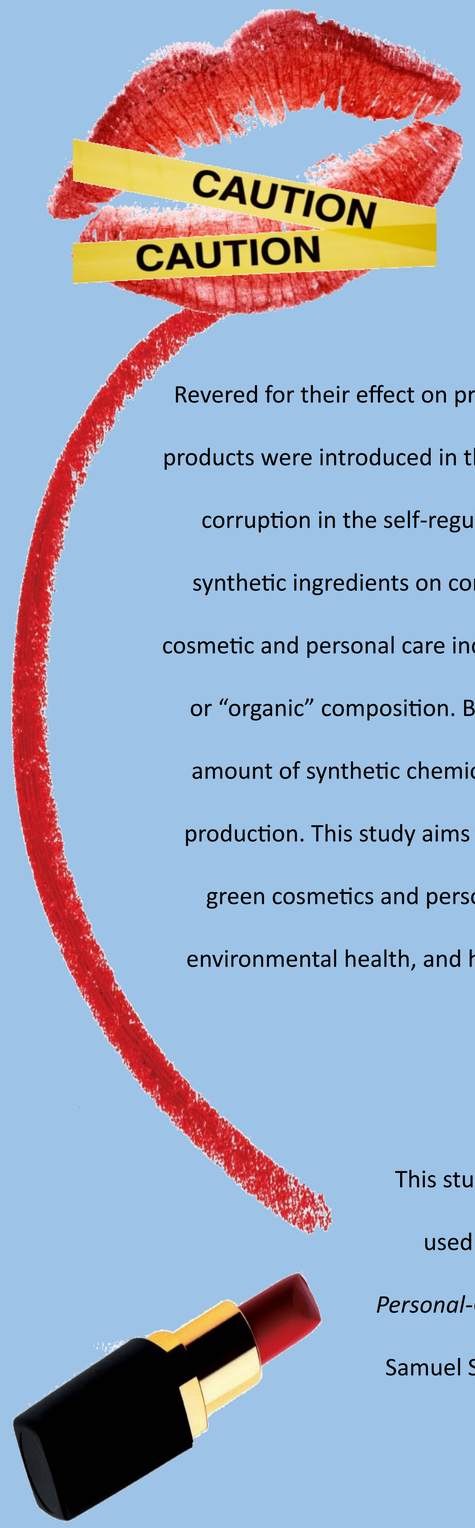
The Dangers of Synthetic Cosmetics and Personal Care Products and the Implementation of the Green Movement

BY: Haleigh Linn

Advisor: Christopher Thoms



Abstract

Revered for their effect on product performance, synthetic ingredients in cosmetics and personal care products were introduced in the beginning of the twentieth century. Lack of government regulation and corruption in the self-regulation of these industries has continually hidden the adverse effects of synthetic ingredients on consumers and the environment. However, in light of recent demand, the cosmetic and personal care industries are creating "green" products with perceived or existing "natural" or "organic" composition. By greening the cosmetic market, some producers have tried to limit the amount of synthetic chemicals that go into their products and promote environmentally conscious production. This study aims to address the role of advertising in promoting the sale of synthetic and green cosmetics and personal care products, the effects of synthetic ingredients on human and environmental health, and how the cosmetic and personal care industry can effectively create green products.

Methods

This study was conducted through literary research analysis. Prominent novels used for conducting this research were *Toxic Beauty: How Cosmetics and Personal-Care Products Endanger Your Health... and What You Can Do About It* by Samuel S. Epstein and Randall Fitzgerald, *Not just a Pretty Face* by Stacy Malkan, and *Drop-Dead Gorgeous* By Kim Erikson.

Table 1: Frank Carcinogens

Acesulfame	DEA cocamide condensate
Acrylamide	DEA oleamide condensate
Aspartame (NutraSweet)	DEA sodium lauryl sulfate
Auramine	Diethylhexyl phthalate (DEHP)
Bisphenol-A (BPA)	Dioctyl adipate
Butadiene	Disperse blue 1
Butyl benzyl phthalate	Disperse yellow 3
Butylated hydroxyanisole (BHA)	Formaldehyde
Chromium trioxide	Glutaral
Coal Tar Dyes	Hydroquinone
D & C	Lead
Green 5	Limonene
Orange 17	Metheneamine
Red 3, 4, 8, 9, 17, 19, 33	Methylene chloride
FD & C	Mineral oils
Blue 2	Nitrofurazone
Green 3	Phenylenediamines
Red 4, 40	Pyrocatechol
Yellow 6	Saccharin (Sweet 'N Low)
Cobalt Chloride	Silica (crystalline)
Cyclamates	Talc (powder)
Diaminophenol	Titanium dioxide (powder)
Diethanolamine (DEA)	

Tables are provided by the Cancer Prevention Coalition

Table 2: "Hidden" Carcinogens

CONTAMINANTS	
Ingredient	**Contaminated With**
Acrylate and methacrylate polymers	Ethylhexyl acrylate
Amorphous silicate	Crystalline silica
Alcohol ethoxylates • Laureths • Oleths • Polyethylene glycol (PEG) • Polysorbates	Ethylene oxide, 1,4-dioxane
Butane	Butadiene
Coal tar dyes	Arsenic, lead
Glyoxal and polyoxymethylene urea	Formaldehyde
Lanolin	Organochlorine pesticides, PCBs, ceteareths
Petroleum	Polycyclic aromatic hydrocarbons
Phenol ethoxylates • Nonoxynols • Octoxynols	Ethylene oxide, 1,4-dioxane
Polyacrylamide and polyquaternium	Acrylamide

FORMALDEHYDE RELEASERS

Diazolidinyl urea
DMDM-hydantoin
Imidazolidinyl urea
Metheneamine
Polyoxymethylene
Quaterniums
Sodium hydroxymethylglycinate

NITROSAMINE PRECURSORS

Bononitrodioxane (nitrite donor)
Bronopol (nitrite donor)
Cocamidopropyl betaine
DEA and fatty acid condensates
DEA sodium lauryl sulfate
Diethanolamine (DEA)
Morpholine
Padimate-O
Quaterniums
Sarcosine
Triethanolamine (TEA)

Conclusion

Advertising for synthetic cosmetics and personal care products sell sex, luxury, and youth. The Green cosmetic and personal care products industry, however, focuses on environmental consciousness in the production of products and limited synthetic ingredients. Cosmetic and personal care products created with synthetic ingredients often contain penetration enhancers, hormone disruptors, and carcinogens. Long-term exposure can disrupt functions in the body as well as negatively effect ecological structures. Green cosmetics are not only feasible but are important because they provide consumers with products that are safer for human health as well for the environment. Green cosmetics can be achieved by using biodegradable ingredients, lowering water activity, decreasing or increasing pH values to reduce microbial growth, using airtight packaging, and keeping oils in a continual stage of emulsion.