective as Kojic acid, although it is a good antioxidant. Further, some controversial research has suggested that Kojic acid may have carcinogenic properties in large doses. It can cause allergic contact dermatitis and skin irritation.

Azelaic acid

Azelaic acid is a component of grains, such as wheat, rye, and barley. It is applied topically in a cream formulation at a 10-20% concentration. Azelaic acid is used to treat acne, but there also is research showing it to be effective for skin discolorations. Other research also indicates Azelaic acid may be an option for inhibiting melanin production.

Vitamin C

Vitamin C and its various forms (ascorbic acid, Magnesium ascorbyl phosphate, etc.) are considered an effective antioxidant for the skin and they help to lighten skin. ter skin.

Cinnamomum subavenium

A Chinese herb has been suggested for use as a skin whitening agent. The plant contains substances which inhibit production of tyrosinase an enzyme which catalyzes the production of melanin. The herb has not been established as either effective or safe but is being researched by Hui-Min Wang and his colleagues at Kaohsiung Medical University in Taiwan where experiments have shown that it was effective at causing Zebra fish to lose their stripes.

Alpha hydroxy acids

Alpha hydroxy acids (AHAs) — primarily in the form of lactic acid and glycolic acid — are the most researched forms of AHAs because they have a molecular size that allows effective penetration into the top layers of skin. It is generally assumed that in and of themselves AHAs in concentrations of 4% to 15% are not effective for inhibiting melanin production and will not lighten skin discolorations in that manner. It is believed that their benefit is in helping cell turnover rates and removing unhealthy or abnormal layers of superficial skin cells (exfoliation) where hyper pigmented cells can accumulate. However, other research has shown that lactic and glycolic acids can indeed inhibit melanin production separate from their actions as exfoliants on skin.

Alpha hydroxy acid peels (using 50% concentrations or greater) may remove skin discolorations. Only a qualified physician should perform these types of facial peels.

Niacinamide

Niacinamide is claimed to be a much safer alternative when applied topically for skin whitening., Niacinamide has no adverse side-effects. It promotes acne reduction, increases skin moisture, and reduces fine wrinkles.

Herbal / Natural Ingredients – Extracts:

Licorice, Pomogranate, Saffron, Aloevera, Manjistha, Cucumber, Papaya, Lothra, Lemon oil, Grape seed, Rose, Lemon, Olive, Berries, turmeric, Wheat germ, Tulsi, Lotus, Jasmium, Sandalwood, Walnut, Milk, Besan, Curd etc.

Major Constituents of Fairness Cream:

In cosmetics the term cream usually signifies a solid or semi-solid emulsion. A typical fairness cream formulation should contain the following:

- Oil phase ingredients A vanishing base, as stearic acid (in most of the cases) that
 imparts rapid rub-in effect, by leaving an apparent film, imparting a mild whitening
 effect / white coat on the skin. It also gives a very attractive appearance to the product
 as a whole.
- Water based ingredients Aqua based to disperse oil based ingredients like stearic acid.
- Emulsifiers They are binders to hold the oil based ingredients into the water based ingredients.
- Sesquersting agents As Ethylenediaminetetraacetic acid, widely abbreviated as EDTA
- Fairness actives Synthetic and Natural/herbals
- Thickeners Renders consistency in the formulation
- Preservatives To preserve the formulations from microbial attacks and contaminations
- Colouring and Perfumery agents To keep the formulation aesthetically appealing and pleasant
- Other special ingredients Moisturizers, Sunscreens, Herbal / Natural additives, Antioxidants Vitamins etc.

What should be the desired qualities of Fairness Cream?

- Pleasant odour and colour
- Must be aesthetically appealing
- Easy to spread, and provide a pleasant feeling during application
- Easy penetration
- Should be non-oily / non-greasy after application
- Impart skin lightening
- Improve complexion
- Render moisturization
- Impart hydration
- Render nourishment
- Well tolerance

- Non-allergenic
- User friendly

COMPARATIVE TESTING

Comparative Testing is a formal process by which products & services of different vendors are tested for Quality; the services are tested for compliance to the regulations laid out by the regulatory authorities for services. CONCERT is undertaking to do this Comparative Testing for South India under a grant from Department of Consumer Affairs, Government of India. Concert is testing 7 products and 3 services. One of the products chosen for testing is Fairness Cream.

SELECTION OF BRANDS FOR COMPARATIVE TESTING

Following are the chosen brands

- 1. Fair and Lovely Advanced Multi Vitamin
- 2. K.P Namboodhri's Turmeric Fairness Cream
- 3. Dhathri Fair Skin Cream
- 4. Fairever
- 5. Gokul Sandiva
- 6. Vivel Active Fair
- 7. Banjara
- 8. Himalaya
- 9. Fair and Lovely Menz Active
- 10. Emami Fair and Handsome
- 11. Garnier Skin Naturals Light
- 12. Ponds White Beauty
- 13. Nivea For Men Advanced Whitening
- 14. VLCC Men Active Light Fairness Moisture

PARAMETERS TESTED

Packaging and Labelling:

Labelling:The primary and the secondary containers viz., the inner ones (tubes) and the outer ones (the cartons) should have the following information marked legibly.

- Name of the fairness cream and registered trade mark if any.
- Name, in chemical nomenclature of any ingredient, together with the concentration present in the cream.
- Weight of the content
- Batch number
- Name and address of the manufacturer
- Manufacturing date, expiry date (year, month, date)
- Storage conditions

- Country of origin
- Instructions of use / product leaflet

Quality Parameters

- Thermal stability
- Viscosity
- Bulk Density
- Loss on Drying
- Free fatty acids &
- Sap values
- Accelerated stability at 5° C, Room temperature (RT) and 45° C for 3 months period

Safety and Health Parameters

• Heavy metals:

Lead:

Lead is one of the most harmful substances and its presence in cosmetic products today would cause lot of deleterious effects viz., constipation, lowers intellectual abilities, neurotoxicity, induces infertility amongst men and women, and induces pigmentation problems on skin: it also causes toxicity in pregnant women.

Arsenic:

This is immediately thought of as "poison," which is exactly what it is. Millions of people worldwide are exposed to potentially harmful levels of arsenic in their drinking water. Some skin lighteners do contain this as an ingredient. The Drug and Cosmetics Act, 1940 and Rules 1945 specifies the limit of Lead and Arsenic at <20 and 2 ppm as maximum limits respectively.

Mercury:

Many skin whiteners contain toxic mercury such as mercuric chloride or ammoniated mercury as the active ingredient. However mercury has been banned in most countries for use in skin whitening because it accumulates on skin and it can have the opposite results in the long term. Toxic levels of mercury can lead to mercury poisoning which causes neurological and kidney damage, and may also lead to psychiatric disorders. In addition, it can lead to severe birth defects. Some studies suggest that long-term use could cause systemic absorption that leads to tissue accumulation of the substance. Mercury can even lead to skin cancer. In the long term the Mercury will damage vital organs and lead to liver and kidney failure and mercury poisoning.

pH value of aqueous solution

The pH value of fairness creams should be kept in alignment with the skin pH. Either too acidic or too alkaline pH of the product tends to cause skin damages. Hence the

manufacturers normally adjust the pH of the formulations accordingly to suit the skin pH.

• Microbial counts – For sterility of product Total viable counts (TVC) and Pathogens – presence and absence of bacteria

ROLE OF MICROBIOLOGY IN COSMETICS:

Cosmetic Microbiology is very popular and useful to consumers by protecting their skin, useful in protecting products throughout its shelf life, and Claim Substantiation in Cosmeceuticals, Nutraceuticals, and Pharmaceuticals.

The products should be germ free and should not cause any skin diseases to the consumers using the products because of the microbial content in the products. The microorganisms may be received from the unhygienic environment and air, from personnel, from raw materials like water or packing materials, from machines or equipment while manufacturing.

The microbes include *Staphylococcus*, *Pseudomonas* and *Salmonella* from the personnel's skin or hands, *Aspergillus*, *Rhizopus*, *Penicillium*, *Mucor* like organisms from the environment, Coliforms, waterborne pathogens from water etc., other fungal and bacterial contaminations from the equipment are possible.

Products become contaminated with the microbes and when used by the consumers will cause skin infections or allergy to the consumers.

Product Protection

Products get contaminated with microbes and result in the change of product nature by microbial metabolism. It includes protein denaturation, aminoacid dissimilation, oxidation/reduction, enzyme activities and other metabolic changes. This affects the product stability and nature.

Role of Preservatives

Preservatives take care of all these metabolic changes by inhibiting or killing the growth of microbes. Preservatives are selected depending upon the nature of the products (water soluble or water insoluble), pH of the products etc. This helps the product to be stable throughout its shelf life.

Microbiological Tests for checking Product quality

Sterility checking

It is necessary to check the sterility of raw materials, personnel, environment and equipment used for manufacturing the product. Among these raw materials, personnel and equipments are monitored by evaluating the number of TVC and pathogens. Environment is checked by swabbing different locations in the manufacturing area, packing area etc. Air is checked by direct exposure plate method of the manufacturing areas, packing areas etc

Total Viable Count

To check the total number of microbial count present in the product by plating method

Pathogens

To check the pathogens like Staphylococcus aureus, Pseudomonas aeruginosa, Salmonella typhimurium, Escherichia coli etc., by using plating method and using specific medium.

Testing efficacy of preservatives

To test whether the preservatives incorporated in the products are effective. Efficacy is checked based on different concentrations, different packing materials, compatibility with other ingredients etc.

TESTS RESULTS WITH SCORES AND RATING

The test results with the scores for the 14 branded fairness cream samples for the three chosen categories viz., **Synthetic based**, **Natural** / **Herbal based and Men's**, **are** presented in Table below.

Three major criteria for the parameters chosen were (a) Packaging and Labelling, (b) Quality and (c) Safety & Health.

All the 14 branded Fairness cream products were tested for these parameters.

5- Point scale was used for the rating of each criterion, sub criterion and parameter individually. The rating scale is: 1: Poor, 2: Fair, 3: Good, 4: Very good, and 5: Excellent. In our above tests if any of these parameters meets the defined standards it is rated as "Good". When it exceeds the standards it is rated as "Very good" and when it shows appreciable scoring it is rated as "Excellent". If it falls short of standard it is either rated as "Fair" or "Poor", based on the extent of deviation from the standard.

The price of each product tested is also tabulated for a common unit for information to consumers. We have presented the results against these criteria in an unbiased manner without any subjective element. The consumers can as well study the results, analyze, assess and choose their brands as per their discretion.

Fairness Cream Scoring Table

	Packaging & Labeling	Quality	Health & Safety	Price in Rs
Synthetic based				
Fair & Lovely Advanced				
Multivitamin	Good	Good	Good	Rs. 82/50gm
Pond's White Beauty	Good	Good	Good	Rs. 249/50gm
Natural / Herbal based				
K. P. Namboodiri's Turmeric (Fairness Cream)	Good	Good	Good	Rs. 40/25 gm
Dhathri Fair skin Cream	Good	Good	Good	Rs. 196/50gm
Fairever	Good	Good	Good	Rs. 82/50gm
Gokul Sandiva Fair Radiance	Good	Good	Good	Rs. 41/25gm
Vivel Active Fair	Good	Good	Good	Rs. 75/50gm
Banjara's Saffron Fairness Cream	Good	Good	Good	Rs. 95/60gm
Himalaya Fairness Cream	Good	Good	Good	Rs. 65/50gm
Garnier Skin Naturals	Good	Good	Good	Rs. 140/40gm
Men's				
Fair & Lovely Max Fairness for Men	Good	Good	Good	Rs. 85/50gm
Emami Fair and Handsome	Good	Good	Good	Rs. 48/30gm
Nivea for Men	Good	Good	Good	Rs. 180/40ml
VLCC Men Active Light Fairness Moisturizer	Good	Good	Good	Rs. 145/75ml

PARABENS

Parabens: A class of preservatives commonly found in moisturizers, deodorants, sunscreens, skin creams, shampoos, conditioners and many personal care products. Parabens come in various forms (methyl, ethyl, propyl, and benzyl) and are used as cheap and effective preservatives in personal-care products as they can survive for years or be exposed to extreme temperatures.

A recent Danish study report showed that when parabens are applied as a cream to the backs of healthy male volunteers, the chemicals can be measured in the blood within hours. "This demonstrates that parabens do indeed penetrate the human skin from cosmetic products," said University of Reading researcher Philippa Darbre, whose research team was the first to detect parabens in human tissue. Women and girls are particularly susceptible to exposure to certain chemicals that mimic hormone activity. Because female bodies have a greater percentage of fat in comparison to men, chemicals that are fat-soluble are more easily absorbed. Breast tissue is one such site where chemicals can accumulate. A study of breast tumours by Dr. Phillippa Darbre, from the University of Reading in the U.K., and published in the Journal of Applied Toxicology, found parabens in each of 20 samples. This led researchers to suspect that parabens,

which mimics estrogens when absorbed through the skin, may play a role in the development of breast cancer as they have been found in human breast tumors. Methlyparaben, butlyparaben, isobutylparaben and propylbaraben are classed as endocrine disruptors in Skin Deep nevertheless FDA has not banned it till now.

THE FOLLOWING FAIRNESS CREAMS CONTAIN PARABENS AS PRESERVATIVE

Fair and Lovely - Advanced Multi Vitamin

Fairever

Vivel Active Fair

Himalaya

Fair and Lovely - Max Fairness for Men

Emami Fair and Handsome

Garnier – Skin Naturals – Light

Ponds White Beauty

Nivea - For Men Advanced Whitening

OUR OBSERVATIONS on various labels:

THE following 3 brands do not mention the preservatives used in the produce.

`Dhathri Fair Skin Cream

Gokul Sandiva

VLCC – Men Active Light Fairness Moisture

THE LABEL OF THE FOLLOWING FAIRNESS CREAM DOES NOT MENTION THE OTHER KEY INGREDIENTS USED:

<u>VLCC – Men Active Light Fairness Moisture</u>

<u>Banjaras Saffron Fairness Cream – This</u> product has been packed only in <u>Lami tubes</u> and not in cartons, the secondary packaging material. <u>Leaflet printed with ingredients list</u> can be inserted

THE LABEL OF <u>VLCC – Men's Active Light Fairness Moisture</u> CREAM DOES NOT DECLARE CLINICALLY PROVEN/TESTED

OTHER OBSERVATIONS

Fair & Lovely Advanced Multi vitamin:

On the label is a phrase "Daily Fairness Expert"; this is an exaggerated claim as the human skin cannot become fair every day continuously

Recommendations to BIS and Other Regulatory Authorities

- 1. Scientific evidence as regards safety and efficacy of Skin lightening / Fairness products can be made mandatory by conducting clinical trials, before marketing each product.
- 2. Claims and Advertising of Cosmetics can as well be regulated by the **Drugs and Magic Remedies_Act**, 1954.
- 3. Promotion of the idea that fair skin is good and gives confidence and happiness while dark skin is a cause of unhappiness by advertisement should be avoided.
- **4.** Exclusion of **Parabens** from the creams and inclusion of other alternative safe preservatives. should be looked into.
- **5.** Manufacturers can disclose all the ingredients used on the Product label both in English and in the Local language, depending upon the place of product launch and product availability so that consumers can read the label and become aware of the ingredients added in the product before they start using the product.
- 6. Unlike for drugs, for marketing of cosmetic products, stringent data about its efficacy and safety has not been made mandatory.
 - In the Schedule of Drugs and Cosmetics Act, preclinical and clinical efficacy and safety data is required to get permission for marketing a new drug in India. Fairness creams act by modifying physiological actions in the body; it should therefore be mandatory that data for their efficacy and safety should be provided before marketing permission is given.
- 7. Advertising of drugs is regulated by The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954. However, claims and advertising done for cosmetics is not covered by the Act. This may warrant rectification as there are both economic and ethical issues to be considered.

USERS' PERCEPTION – <u>Many of the</u> Fairness cream_users <u>are aware that it does not</u> cause any appreciable skin lightening effect even after continuous use.

We have often seen advertisements of slimming clinics where an extremely fat person is transformed into a thin one. But one has never witnessed such a dramatic change with respect to the change in the complexion Even the advertisements only show a person getting a shade or two lighter. Indeed this is what our survey revealed.

We surveyed 71 persons who used fairness cream.

- More than 50% were happy with the overall performance of the fairness cream they used.
- Most of them agreed that it did not bring about any appreciable skin lightening but it gave them a psychological boost. They used it for the feel good factor.

- The major factors influencing consumers to purchase a brand / product are:
- ✓ Advertisement
- **✓** Offers introduced by the companies
- ✓ Influence by friends, relatives
- ✓ Price
- Many young boys and girls use fairness cream without letting their family know about it; often using saved pocket money to buy the fairness cream.

FAIRNESS AT WHAT COST??

Here is a True Story

A young girl saw her neighbour get shades fairer in less than a week; she was very impressed with the skin lightening result and she enquired more about her fairness regime.

The neighbour declared that she used a cream by name Melacare which she procured from the pharmacy; she further said she had seen her friend who had dark spots on her face use this cream and the spots lightened and so she decided to experiment with it as a fairness cream and found it to be useful.

WHAT IS THIS MELACARE??

Melacare is a bleaching agent containing hydroquinone, tretinoin, and mometasone (topical steroid). The purpose of using it is to lighten the skin.

This cream works very well if it is used and applied properly. One should only apply Melacare Cream at night just before going to bed, wash it off in the morning and apply some sunscreen, before going outdoors. Failure to do this will cause significant damage to your skin as it will go black. If your skin becomes irritated due to the use Melacare Cream, you have to stop using it.

The ingredient hydroquinone undergoes strong reactions when exposed to the sun, and this goes on to mean that you cannot be in the sunlight after applying it as it will bring about photoallergic reactions that will contribute to the darkening of your skin.

Unfortunately these young girls were illiterate and did not know that exposure to the sun after using this cream can cause skin damage; As a result within a few weeks of use their skin not only became dark and patchy was also inflamed.

They could not tell their family the reason for their skin condition as they did this without the knowledge of their family members. Fearing punishment they are suffering in silence.

In the prevailing circumstances consumers also need to understand about their own skin and think twice before they would purchase any skin care products per se. As manufacturers use advertisements as a product promotional media consumers should concentrate in surveying, choosing, selecting, purchasing their own product that would suit their skin nature and type and keep their skin safe.

Life's Priceless Riches are our Five Senses. Skin is one of the Sense Organs; the largest organ one interacts with World. It is therefore our duty to gratify and maintain our skin. Having known the details, let us take the privilege to maintain it with Good Ease.

Skin lightening is not only a psychological and social problem, but also a public health issue that needs to be addressed with targeted interventions aimed at changing perceptions and educating people. There is a need to generate scientific basis of claims made on skin fairness creams. This is important to protect consumers' interests who procure the products with the hope of becoming "fairer."