



- Chemicals to avoid**
- Diethanolamine DEA
 - Mineral oil
 - Propylene glycol
 - Sodium lauryl/laureth sulfate
 - Parabens
 - Imidazolindinyl urea
 - Talc
 - PVP-VA/copolymers
 - Synthetic fragrances
 - PEGs (polyethylene glycols)
 - Titanium dioxide

by natural beauty therapist and aromatherapist Mukti Lloyd

What's in your skincare?

You wouldn't use damaging sandpaper or bottled chemicals on your face, but what about the hidden chemicals in your skincare?

Nowadays, synthetic chemicals are virtually unavoidable. In fact there are more than 500 PCBs (polychlorinated biphenyls – mixtures of synthetic organic chemicals) found in our systems, than there were in the previous generation. It's little wonder that more people are suffering from chemical sensitivities, why one in three people are likely to suffer from cancer and why there are greater incidences of heart and immunosuppressive diseases. Not only do genetics, the environment and our food choices play a role in this equation.

Most of us use personal care products and cosmetics on a daily basis. You may have noticed that it has become an increasingly difficult and arduous pursuit to define exactly what is pure, natural and organic when choosing products. Unfortunately, the catch phrases in the skincare industry and consumer demand in the market place has created blatant abuse of these terms. When referring to organic chemistry, anything that contains a carbon atom can legitimately be referred to as "organic". In order to define this further, we're faced with the responsibility of becoming self-informed and knowledgeable consumers and not just accepting things at face value.

A quick glance at the ingredients listed on any commercially produced item reveals that a chemical dictionary

is needed to define baffling high-tech ingredients and superfluous Latin terminology. Yet most of us remain blissfully unaware of the long-term and cumulative effects of the chemical concoctions that we are placing on our bodies. We continue to place blind faith in the manufacturer, whose bottom line is maximising profit, and the regulator, whose position remains that chemicals are safe until proven otherwise. It's a major concern when considering many adverse reactions are not reported and that the usual response is to discontinue using the product without any further action being taken.

Products absorb into your skin

The body usually absorbs chemicals in one of two ways – via the skin, or inhalation via the lungs. The skin, the body's largest living and breathing organ, not only acts as a barrier, it assists with elimination, and absorbs substances into the systemic circulation and blood stream via the hair follicles, skin lipids, the sweat and sebaceous glands and pores. Nicotine patches and cortisone creams clearly illustrate this point. Absorption is greater depending on the number and the size of the hair follicles (e.g.; the scalp), where the skin layer is thinner, and where mucous membranes are present; also, if there is damage or disturbance to the acid mantle, skin proteins or sebum.

What can I do?

The most prudent choice as a consumer is to become a label reader. Learn to discriminate and avoid the arsenal of ingredients that are potentially toxic or known irritants (of which there are between at least eight and 10,000 in the marketplace). As a starting point, here is a list of some of the most harmful and commonly used ingredients coupled with an effective, safe and natural alternative.

Chemicals to avoid

AVOID

Diethanolamine DEA

It's used as a solvent, emollient, emulsifying agent and detergent in most shampoos. Studies have shown that diethanolamine- and DEA-related ingredients such as cocamide DEA and triethanolamine TEA form nitrosamines – potent carcinogens that have been known to cause cancer in laboratory animals.

ALTERNATIVES

Vegetable glycerine (not glycerol) – A wetting agent, natural humectant and carrying agent that has safely been used in cosmetic formulations for thousands of years.

AVOID

Mineral oil

It's a petroleum derivative used in baby oils and as an emollient in almost all moisturisers. It's a cheap alternative to natural oils. It has no

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similarities with the composition of our skin's natural oil secretions. It's not readily absorbed due to its molecular structure but rather sits on top of the skin, leaving a greasy residue which over time dries the skin and causes the pores to become blocked, resulting in skin irritations.

ALTERNATIVES

A natural moisturiser contains a combination of cold-pressed, certified organic, unrefined nut and seed oils and essential fatty acids such as macadamia, almond, apricot, jojoba, olive, rosehip and evening primrose. These oils are easily absorbed, are not greasy or irritating but rather serve to nourish and feed the skin.

AVOID

Propylene glycol

It's one of the most commonly used humectants and emulsifiers. It's a petrochemical derived from propylene alcohol that is readily absorbed by the skin and scalp and removes their natural oils. It has been linked to abnormalities in the liver and kidneys, allergic sensitisation including dermatitis, blocked pores and blemishes. It's also used in industry as anti-freeze and is the major component of brake and hydraulic fluids.

ALTERNATIVES

Vegetable glycerine is a natural humectant and carrying agent that is readily absorbed.

AVOID

Sodium lauryl/laureth sulfate

A synthetic wetting and cleansing agent that is found in almost all commercial brand shampoos and toothpastes. It's a potent skin irritant and sensitiser. There are literally hundreds of articles highlighting their adverse effects and toxicity.

ALTERNATIVES

Coconut oil, polyglucose, castile, yucca juice, soap wort are liquid soaps made from the saponification reaction of fats with potassium and sodium. They have less sudsing action but are safer and gentler on the hair and the environment.

AVOID

Methyl-/propyl-/butyl- and ethyl-parabens

They are commonly used as cosmetic preservatives and also destroy enzyme activity and bacteria in products. They are the leading cause of contact dermatitis and are highly toxic.

Imidazolidinyl and diazolidinyl urea

They are synthetic preservatives that are usually found in shampoos and soaps. They're formaldehyde-releasing agents. Formaldehyde is toxic, carcinogenic and one of the most irritating ingredients commonly found in personal and haircare products. It's usually listed as 'formalin'.

ALTERNATIVES

Citrus extract is an antioxidant that's effective in both water- and oil-based cosmetics. It preserves against fungi, bacteria and other microorganisms and will safely preserve cosmetics for a year or more.

Tea tree extract is derived from the tea tree and has strong antimicrobial antibacterial anti fungicidal properties.

AVOID

Talc

It's the main ingredient used in face powders and its molecular size and structure is similar to asbestos. It has been linked to ovarian cancer and is commonly used on babies, especially in the genital area. It's also a known carcinogen when inhaled.

ALTERNATIVES

Corn or rice starch powder, which are naturally derived from grains.

AVOID

VVP-VA/copolymers

Plastics that are commonly used in hairstyling products that coat the hair with a hard film, rendering it dull and lifeless. It's a suspected human teratogen (causing birth defects) and carcinogen. Inhalation is associated with respiratory problems and asthma.

ALTERNATIVES

Aloe vera; acacia, xanthum, tragacanth gums – naturally occurring polymers that have been safely used for centuries.

AVOID

Synthetic fragrances

Little is known about fragrance constituents. They may be a blend of up to 600 different chemicals, very few of which have been tested for human toxicity. They are a primary cause of allergic sensitivity and irritation.

ALTERNATIVES

Pure essential oils are extracts that are derived from plants and flowers that have therapeutic benefits for the mind, body and spirit. **NH**

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Checklist

We as consumers have a personal choice to make healthier and more informed decisions. Until there is collective awareness and market pressure, the cosmetic and skincare industry will not change. When you examine the labels of the products that you currently use, ask the following questions:

- Are the labels on the products accurate and do they list all of the ingredients?
- Can I trust the company that is manufacturing the product?
- Is the company more concerned about my health or about making money?
- Can I trust in the safety of the products that I am using on a daily basis?
- Is my overall health and wellbeing affected by the products that I'm using?
- Are there stringent government regulations and standards in place that protect me from chemicals that may have an adverse affect on my health?