Warning: Your Therapeutic Lotions, Creams and Gels May Contain Harmful Ingredients

By Christine H. Farlow, DC

Stop! Before you put that lotion on your next patient’s back, make sure you read the list of ingredients - all the ingredients. Various ingredients in the products you use in your office can be absorbed through your patient’s skin into their bloodstream. Those same chemicals may be stored in their body fat at much higher concentrations. How do you choose the products you use on your patients’ skin, whether to ease their pain or in conjunction with physical therapy modalities? Have you ever looked at the ingredients in the products you use?

The cosmetics industry is highly unregulated. Manufacturers can use virtually any ingredients they want in the products they manufacture. The FDA does not regulate the cosmetic industry and has no control over whether the products are safe. The FDA can make suggestions or recommendations to manufacturers about cosmetic products or their ingredients, but the manufacturers do not have to comply. The FDA must first prove in a court of law that a product is harmful, improperly labeled or violates the law if it wants to remove a cosmetic product from the market.

The definition of cosmetic products consists of all cosmetics and personal care items, including the lotions and gels you use when treating your patients. Products that contain "active ingredients" are classified as drugs. The non-active ingredients in these products are the same types of ingredients found in cosmetics and personal care products on the market. In many cases, the sales reps who sell you these products don’t know anything about the safety of the ingredients used in the products they’re selling you. They just know what they’re trained to tell you.

It would seem as if the products sold to practitioners in the alternative healing arts would be natural with healthy ingredients. Certainly some that fall into this category, but for a great many products, this isn’t the case.

When you consider a product, whether for use on your patients or for personal use, the most important thing to read before you decide to buy is the ingredients list. You might want to keep a magnifying glass handy.
because sometimes the ingredients are in a print so tiny it’s almost impossible to read. If the ingredients don’t pass the test, all of the other information about the product is irrelevant. Here are some ingredients found in many lotions, creams and gels, and sold to health care practitioners, that should be avoided.

- **Triethanolamine (TEA)** is a mutagen and is considered hazardous/moderately toxic. It’s a skin, mucous membrane and eye irritant, a sensitizer and causes contact dermatitis. Some individuals suffer allergic reactions. TEA is absorbed through the skin. Frequent exposure may cause kidney and liver damage.\(^1\)\(^-\)\(^4\)

- **Methylparaben** is a mutagen, a skin irritant and may cause allergic reactions. It can cause sensitivity in those allergic to local anesthetics such as benzocaine or Novocain. Numerous health problems have been associated with methylparaben including contact dermatitis and asthma. It’s completely absorbed through skin and is a weak endocrine disrupter.\(^1\)\(^,\)\(^5\)\(^-\)\(^8\)

- **Propylparaben** disrupts the endocrine system. It’s a skin irritant, a strong allergen and may cause numerous health problems including contact dermatitis and asthma. It’s considered hazardous/moderately toxic. Carcinogenic, mutagenic, teratogenic or developmental toxicity effects have not been studied.\(^1\)\(^,\)\(^9\)\(^-\)\(^11\)

- **DMDM hydantoin** is a skin irritant, a sensitizer, a possible mutagen and may cause allergic dermatitis. It contains formaldehyde and releases it into the product in order to preserve it. Formaldehyde is classified as a Group 1 carcinogen by the International Agency for Research on Cancer - it definitely causes cancer.\(^1\)\(^,\)\(^12\)\(^-\)\(^13\)

- **Diazolidinyl urea** is a formaldehyde releaser. It’s a possible mutagen, skin irritant, sensitizer and may cause allergic reactions.\(^1\)\(^,\)\(^14\)

- **Imidazolidinyl urea** is also a formaldehyde releaser and a possible mutagen. It’s a strong irritant, a sensitizer and causes contact dermatitis.\(^1\)\(^,\)\(^15\)\(^-\)\(^16\)

- **PEG (polyethylene glycol) compounds** may be contaminated with the carcinogen 1,4-dioxane. They are absorbed through the skin, are eye and skin irritants and are considered hazardous on large areas of the body. All ingredients with PEG in the name should be avoided.\(^1\)\(^,\)\(^17\)\(^-\)\(^18\)

Other ingredients that may be contaminated with 1,4-dioxane contain ceteareth, laureth, myreth, oleth, any other chemical ending in “-eth,” polyethylene, polyoxyethylene or oxynol.\(^18\)
A recent study commissioned by the Organic Consumers Association revealed the presence of 1,4-dioxane in a large number of personal care products, including those labeled as organic and found on the shelves of many health food stores. Ingredients containing these contaminants are widely used. Products certified organic or that adhere to the organic standards of the National Organic Program (food standards) will not contain these contaminants.¹⁸

**Note:** Not all organic standards are created equal. The Ecocert and OASIS Organic Standards are not true organic standards. These organizations are known to certify products as organic that contain synthetically derived ingredients and really do not meet true organic standards.¹⁹-²⁰

- **Propylene glycol** is a strong irritant and penetration enhancer, absorbed quickly through the skin. It may cause delayed allergic reactions, acne and contact dermatitis. The potential for propylene glycol to cause cancer has not been fully investigated. It is a neurotoxin and may cause kidney and liver damage.¹,²¹

- **Sodium hydroxymethylglycinate** is a skin and eye irritant and a sensitizer. It’s a formaldehyde releaser, breaking down into sodium glycinate and formaldehyde in aqueous solution.¹,²²

- **FD&C yellow #5 (aka Yellow #5)** is derived from cancer-causing coal tar and may contain carcinogenic contaminants. It may cause life-threatening symptoms in individuals who are sensitive to aspirin.¹,²³-²⁴

- **FD&C blue #1 (aka Blue #1)** is also derived from coal tar and may be tainted with cancer-causing contaminants.²⁵

**Note:** FD&C colors are certified by the FDA to not contain more than 10 ppm of lead and arsenic. D&C colors are certified to not contain more than 20 ppm. Most FD&C and D&C colors are derived from coal tar. Certification does not address any harmful effects these colors may have on the body. Most coal tar colors are potential carcinogens, may contain carcinogenic contaminants and cause allergic reactions.¹

Some ingredients may be produced by different processes. One method may produce a chemical that is perfectly safe, while another may not. That information is not likely to be printed on the label; you will have to contact the manufacturer to obtain it. One such ingredient is polysorbate 60. If naturally derived, it’s fine. However, if synthetically derived, it may be contaminated with the carcinogen 1,4-dioxane.²⁶
Frequently, manufacturers will list the healthy ingredients contained in their products in their advertising and on their Web sites, purposely leaving out the synthetic chemical ingredients that can cause a wide variety of harmful effects. In many cases, unless you read the complete ingredients list in tiny print on the back of the label or call the manufacturer, you may be using products yourself or on your patients with ingredients that may cause harm.

This is only the tip of the iceberg. There are more than 15,000 ingredients with 63,000 different names that manufacturers can use in their products. Most have not been fully tested for safety. Safety testing has been done on various individual ingredients, but not on combinations of ingredients. Ingredients that are safe individually may be harmful in certain combinations. No one knows the effects of the many different ingredients used in the thousands of different combinations, the effects of using numerous different products, one on top of the other, or the effects of repeated use of ingredients or products over time.

To make sure you’re using products with only safe and healthy ingredients, read the ingredients list on the label. Use a reference if necessary to determine the safety of the ingredients. Choose certified organic products when available. And remember, manufacturers sometimes change the ingredients in their products, so read the ingredients list every time you buy, even if you’ve been using the product for years.

References

6. http://findarticles.com/p/articles/mi_m0PDG/is_1_7/ai_n24258984.
In this case, "synthetically derived" is also known as PEG-60.

Dr. Christine Farlow practices in Escondido, Calif. The author of *Dying to Look Good* and *Food Additives: A Shoppers Guide to What's Safe & What's Not*, she has been researching ingredients in food, cosmetics and personal care products since 1991. E-mail questions and comments to dr.cfarlow -at- dyingtolookgood.com.

Page printed from: