

Marketing Claims in Cosmetics – True or False?

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Every cosmetic marketing company wants its products to be attractive and enticing so that consumers readily buy it. Some of them even willingly overlook the strict barriers and guidelines law presents to manufacture and sell. Another trick they employ is to say deliberately that it does not contain a particular ingredient thereby implying that its product is safer in comparison to competitive products and this could be far from the actual truth.

DEFINITIONS

“Cosmetic” means any article intended to be rubbed, poured, sprinkled or sprayed on, or introduced into, or otherwise applied to, the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering the appearance, and includes any article intended for use as a component of cosmetic.

“Drug” includes,

1. all medicines for internal or external use of human beings or animals and all substances intended to be used for or in the diagnosis, treatment, mitigation or prevention of any disease or disorder in human beings or animals, including preparations applied on human body for the purpose of repelling insects like mosquitoes;
2. such substances (other than food) intended to affect the structure or any function of the human body or intended to be used for the destruction of [vermin] or insects which cause disease in human beings or animals, as may be specified from time to time by the Central Government by notification in the Official Gazette;
3. all substances intended for use as components of a drug including empty gelatin capsules; and
4. such devices intended for internal or external use in the diagnosis, treatment, mitigation or prevention of disease or disorder in human beings or animals, as may be specified from time to time by the Central Government by notification in the Official Gazette, after consultation with the Board.

“Ayurvedic, Siddha or Unani drug” includes all medicines intended for

internal or external use for or in the diagnosis, treatment, mitigation or prevention of disease or disorder in human beings or animals, and manufactured exclusively in accordance with the formulae described in, the authoritative books of Ayurvedic, Siddha and Unani Tibb systems of medicine, specified in the First Schedule.

FALSE CLAIMS - ADVERTISEMENTS

The status of many borderline products falling between medicinal product and cosmetics is difficult to determine. In addition, the products should adhere to existing laws comply with weights, measures, labeling rules and regulations. Compliance with law is mandatory and companies have to adopt the same if it wants to flourish or even survive in the market.

Consumers should look out for any infringement to these regulations especially in cases where products fall on the borderline between a medicinal product and cosmetics. The proliferation of products misleading consumers into believing that it will exert a physiological effect is only increasing day by day. Nowadays some manufacturers have no qualms to jeopardize a rational consumer’s credibility with product suggestions and claims that are outright ludicrous. Today cosmetic claims seen are “kills the bacteria responsible”, “moisturizing the skin to stop it from becoming dry”, etc. Any product that uses the word “heal” or states the product will be a remedy or for treating, an aliment is breaking the law. Logically are not claims, to relieve symptoms, to cure, remedy, or heal a specific disease, or adverse condition of body or mind, medicinal claims? Think about it!

The beauty industry targets consumers in the areas of stress, obesity, lifestyles and for being healthy. To look beautiful actually, one requires good food habits, diet, plenty of exercise and good amount of sleep, avoidance of alcohol and smoking. Once a person is able to get to a right combination of the above factors, it will initiate him or her to look and feel good. One should stay out of the mid-noon hot sun as it leads to premature aging of skin, but

avoiding sunlight totally will lead to “Vitamin D” deficiency. Claiming that a product “maintain”, “help to maintain”, “support”, etc., may not directly claim to heal but isn’t in a sense, imply that the product is for treating / preventing an adverse health condition?

Consumer commonsense balance will surely get disturbed hearing unbelievable promises of magical products that can reduce weight in a single application. Many products advertised now, and that claims such magical remedies include drinking herbal tea to reduce weight, a body wrap that shrinks adipose tissue of fat or cellulite, eliminating toxins from the body through the lymphatic system, exfoliating, smoothening, and softening skin, tightening loose skin tissue, firming up, and tightening it enabling one to loose 5-15 inches in jiffy.

It is important for consumers to note that our body removes toxins using our liver and kidneys with sufficient help of our lungs and nose that inhales oxygen and exhales carbon dioxide. Our lungs eliminate any damaging phlegm accumulated in our body by coughing. Lymph nodes act as filters and in association with the reticular connective tissue filled with lymphocytes’ collect and destroy bacteria’s and viruses. When a body is fighting an infection, lymphocytes multiply rapidly producing a characteristic swelling in the lymph nodes.

Untrue claims that a bandage soaked in colloidal clay can remove toxins could prove dangerous if some naive consumer seeing such advertisements believes it to be true and uses it to sort out an actual medical problem without approaching a medical practitioner.

Moreover, we measure weight in kilograms and grams and not in inches and centimeters as some advertisers suggest, all the more ridiculously untrue, saying that one can lose weight by wrapping one’s body with a few bandage like products for an hour or so everyday. Surprisingly we still see such advertisements claims promoted on TV with the relevant authorities

neither stopping nor prosecuting the advertisers but ignoring it totally.

NOT PRESENT – ADVERTISEMENTS

Cosmetic scientists to improve efficacy always try to add wonderful ingredients in their formulations. However, today the new marketing trend is to inform consumers, what is not present in the formula. The consumer in any case is not aware, about the replacement the formula uses for the missing ingredient and whether it is better than the regular one.

Natural ingredients often aver to be safer to chemicals in cosmetic product claims. This is far from truth. Nature is without doubt a wonderful provider of ingredients but to assume that all things natural are good is very erroneous. It is true that cancer drugs like “Taxol”, “Vincristine”, “Vinblastine”, and “Podophyllotoxin” do come from nature, but at the same time deadly poisons like “Strychnine”, “Colchicines”, “Nicotine”, and “Rotenone” are also coming from natural plants.

CONTAINS NO PARABENS

This is another unessential claim. We find parabens in nature, safe also occurring in the food we eat. 4-hydroxybenzoic acid and its various analogues are present in barley, strawberries, blackcurrants, peaches, carrot, onions, cocoa beans and vanilla. We find it in fruit juices, yeast extract, wine, vinegar and even cheese. Incidentally, Scandinavian cloudberry contains benzoic acid, sorbic acid, salicylic acid, 2-hydroxybenzoic acid, methyl, and propyl paraben, making cloudberry resistant to microbial spoilage. About 122 plants contain 4-hydroxybenzoic acid naturally and so using it in cosmetics as a preservative in very small quantities (below 0.3%) should not ideally cause major alarm.

Some researches in UK, USA, Australia, & Europe claim the presence of parabens in breast cancer patients however, linking it to the use of parabens-containing cosmetics without any conclusive evidence seems illogical. Some published data indicates that parabens demonstrates weak estrogenic activity in animal experiments and that enzymes present in the skin and subcutaneous fat cells are capable of breaking down topically applied parabens. In this

respect, we can consider parabens in cosmetic products as safe if used as directed by the formulator. It is unbelievable that companies can also make mileage and unique sales pitches by saying parabens are unsafe when in reality the opposite is true. Any company trying increase sales by creating a scare of using parabens is both scientifically uninformed & technically incompetent to be in this business.

CONTAINS NO CHEMICALS

To be frank actually this claim is not even worth commenting as irresponsible advertising that imply a product to be “chemical free” is certainly misleading and ethically incorrect. Everything on this world is chemical even air & water. Vacuum alone is chemical free and only an educated consumer will be able to take an informed decision on their purchase in such cases.

CONTAINS NO PRESERVATIVES

Is this another way of telling that the product does not contain preservatives officially permitted by legislation? Can a product offer sufficient preservative action and allow it to pass microbial challenge test mandatory by law? Some raw materials when added to a product reduce the level of preservative required to protect the product offering sufficient preservative action allowing it to pass the mandatory microbial challenge test. These materials could be aroma chemicals, essential oils, botanical extracts, etc. However, are botanical extracts itself preserved by using chemicals and can we check it? In this case, the botanical extract is definitely not a natural preservative. Many natural cosmetics use these tricks to market their products. It is better for consumers to know that high levels of alcohol, glycols, and sugars in cosmetics also give a high level of preservation.

CONTAINS NO PETRO CHEMICALS

The Britannica concise encyclopedia defines petrochemicals as “strictly any of a large class of chemicals (as distinct from fuels) derived from petroleum and natural gas. The category also includes organic chemicals, a few organic compounds including carbon black, sulfur, and ammonia. Can we unequivocally say that all chemicals are petrochemical

derivatives? The answer is a strict no as some chemicals do have alternative sources of manufacture (e.g., ethanol from fermentation, or benzene from coal). Just like crude oil and natural gas, petrochemicals consist of carbon and hydrogen and so are hydrocarbons.

Petrochemicals find use as feed stock raw materials for manufacture of ethylene, propylene, benzene, toluene, xylene, naphthalene and butadiene. Separating naturals from synthetics and categorizing them differently is difficult as one can trace all synthetics having their origins to a natural source. Conversely, most natural ingredients at some point or other during its lifetime involve the use of synthetic ingredients or process.

Webster’s new college dictionary has a number of interesting definitions for the word “natural”.

- Growing as a native and without cultivation
- Occurring in conformity with the ordinary course of nature
- Produced by nature
- Inferred from nature
- Consonant with nature
- Relating to nature
- Having or constituting a classification based on features existing in nature.

Geologists believe that during the past many centuries incompletely decayed remains of prehistoric marine animals and terrestrial plants mixed with mud remain buried under thick layers of sedimentary rocks. The high levels of heat and pressure caused these buried remains metamorphose into waxy ‘Kerogen’ which ultimately through the process of catagenesis was converted into liquid and gaseous hydrocarbons. The hydrocarbons then migrated through adjacent rock layers to collect within and under porous rocks or reservoirs forming oil fields. The alternate theory to the above biogenic petroleum origin is proposed by Thomas Gold. It suggests that large amounts of carbon exist naturally on earth. Some of them are in the form of hydrocarbons. Hydrocarbons are less dense than aqueous pore fluids and so they migrate in the upward direction. Microbes deep down in these deposits convert them into different types of hydrocarbons. Coal too comes from dead plants buried and compacted beneath sediments many millions of years ago.

Thermodynamic calculations and experimental studies carried out prove that n-alkanes do not spontaneously evolve from methane at pressures found in sedimentary rock basins but gets generated at 200 km or deeper below earth surface. In light of the above definitions, one can argue that petroleum oil and coal are natural. Are they not fossil remains of prehistoric animals and plants? True they are a million years old but are certainly natural!

Similarly, all external applications used on human body are artificial, as it did not exist at birth. In the same vein, can we say that flower extract obtained from rose petals is artificial, as it did not exist in nature? We use a number of synthetic fertilizers in cultivating plant crop. So are all crop plants synthetic? In fact a plant growing wild in the woods may also require artificial process to isolate and purify the active ingredient, so.....This debate can make us realize how difficult it is to discriminate an ingredient as natural or synthetic. Petrochemical does also have some wonderful products like petroleum jelly or petrolatum a very safe and protective moisturizing skin barrier and liked by most dermatologists over the years.

CONTAINS NO SYNTHETIC FRAGRANCES

Fragrances should not have prohibited aroma chemicals, limit allergens and declare it as per law. Truthfully speaking we find some ingredients declared as allergens in natural essential oils. Manufacturers advocating fully natural fragrances being better than synthetic fragrances probably are very poor in aroma chemistry.

CONTAINS NO SLS / SULFATES

SLS or Sodium Lauryl Sulfate is one of the most natural detergents produced from nature by humans. SLS is a simple chemical substance structurally and relatively easy to prepare. It is a remarkable foaming agent giving copious bubbles leaving our skin and hair squeaky clean. It is a detergent closer to coconut fatty acid and to say it is carcinogenic is a little far fetched.

Journal of the American College of Toxicology [Volume 2, Number 7, pages 127-181, (1983)] states that SLS and ALS (Ammonium Lauryl

Sulfate) appear safe in formulation designed for discontinuous brief use followed by through rinsing from the surface of the skin. In products intended for prolonged contact with skin, concentration of SLS/ALS should not exceed 1%.

In July 2000, CTFA (Cosmetic Toiletry and Fragrance Association; www.ctfa.org) issued the following response statement. Internet spread rumors about SLS and SLES (Sodium Lauryl Ether Sulfate/Sodium Laureth Sulfate) being unsafe are false and unsubstantiated. "It has come to our attention that an e-mail is currently circulating on the internet which falsely states that SLS & SLES ingredients used primarily in some cosmetics 'rinse off' products are unsafe. The story relayed via e-mail is an unsubstantiated story. It is typical of internet rumors notorious for inaccurate and false information.

There is no evidence of harm from the use of either SLS or SLES as used in cosmetic products. Both ingredients were reviewed in 1983 by the Cosmetic Ingredient Review (CIR) Expert Panel and found to be safe. Complete reports on both ingredients are available from CIR."

Other organizations like 'The Canadian Health Protection Branch', 'The American Cancer Society', 'The National Industrial Chemicals Notification & Assessment Scheme, Australia', issued similar statements branding internet rumors as hoax.

Current data available do not indicate SLS to be a skin sensitizer, genotoxic, carcinogenic or a reproductive toxicant. The toxicity of SLS is restricted to acute skin and eye irritation. Chronic toxicity on oral study of rats indicates primary local irritation. We see adverse health effects only at high doses of SLS in laboratory animals and the risk of such exposure to humans is low as the amount of SLS in cosmetics and so hence potential exposure is comparatively smaller. In any case, instances of leaving SLS on skin are minimal as it is a detergent and most times, we would rinse it off with water.

CONTAINS NO PEG/ ETHOXYLATES

This claim is gibberish to create a marketing opportunity either based on ignorance and/or the intention to cheat consumers. The truth is we produce an ethoxylate by grafting an

ethylene oxide unit onto a carbon chain structure. The fully reacted ethylene oxide results in a much milder molecule. Ethylene oxide in its raw state is carcinogenic but once reacted fully it is safe. SLS on chemical reaction with ethylene oxide gives SLES. Interestingly SLES has eight times lower irritancy than the original SLS. Further, more the ethoxylation we carry to SLES to achieve a higher mole ethoxylate (normal is two moles) the lower the irritancy.

In shampoo formulations we find a blend of SLES or SLS (say 75%) and (25%) of CAB (Cocamidopropyl Betaine). Blending the two gives irritancy values far less than if we use either of the products alone, thanks to synergistic effect. Ethoxylates are good fragrance solubilisers and is generally a part of the formulation in Eau de toilette, after shave lotions, deodorant sprays and other cosmetic emulsions. Ethylene oxide is a carcinogen in its raw state but when reacted to get an ethoxylated compound it is safe, similar to an acid being corrosive in nature but turning into a safe salt when reacted with a strong alkali.

CONTAINS NO SILICONE

Dimethicone is an inert material in cosmetics for lubricating the skin. To claim it as being absent as so the cosmetic is better is itself a puzzle. Looks some cosmetic manufacturers to improve sales want to link it to prosthetic silicone breast implants that leaked causing problems to the users who had such implants.

ORGANIC COSMETICS

Film actors and celebrities usually promote these expensive cosmetic products in TV channels. The organic certification scheme design is primarily for food products. It indicates that the manufacture of the food material is under organic conditions.

Personally, organic certification makes no sense. Water is not organic surprisingly, although it falls from the sky as a pure substance; further purified by distillation and demineralization to remove impurities. Is an organic product different from the regular one? I have no convincing answer to this question, a mystery to me until date. Some of my colleagues in the industry say that organic

essential oils and plant extracts are of inferior quality, are dark colored, sometimes rancid and with a poor odor profile. I am of the strong belief that organic material is a very good way for companies to make consumers pay four to five times the normal price for an inferior product and make substantial profit margins.

IMPORTANCE OF CONSUMER AWARENESS AND EDUCATION

Earlier cosmetics were sold on aesthetics, color, look and feel without

making any biological claims, however this is no longer so with marketers making simple cosmetics to cosmeceuticals. Today products contain active ingredients that provide added benefits on the final product. In such cases, it is of paramount importance that all advertisements and claims should reveal the truth in accordance to and in confirmation with science. Making credible claims should be an important aspect in marketing and for all marketers. Instead, what we encounter today are marketing claims more farcical and

absolute untruths peddled as gospel facts. Prosecution of such companies for unfair trading and misleading advertisements is one way to put an end to this. The second is for consumers to boycott such products voluntarily. In order to do this consumers have to become aware of facts by educating themselves about the materials they want to use so that they are able to identify ridiculous claims of companies who do not mind being dishonest and guilty of meaning less promotional statements to make a fast buck.

FOOD REFRIGERATION TIPS

Very often we keep all our fresh foods in the fridge to prevent it from going bad, but should we keep it all refrigerated. No! Here are 10 common foods we should avoid from cooling too much, to prevent ruining it also destroying its taste.

- 1. Tomatoes:** The fridge does keep tomatoes fresh, but it does this by stopping the process of ripening. When this process stops, the tomato loses its flavor. In addition to the loss of flavor, the refrigerator also changes the texture of the tomato, making it powdery or floury. Keep tomatoes out of cooling, in a basket.
- 2. Basil:** When one keeps fresh basil in the refrigeration, it withers very quickly, but before it withers all the way and becomes unusable, it absorbs the taste of the foods kept close to it. The best way to keep fresh basil is outside the fridge, in a glass of fresh water, just like flowers.
- 3. Potatoes:** The cold of the fridge turns the starch in the potato into sugar at a faster pace, and we get a sweet, yet grainy potato. Keep potatoes in a sealed sack, in a cool, not cold place. Exposing to sunlight makes them grow 'eyes'.
- 4. Onions:** The damp in the fridge makes the onion soft and moldy. The best way to keep onions is in a cool and dry place, outside the fridge. Keep green onions in the fridge because of their high percentage of water content. Be sure not to keep onions next to the potatoes, because it will make them both go bad faster.
- 5. Avocado:** If we are waiting for the avocado to ripen, we should never put it in the fridge. A refrigerator does well by the avocado, but only if it has already ripened, and we want to prevent it from going bad.
- 6. Garlic:** When we keep garlic in the refrigerator, it begins to shoot out and grow green stalks. In addition, it will get a moldy, sticky texture. It is best to keep garlic in a dry, cool place.
- 7. Bread:** When it comes to bread, there are a number of options. Keep in a fridge only sliced bread for use within a few days. When we keep bread for longer, the fridge will make it dry out faster, and so it is best to keep it somewhere closed off, but not in the refrigerator. If we only rarely eat the bread, keep it in the freezer.
- 8. Olive Oil:** Keep olive oil in somewhere dark and cool, but when put in refrigeration, it freezes and becomes very much alike butter. However, we can thaw it again to its original state.
- 9. Coffee:** Storing coffee in the fridge makes it quickly lose its flavor and even absorb the flavor of foods stored near it. Keep coffee in the dark, somewhere cool. However, we may keep a large amount of coffee at home in the depths of the freezer and not near the door.
- 10. Honey:** One of the most fascinating facts about honey is that it never goes bad. A thousand years old honey will still be good. Do not keep honey in the fridge, as it will make it a solid. Always keep honey at room temperature.

WHAT IS SWINE FLU?

The human respiratory infection caused by an influenza virus H1N1 strain — popularly known as swine flu — was first recognised in 2009.

The H1N1 virus is contagious and can spread from human to human. Symptoms of swine flu in people are similar to the symptoms of regular human flu and include fever, cough, sore throat, body aches, headache, chills and fatigue.

Technically, the term "swine flu" refers to influenza in pigs. Occasionally, pigs transmit the influenza virus to people.

PRECAUTIONS AGAINST H1N1 OR SWINE FLU



Covering your nose and mouth with a tissue when you cough or sneeze.

Washing your hands often

You can also use alcohol-based hand cleaners.

Avoiding touching your eyes, nose or mouth. Germs spread this way.

Trying to avoid close contact with sick people.



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