

# Labels on Health and Beauty Products:

## *an Essential Guide on How to Read Them, What to Use and What to Avoid*



After having read an extremely important article published in the Look Good Feel Better magazine, 2004, I felt that many women could benefit from some guidance in learning how to read the labels on the skin care, body care, hair care, cosmetics and nutritional products they consume.

There are new products being launched all the time. Just because you have used old faithful for the past 10 years without incident i.e. hives or breakouts, doesn't mean that there might not be something better for you. Just as our skincare and body care needs change over time as we age, we need to change the products we use to address them also. Certainly, if you have been diagnosed with a serious illness or chronic condition, your body will welcome products that are truly fresh, pure, balancing, soothing and rejuvenating.

It is exceedingly important that as a patient, consumer or client, you are not misled by the information given on product labels. The following are a list of strategies and tips you might find useful.

- 1) **Formulators of personal care products are required to list the ingredients in descending order by quantity of composition. It is a legal requirement. If the label does not conform, don't buy the product.**
- 2) **Bottom's up.** Sometimes the ingredient that the manufacturer is least proud to show off is listed at or near the bottom of the list in accordance with 1), so start there. Some of the most potentially dangerous chemicals are also the most potent, so they don't need to exist in large quantities to be troublesome especially if you use them twice daily for years. Remember that your skin absorbs and is likely to deliver to your bloodstream whatever you rub into it. Your skin, the largest organ of your body is a prime entryway for toxic chemicals, the others of course being your mouth and your nose.
- 3) **What definition of 'organic'** is the creator of the range of products using. Many will claim that their ingredients are 'organic' but in fact are referring to the definition that your favourite chemistry professor insisted you learn: that all compounds containing the element, carbon, which inherently are derived from previously living matter, would qualify. Sorry, both you and your prof would fail this test. By 'organic', the meaning that is now ethically adopted in the agriculture and cosmetic industry is that the ingredient was grown, harvested and processed without the addition of any synthetic chemicals whatsoever—pesticides, fungicides, insecticides, genetically modified organisms, solvents, stabilizers etc.
- 4) **The only way to be confident with the product is to ensure that the use of the word organic** has required third-party verification in which case the product is certified according to IFOAM standards. The International Federation for Organic Agriculture Movements is a global organization with the highest standards for accreditation by certifiers. Ensure that any 'certified organic' product was declared so by an IFOAM member in good standing. To review a pdf of the list members go to: [www.IFOAM.org](http://www.IFOAM.org). Having said this, there are many wonderfully pure ingredients and natural products that have not undergone the rigorous procedures required for certification. See if the manufacturer is open to telling you where the ingredients were grown and harvested under what conditions. Remember: The absence of a guarantee such as certification does not equate with a guarantee of absence of the good stuff—just watch out for the bad or questionable stuff.
- 5) **Look for percentages.** This will clue you into approximately how much of a so-called key ingredient was actually incorporated into the product's formulation. For example, if you're considering buying apricot cream and it is listed as the 3rd ingredient of 24, but apricot oil accounts for only 2.5% of the content of the cream—keep walking.
- 6) **Avoid petroleum-based ingredients.** These include the parabens, paraffins and petrolatum products. These are derived from the same crude that was processed to fuel your car. The processes involved in getting them to the state used in lotions, potions and other goodies are loaded with toxic and carcinogenic solvents. Any chemical with paraben as the root word such as methylparaben, propylparaben are suspect.
- 7) **Do not assume that ingredients derived from natural crops are still natural.** For example, many manufacturers love to say claims such as "from coconut", erroneously leading the buyer to assume that the ingredient is still natural. The truth is that too many conventional processes used in skin-, body- and hair-care products require the addition of synthetic chemicals to the ones that Mother Nature gave us. You might have seen Cocamide DEA (derived from coconut oil), a commonly used foaming agent used in shampoo; however, it requires the addition of Diethanolamine, a known carcinogen. So, is it still natural or safe?
- 8) **Avoid colours and dyes such as FD&C Yellow#5 and D&C Red#4**—I still don't know what these are, truly, except standardized dyes. Somewhere along the line, they've also been listed as carcinogens. According to CBC Marketplace, January 28, 2003 broadcast (excerpt from Unreasonable Risk by Samuel Epstein), the "frank carcinogens" (cancer causing) are: D&C—Red 2,3,4,8,9,10,17,19 & 33; Green 5; Orange 17; FD&C—Blue 1 & 2 Green 3; Red 4 & 40; Yellow 5 & 6; Blue 1,2,4; Diaminophenol, Disperse Blue 1 and Disperse Yellow 3. Additionally, there is a host of other "frank carcinogens" such as: Benzyl Acetate, Butylated Hydroxyanisole (BHA) Butylated Hydroxytoluene (BHT), Butyl Benzylphthalate, Coal Tar Dyes (and lakes), Nitrophenylenediamine, p-Phenylenediamine\* (following oxidation), Phenyl-p-phenylenediamine, Crystalline Silica, Diethanolamine (DEA), Dioctyl Adipate, Ethyl Alcohol\*, Fluoride\*, Formaldehyde, Glutaral, Hydroquinone, Methylene Chloride, Polyvinyl Pyrrolidone, Pyrocatechol, Saccharin, Talc, Titanium Dioxide (\*Evidence of carcinogenicity is limited).

### **Others to look out for, but be careful, because they are "hidden", include:**

Aflatoxin (in peanut oil and flour); Arsenic and Lead (in coal tar dyes, polyvinyl acetate, PEGs or polyethylene glycols); Chloroaniline (in chlorhexidine); Crystalline Silica (in amorphous silicates); DDT, Dieldrin, Endrin and other organochlorine pesticides (in lanolin, hydrogenated cottonseed oil—found in numerous candies and chocolate bars, quarternium-26); DEA or diethanolamine (in DEA-cocamine/lauramide condensates, quarternium-26); 1,4-Dioxane (in ethoxylated alcohols, including PEGs, oleths, choleth-24, cetearth-3, laureths, polysorbate 60 & 80, nonoxynol); Ethylhexylacrylate (in acrylate and methacrylate polymers); Ethylene Oxide (in PEGs, oleths, cetearth-3, laureths, polysorbate 60 & 80, nonoxynol); Formaldehyde; (in polyoxymethylene urea).

#### **Nitrosamine (NDELA) Precursors:**

Bromonitrodioxane; Bronopol (2-bromo-2-nitropropane-1,3-diol); Diethanolamine (DEA); DEA-Cocamide, Lauramide & Oleamide condensates; Metheneamine; Morpholine; Padimate-O (octyldimethyl para-amino benzoic acid); Pyroglutamic Acid; Triethanolamine (TEA); TEA-Sodium Lauryl Sulfate.

#### **Formaldehyde Releasers:**

Bronopol; Diazolidinyl Urea; DMDM-Hydantoin; Imidazolidinyl Urea; Metheneamine; Quarternium-15; Sodium/Hydroxymethylglycinate.

Now, if just trying to read those fancy chemical names made you kind of dizzy, just think of what they can do to your insides.

Here's a summary chart that should make it a little easier.

The Good	The Bad and the Ugly
<b>Emollients</b>	
<p>Protect skin and prevent dryness. Barrier and healing agent. Naturally nourishes the skin. Easily metabolized by the skin's enzymes and absorbed. Look for edible quality plant oils such as Jojoba, Avocado, Rosehip, Shea, Cocoa and Jojoba Butters</p>	<p>Synthetic emollients coat the skin and prevent respiration (the plastic wrap effect). Skin irritation, liver and lymph nodes accumulation can occur. Non-biodegradable with poor environmental consequences.</p> <p><b>Examples:</b> PEG compounds; synthetic alcohols such as benzyl-, butyl-, cetearyl-, cetyl-, glyceryl-, isopropyl-, myristyl-, propyl-, propylene- or stearyl-, e.g. Isopropyl Palmitate, Diglyceryl Caprylate have been shown to cause allergies and dermatitis. Hydrocarbons (e.g. mineral oil, petrolatum, paraffin) contain carcinogenic and mutagenic polycyclic aromatic hydrocarbons (PAH) and can cause chemically-induced acne. Silicone oils will clog the skin e.g. dimethicone, cyclomethicone, copolyol.</p>
<b>Humectants</b>	
<p>Moisturize the skin. Natural phospholipids from non-GMO lecithin are the best. Phospholipids are hydroscopic or attract water from the surrounding air toward the skin and hold it there for maximum hydration. Topically applied plant phospholipids restore the barrier function of skin, protecting it from bacteria and harmful chemicals. Look for Lecithin, Panthenol (pro-vitamin B5) and Glycerin.</p>	<p>Collagen, elastin and keratin—the most popular in this group are sourced from animals and are therefore not 'cruelty free'. They have molecules that are too large to penetrate the skin. Examples: Propylene Glycol and Ethylene/Diethylene Glycol which causes irritation and contact dermatitis; PEG compounds e.g. polyethylene Glycol which may contact the toxic by-product dioxane; Ethoxylated surfactants e.g. laureth-, may contain dioxane also; synthetic alcohols e.g. Glyceryl Coconate, Hydroxysterate, Myristate, Oleate, all of which have been shown to cause allergies and dermatitis</p>
<b>Emulsifiers</b>	
<p>Allow two ingredients that don't normally mix well to stay together. Natural plant waxes such as Candelilla, Carnauba, Jojoba, Rice Bran; Xanthan Gum and Quince seed.</p>	<p>Synthetic emulsifiers are usually petroleum/hydrocarbon derivatives and can be allergens e.g. Alkoxylated amides such as TEA, DEA, MEA, MIPA compound which undergo nitrosation to form nitrosamines, known carcinogens. Sorbitan Stearate, Laurate, Palmitate, Oleate, Ozokerite, Ceresin, Silicone and Montan waxes, Isopropyl Stearate, Laurate, Palmitate.</p>
<b>Surfactants</b>	
<p>Surface-active-agents dissolve oils and hold dirt in suspension so they can be rinsed away with water. Used in skin cleansers and shampoos. Natural saponins or foaming agent are the ingredient of choice for shampoos. Natural Surfactants include: Castile Soap, Yucca Extract, Soapwort and Quillaja Bark Extract.</p>	<p>The major problem with ethoxylated surfactants (those that utilize ethylene or propylene oxide in their chemical reaction) is that they can be contaminated with dioxane, a potent carcinogen. Look on the label to avoid ingredients ending with -eth (such as laureth) or containing the phrase PEG (PolyEthylene Glycol) or PPG (PolyPropylene Glycol). Another dangerous class of surfactants are the amides. They are listed on labels containing the term TEA (TriEthanolAmine); DEA (DiEthanolAmine) and MEA (MonoEthanolAmine). Compounds containing TEA, DEA and MEA can undergo nitrosation with other chemical to form nitrosamines, which are carcinogenic. Examples: Sodium or Ammonium Lauryl or Laureth Sulphate; Sodium Methyl Cocyl Taurate, Sodium Lauryl or Cocyl Sarcosinate; Cocamidopropyl Betaine, TEA, DEA and MEA compounds; PEG compounds, Quaternium -7, -15, -31, -60 etc, Lauryl or Cocoyl Sarcosine, Disodium Oleamide or Dioctyl Sulfosuccinate etc.</p>
<b>Preservatives</b>	
<p>To address the natural decaying process that all products go through. Some natural preservatives: Tea tree Essential Oil, Thyme Essential Oil, Grapefruit Seed Extract and Bitter Orange Extract.</p>	<p>Chemical preservative generally are cheaper and extend the shelf life of the product more than natural alternatives. Examples: Imidiazolidinyl Urea (Germall 115) and Diazolidinyl Urea (Germall II) cause contact dermatitis. Germall 115 releases formaldehyde over 10 degrees Celsius. DMDM Hydantoin, often used in shampoos is highly toxic and causes contact dermatitis and contains formaldehyde. Methyl-, Propyl-, Butyl- and Ethyl Paraben are toxic, cause allergic reactions and skin rashes—found in almost everything including "natural" and so-called "organic" products. 2-Bromo-2-Nitro-Propane-1,3-diol. (Bronopol) is toxic and causes allergic contact dermatitis—used in face creams, shampoos, mascaras and bath oils. Benzalkonium Chloride is highly toxic and a primary skin irritant. Used in shampoos, conditioner, and deodorants. Quaternium-15 is toxic and causes skin rashes and allergic reactions. Chloromethylisothiazolinone and Isothiazolinone cause contact dermatitis. Methylisothiazolinone and methylchlorisothiazolinone both cause allergies. Butylated hydroxytoluene (BHT) is a carcinogen. It and Butylated hydroxyanisole (BHA) both cause allergic contact dermatitis.</p>

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More and more we have been lead to believe that the synthetic chemicals are safe; however, we know that frequently, "approved" chemicals are later banned after they have taken their toll—DDT, Thalidomide, Prozac, Paxil, and Celebrex to name a few. It would even appear that the "release time" to the day of demise is shortening. Relying on nature in her true form is our best option for balancing the detrimental effects of genetics, environment and stress on our health. Now that the toxic bio-accumulative effects of pesticides are widely known, it is incumbent on us to not only address the toxic load from environmental sources.