Toxics in Cosmetics

As Orthodox Christians, we respect life and make a special effort to avoid harm to one another or to God's creation. By implication this means that we also strive to avoid products or agents that are harmful or cause injury. A problem area that is only now coming into clear focus involves the toxic ingredients used in cosmetics.

Since the 1930s, the only thing the FDA regulates is the accuracy of the labeling on cosmetics. The rule is extremely slim: it requires a manufacturer to list the industrial chemicals, heavy metals, and toxic substances that are included in the container. That's it! In practice this means that companies can put any ingredient they choose into eye creams, face wash, lipstick, lotions, and other cosmetics. This is despite a growing awareness of how easily poisons and pollutants are absorbed through the skin.

Because of the lack of oversight by government coupled with a lack of ethical restraint by manufacturers, numerous toxic chemicals have crept into cosmetics. These toxic ingredients bear a significant level of responsibility for increasing birth defect rates, reproductive harm, learning disabilities, asthma, cancers, and other health disorders. Some examples:

- In 2010, plastic baby bottles were found to contain the chemical Bisphenol A (BPA). Dr. Samuel Epstein, M.D., chairman of the President's Cancer Prevention Coalition, warned that Bisphenol-A (BPA) is linked “to breast cancer, obesity, and other disorders.” BPA is used as a plasticizer in cosmetics and food can linings, among many uses. It also disrupts normal hormone function.

- In 2007, The Campaign for Safe Cosmetics purchased a wide range of lipsticks and tested them for heavy metals. Over 60 percent contained lead, a potent neurotoxin. Lead can cause learning, language and behavioral problems and is linked to infertility and miscarriages. Some companies used higher lead levels in lipstick than other companies. These included Revlon, Cover Girl, and L'Oreal. Health-conscious women should be aware of the higher lead content in these brands.

- Some cosmetic companies add mercury, a potent neurotoxin, to eye products as a preservative. Federal law allows cosmetics to contain up to 65 parts per million of mercury. Mercury can pass from a pregnant woman or a nursing mother to her baby. Because mercury alters the way young brains develop, it can particularly harm babies and children.

A problem in addressing these toxic ingredients is that the cosmetics lobby has received a special waiver from regulation on skin and beauty products. A consequence
is that the FDA has no authority to require companies to test products for safety. Without regulation, U.S. companies sell over 500 products that contain ingredients that are banned in Canada, the European Union and Japan.

Another problem is that cosmetic advertising claims are unregulated. This means that companies are rarely required to prove their claims, even for children's products. A 2007 investigation of over 1,700 children's body care products found that 81 percent of those marked “gentle” or “hypoallergenic” contained allergens or skin and eye irritants.

The issue becomes complicated because federal law allows companies to leave many chemicals off of labels if their ingredients are trade secrets or components of “fragrance.” This term fragrance may include any of over 3,000 different chemicals, none of which must be listed on labels. Tests on “fragrance” reveal an average of 14 hidden compounds per formulation, including potential hormone disruptors.

Thousands of dangerous chemicals are used in cosmetics. The problem is not just for women. Surveys show that women use about 12 different products (containing 168 ingredients) while men use 6 products with 85 ingredients. With this as background, use the list below as a guide to check ingredients for which products to avoid in cosmetics.

**Acetone or Acetaldehyde**
This chemical is often found in nail polish and nail care products. It is known to cause cancers in humans. Effects of long-term exposure can also include kidney, liver and nerve damage, increased birth defects, metabolic changes and coma.

**Benzoyl Peroxide**
This chemical is found in acne treatments, bar soap, facial cleansers and even food additives! This is a highly toxic irritant. In animal studies, it causes cancers.

**Coal Tar**
This is used to treat eczema, psoriasis, and other skin disorders; it is found in anti-itch creams, hair dyes and some scalp treatments. It is a known carcinogen and may be contaminated with heavy metals that are toxic to the brain (IARC 1985, 1987).

**Cocoamide DEA**
Also known as diethanolamine, or triethanolamine, this is a shampoo thickener and foam stabilizer. According to the FDA, this chemical is harmful if swallowed, inhaled or if brought into contact with the eyes or skin. It may form carcinogenic nitrosamines.

**Diazolidinyl Urea**
This chemical is used as a preservative in skin care products, baby wipes and detergents. It breaks down in the product or on the skin and releases formaldehyde. It's an endocrine disruptor, a possible neurotoxin, a known immune system toxicant and has a possible link to cancer. Even supposedly natural companies often use this ingredient.
**Diethanolamine (DEA)**
Look for this lathering agent in soaps and shampoos. It can appear in many forms, including Cocamide DEA, Oleamide DEA, and Lauramide DEA. DEA alone is not harmful but while sitting on stores shelves or in your medicine cabinet at home, DEA can react with other ingredients to form an extremely potent carcinogen called nitrosodiethanolamine (NDEA). NDEA is readily absorbed through the skin and has been linked with stomach, esophagus, liver and bladder cancers.

**Fragrance**
Over 3,000 chemicals that are used to produce fragrances. Companies don't disclose the components of each fragrance because each one is considered its own unique trade secret. Fragrance is known to cause many side effects, including headaches, fatigue, forgetfulness, insomnia, irritability, visual problems, clumsiness, and allergic reactions. Make a special effort to avoid products that use this ingredient.

**Formaldehyde**
This common ingredient occurs in many beauty products. Formaldehyde can irritate the eyes, nose and throat, or dry out and irritate skin. In sensitive individuals it triggers asthma attacks. It is a proven carcinogen. The International Agency for Research on Cancer (IARC) classifies formaldehyde as a human carcinogen.

**Hydroquinone**
Usually associated with skin lighteners, hydroquinone decreases skin melanin and increases exposure to ultra-violet light which increases skin cancer risks in addition to the chemical’s carcinogenic effects. The U.S. Cosmetics Ingredient Review Panel finds that hydroquinone is not safe for use on skin. The EWG’s Skin Deep database identifies hydroquinone as a carcinogen, immunotoxicant, and developmental and reproductive toxicant. This chemical is banned in Australia, Japan, and the European Union.

**Methylparaben**
This is a cosmetic preservative. Methylparaben, and any chemical ending in Aparaben, behaves like estrogen in the body. It can throw off hormonal balance. Parabens accumulate in cancerous breast tumors; they may trigger allergies and reproductive problems.

**Mineral Oil**
Also called Petrolatum, mineral oil is used in many moisturizing products. It is a petroleum by-product that clogs the pores and reduces the skin's ability to eliminate toxins. It promotes acne and skin disorders. Mineral oil has also been associated with premature aging. Any product that contains mineral oil may also be contaminated with cancer causing Polycyclic Aromatic Hydrocarbons.

**Phenylenediamine (PPD)**
PPD is an ingredient in hair and eyelash dye. The National Institute for Occupational Safety and Health (NIOSH) finds a higher incidence of cancer among hairdressers and
cosmetologists who have the highest PPD exposure. Although PPD is not approved for products that come in contact with the skin, hair dye usually gets on forehead skin or ears for up to 30 minutes.

**Propelyne Glycol**
This serves as a penetration enhancer. This means that it is designed to carry chemicals through the skin into the bloodstream. It's a known skin irritant; the FDA lists it as a carcinogen, meaning it can cause cancer. It is a probable endocrine disruptor and a neurotoxin. It is connected to kidney and liver damage. Propelyne glycol is found in over 3,000 products, including lotions, deodorants, sun screen, and hair conditioners.

**Sodium lauryl sulfate (SLS)**
SLS, or sodium laureth sulfate, is a common ingredient in shampoos and liquid soaps, and it is used as a foaming agent. SLS is a skin irritant and can enter the heart, brain, and liver through the skin and accumulate in these organs. SLS is a highly corrosive chemical that is also used in garage floor cleaners, degreasers, and industrial soaps. SLS is commonly contaminated with dioxane, a known carcinogen.

**Tetrasodium EDTA**
Tetrasodium EDTA is a cosmetic preservative and also a penetration enhancer that breaks down the skin's protective barrier and carries the cosmetic right into a person's bloodstream. It is made from the known carcinogen formaldehyde and sodium cyanide. Many companies, trying to be "natural," will use Tetrasodium EDTA instead of parabens to preserve their products. Tetrasodium EDTA is just as bad.

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Consumers who are armed with accurate information about the specific toxic ingredients in personal care products will be able to make informed decisions that will protect their health. Source: http://www.inspiredliving.com. To check for hazards in the cosmetics that you use, see http://www.ewg.org/skindeep/. Over 65,000 products are listed and screened on this website.

When choosing cosmetics, read the list of ingredients and go as simple and natural as possible. As a general rule, avoid cosmetic products that do not carry certified organic seals and/or the logos of organizations that have tested the product and found it safe. Out of respect for the body as the temple of the Holy Spirit, make the switch to safe cosmetics. This is to maintain your own health and to set a good example for others.

Generally, the greener and healthier that we seek to become, the more we have to scrutinize the products that we use.