

Hygiene

What impact do your health and beauty products have on the environment? According to the [Environmental Working Group](#), women use an average of 12 different personal care products each day and men use an average of six. While there are some regulations in place to control the use of certain ingredients, cosmetics are not as stringently controlled as food products and there are a number of potentially harmful ingredients that are still in common use. By incorporating sustainable hygiene products into your daily routine, you can significantly reduce your impact on the environment, and reduce your personal exposure to many potentially harmful substances.

Why It Matters For The Environment

Most of our body care products end up going down the drain eventually. It is very important to consider what we are putting down those drains. All storm sewer water in Edmonton skips the water treatment facility and flows straight into the North Saskatchewan River.¹ Water that goes down the drain or is flushed down the toilet in Edmonton gets treated at the Gold Bar Wastewater Treatment Centre. The majority of substances are cleaned from this water before it is reintroduced to the river, but water treatment is not perfect and impurities – notably, some pharmaceuticals – can slip through the cracks in the filters.²

Aquatic life can be greatly affected by the chemicals that make their way into the water system. Animals (fish in particular) are susceptible to a process called bioaccumulation. This is when chemicals deposited into the water enter the food chain, and build up in the body tissues of predators over time.³ Chemicals can also affect plant growth, which can so radically alter the ecosystem that other organisms are no longer able to survive there.⁴

Did you know?

The European Union has banned over 1,100 chemicals from use in cosmetics, but the majority of these are still used in North America.⁵

Why It Matters For Your Body

Some personal care products can be dangerous to your health. There are hundreds of potentially dangerous chemicals remaining in our hand creams, shampoos and lipstick – ingredients that have been linked to cancer, birth defects, infertility and worse. Read on for a list of the most worrisome ingredients to watch for in your purchases.

Health Canada keeps a “List of Prohibited and Restricted Cosmetic Ingredients” which is designed to keep harmful chemicals out of the items that we use on a daily basis. Unfortunately, the list does not have very much legal sway and there is no policing body. It also only applies to ingredients that are initially added to the product, not to the toxic by-products that end up in the finished version.⁶

Adria Vasil’s “Mean 15”

Adria Vasil is a Canadian writer who explores ways to integrate sustainability into daily life through her *Ecoholic* books, column and blog. In *Ecoholic Body*, she identifies the following list of “Mean 15” ingredients as the most important ones to avoid in your purchases.

BHA and BHT: endocrine system-disrupting preservatives also linked to cancer. These are also dangerous to aquatic life and have the potential to bioaccumulate.

DEA/MEA/TEA (diethanolamine): can create cancer-causing nitrosamines when mixed with preservatives.

Formaldehyde-releasing preservatives (DMDM hydantoin, diazolidinyl urea, imidazolidinyl urea, methenamine, quaternium-15 and Bronopol, a.k.a. 2-bromo-2-nitro-propane-1,3-diol): cosmetics containing these chemicals have potential to off-gas known cancer-causing agents. They are restricted in Europe but not yet in Canada.

Oxybenzone (BP-3/ benzophenone) **and octinoxate** (octyl methoxycinnamate): two sunscreen chemicals that may disrupt our hormone system and can trigger allergic reactions.

Palm oil (or anything with “palm” or “palmate” in its name, like sodium palmate): unless Certified Fair Trade and Organic, the creation of palm oil has a huge environmental impact as it has resulted in clear-cutting of old-growth rainforests in Indonesia and Malaysia.

Parabens: these preservatives mimic estrogen and were found in breast cancer tissues in one preliminary study. They have also been linked to damage to male reproductive systems.

“It’s like a giant experiment. We’re using all these mystery chemicals and just waiting to see what happens.”

– Annie Leonard

Parfum/fragrance: synthetic fragrance often contains phthalates and other hormone disruptors, carcinogens, as well as asthma and allergy triggering ingredients.

Note: some natural European brands with “parfums” are made with natural essential oils, but it will likely indicate this on the label.

PEGs (polyethylene glycol compounds, and anything with “-eth” in its name): these are often contaminated with cancer-causing 1,4-dioxane.

Petrolatum/paraffin/mineral oil/petroleum distillates: not only are there are significant environmental impacts of petroleum production, but these petrochemicals can also be contaminated with carcinogenic polycyclic aromatic hydrocarbons.

PPD (can also be called p-Aminoaniline; 1,4-benzenediamine; p-benzenediamine CI 76060; p-Diaminobenzene; 1,4-phenylenedia- mine; 1,4 diaminobenzene): these are found in permanent hair dyes and have been linked to some cancers.

Phthalates: ingredients from this hormone-disrupting family of chemicals are often listed behind the word “fragrance”.

Retinyl palmitate: often used in anti-aging and acne products, this ingredient has been noted to speed up the cancer-causing effect of UV rays in mice.

Siloxanes: siloxanes that are prefixed with “Cyclo-“are silicon-based polymers that are toxic to fish and aquatic life.

Sodium laureth sulphate: this irritant is a foaming agent in soaps and shampoos that is often contaminated with cancer-causing 1,4-dioxane.

Triclosan/triclocarban: the antibacterial ingredient is suspected of causing thyroid problems and may also contribute to antibiotic resistance. It is also toxic to aquatic life.

Certified Green

If you want to buy a product that has as little impact on the environment and society as possible, let third-party certification be your guide. Third-party certifiers evaluate products and services against a set of sustainability criteria. By maintaining their independence from the companies, they evaluate products and aim to be unbiased and transparent judges. Examples of third-party certifiers include Eco Logo, Green Seal, and Canada Organic.

“As the bigger picture comes into focus, we’re waking up to the fact that we’re not only making ourselves sick, we’re making the planet sick too.”

– Adria Vasil

Oh, “naturel”?

Companies often use the words “natural,” “eco,” “green,” or “bio” in their product labels. These are words that are not affiliated with any accountability standard. This is called greenwashing. The word “natural” in particular is the most ambiguous. A product marked natural could contain just a trace amount of an ingredient that is “from nature” and offers no guarantee that pesticides and other chemicals were not used in its production. This includes “natural flavour” which you’ll find in most processed foods and drinks.

Shopping Sustainably

Avoid potentially harmful ingredients

This is pretty self-explanatory. Keep an eye out for ingredients that might put your health at risk and avoid buying products that contain them in order to reduce your risk of experiencing any of their side effects.

Vote with your dollar: look for third-party certification

Certification is key to ensuring that products and services are both safe and ethical. By withholding their stamp of approval, a third party certifier acts as a motivator, showing companies that they need to change their practices to remain a viable option in the market.⁷

Avoid animal testing

Many people believe it is wrong to test potentially dangerous chemicals on captive animals. The animals suffer, the results are not always reliable, and the benefits that are provided could reasonably be gained in other ways (using computer models or experimenting on cell cultures instead of whole animals).⁸

Buy local

It’s much harder for companies to get away with using toxic chemicals when they can’t dump them in faraway lands with suppressed labour standards. Buying locally can often mean products made from more pure ingredients. Plus, shopping locally cycles your hard earned money back into your own community where it supports local businesses.⁹

Loco for logos

Certified products are often indicated with a logo. This is beneficial for the consumer, but it can also be a source of confusion. After all, logos are marketing tools, and some companies will mimic the logos of third-party certifiers to trick you into buying something that looks better than it really is.¹⁰

Buy organic

Organic personal care products allow you to avoid exposure to synthetic pesticides, herbicides or GMOs that come with non-organic oils and animal by-products. Ultimately buying anything organic helps protect species diversity, combats climate change and maintains good water quality.¹¹

Buy in bulk

Buying in bulk can save you money because you don't have to pay for extra packaging, and it allows you to buy the exact amount of the product that you need so you don't have to pay for the extra amount in a pre-packaged item. Using the bulk section also allows you to assess the condition, aroma, colour and texture of the product you want to buy.¹²

Cut down on packaging

Packaging accounts for about one third of the USA's municipal solid waste, and manufacturing all of that packaging takes energy and resources. Cut back by re-using containers whenever possible, and buying products with little packaging.¹²

Make Your Own Products

Making your own self care products is the only way to know exactly what ingredients are used. You can save money because generally ingredients to make a product are cheaper than buying a finished product, and making your own allows you to customize the product by choosing your own scents and whatever ingredients may make the product more effective for you.¹³

Note: When trying any new body care product, it is important to test it on a small area of your skin first, to ensure that you do not have an allergic reaction to any of the ingredients.

Gentle Oatmeal Mask¹⁴

- 1 tbsp. honey
- 1 egg yolk
- Oatmeal

Mix honey and egg yolk in a small bowl. Slowly add enough oatmeal to create a thick paste.

Smooth mask over face and neck. Leave it on for 15 minutes. Rinse with lukewarm water.

Did you know?

Instead of lotion, you can use a small amount of nut or vegetable oil to moisturize dry skin. There are many different types right from your kitchen that will work well, including olive, almond, coconut, grapeseed or hemp oil.⁶

Honey-Cocoa Butter Lip Balm¹⁵

- 2 tbsp. olive oil
- 1/2 tsp. honey
- 3/4 tsp. beeswax — grated
- 1/2 tsp. pure cocoa butter
- Flavored oil of your choice (like peppermint or vanilla)
- 1 vitamin E capsule

In a small saucepan, heat oil, honey, beeswax and butter over a low heat until just melted. Remove from heat and allow to cool for 2-3 minutes. Stir in flavoring and contents of vitamin E capsule. Pour into containers of your choice.

Honey & Brown Sugar Body Scrub¹⁶

- 1/2 cup brown sugar
- 1 tbsp. olive oil
- 2 tsp. honey
- 1/2 tsp. vanilla extract

Mix ingredients together until you have an even consistency. If the mixture is too dry for your liking, add a bit more olive oil and honey. If it is too liquid, add a bit more brown sugar.

Apply the mixture to your skin in the bath or shower like you would do with any scrub. It's also great to keep by the sink to use just on your hands.

Shampoo Substitute¹⁷

- 1 tbsp. baking soda (moistened)
- 1 tbsp. apple cider vinegar
- 1 cup water

Moisten baking soda in your palm and then massage into hair and scalp. Leave on for a minute and then rinse thoroughly. Combine the vinegar with the water in a re-usable container. Apply a liberal amount to scalp and hair, and save the rest for future washing. Wait a minute and then rinse out thoroughly.

This method of washing your hair can require a bit of an adjustment period, so give it a few tries before deciding if it will work for you. Different hair types may need an adjusted ratio of ingredients. For oily hair, use a higher amount of baking soda, and for dry hair up the vinegar.

Don't want to make your own?

Here are brands you can buy that have some sustainable features:

- ILIA
- 100% Pure
- Rocky Mountain Soap Company
- John Masters Organics
- Lather Bee Rich
- Dr. Bronner's Magic Soaps
- Badger
- Mother Earth Essentials

Natural Split-end Remedy¹⁶

- 1 avocado, pitted and skinned
- 2 tbsp. egg whites
- 3 tbsp. olive oil

Mash up the avocado and mix in the egg whites and olive oil. Whip until you obtain a creamy consistency like conditioner. Apply to your hair and let sit for 45 minutes to an hour. Rinse thoroughly and wash hair with a mild, sustainable shampoo.

Learn More About Sustainable Body Care

Care2 provides information about sustainable personal care products and more recipes that you can make yourself.

EWG Skin Deep Database lets you look up brand-name products to see a standardized safety rating for their ingredients.

The **Good Guide** is a database rates personal care products on a ten point scale in respect to how they affect your health, the environment and society.

Ecoholic is where Adria Vasil shares information on integrating sustainability into many aspects of your everyday life.

David Suzuki's What's Inside? That Counts provides information and studies about potential chemicals that can be found in your everyday body care products. Their FAQ that gives tips on how to green your personal care shopping and avoid chemicals as well as suggesting ways to help ban toxins from body care items.

The Campaign for Safe Cosmetics provides information and reports on the laws and regulations surrounding ingredients in personal care products. A good way to get involved in the fight for safe cosmetics.

Love the Label has easy to follow steps for shopping for new body care products. A wealth of great resources and a list of amazing brands.



Sources

1. "Stormwater". City of Edmonton, 2013. Web. Retrieved 27 June, 2013. <http://edmonton.ca/for_residents/flooding_sewers/stormwater.asp>
2. Sosiak, A. Hebben, T. "A Preliminary Survey of Pharmaceuticals and Endocrine Disrupting Compounds in Treated Municipal Wastewaters and Receiving Rivers of Alberta" *Alberta Environment - Information Centre*. Government of Alberta., September 2005. Web. Retrieved 27 June, 2013. <<http://environment.gov.ab.ca/info/library/7604.pdf>>
3. Ayandiran, T.A., Fawole, O.O., Adewoye, S.O., and Ogundiran, M.A. (2010). "Bioconcentrations of metals in the head capsule and skeleton of *Clarias gariepinus* exposed to sublethal concentrations of soap and detergent effluents." *Agriculture and Biology Journal of North America*, 1(5), 2010. 796-802.
4. Branislav, R.J., Bojovic, S., Panic, B., Radenkovic, B., and Despotovic, M. "The effect of detergent as polluting agent on the photosynthetic activity and chlorophyll content in bean leaves." *Health*, 2(5), 2010. 395-399.
5. Mizell, Bijani. "American Beauty: Why Europe Bans Cosmetics America Won't". *Divine Caroline*. n.d. Retrieved 27 June, 2012. <<http://www.divinecaroline.com/beauty/makeup/american-beauty-why-europe-bans-cosmetics-america-won%E2%80%99t>>
6. Vasil, Adria. *Ecoholic Body*. Toronto: Random House, 2012. Print.
7. "Third Party Certification and Quality Standards". Unite for Sight Inc., n.d. Web. Retrieved 27 June, 2013. <<http://www.uniteforsight.org/innovation-certificate/certifications>>
8. "Experimenting on Animals". BBC., n.d. Web. Retrieved 27 June, 2013. <http://www.bbc.co.uk/ethics/animals/using/experiments_1.shtml>
9. Pazderka, C., A. Rowan, E. Tamm. *The green guide to David Suzuki's Nature Challenge*. The David Suzuki Foundation. 2003.
10. Dahl, R. "Greenwashing." *Environmental Health Perspectives*, 118(6). 2010. A246-A252.
11. "Organic Personal Care". Organic It's Worth It. n.d. Web. Retrieved 27 June, 2013. <<http://www.organicitsworthit.org/get/organic-personal-care>>
12. "Advantages of Buying in Bulk". Frontier Natural Products Co-op. n.d. Web. Retrieved 27 June, 2013. <http://www.frontiercoop.com/learn/bulk_advantages.php>
13. Yap, Shirley. "Advantages of Making Your Own Homemade Beauty Products" Ezine Articles. SparkNET. n.d. Web. Retrieved 27 June 2013. <<http://ezinearticles.com/?Advantages-of-Making-Your-Own-Homemade-Beauty-Products&id=4541810>>
14. Ellis, Kori. "Homemade face masks for oily skin". She Knows. SheKnows, LLC. 25 Jan. 2011. Web. Retrieved 27 June 2013. <<http://www.sheknows.com/beauty-and-style/articles/822977/homemade-face-masks-for-oily-skin>>
15. O'Grady, Helen. "How to make 10 Natural Beauty Products". The Daily Green. Hearst Digital Media. n.d. Web. Retrieved 27 June 2013. <<http://www.thedailygreen.com/living-green/diy-natural-beauty-products-recipes-461108#slide-1>>
16. *BLDG 25 Free People Blog*. Free People. n.d. Web. Retrieved 27 June 2013. <<http://blog.freepeople.com/>>
17. Striepe, Becki. "No 'Poo: Get Beautiful Hair with Just Baking Soda & Vinegar" Care2. Care2.com Inc., 29 Sept, 2012. Retrieved 26 June, 2013. <<http://www.care2.com/greenliving/no-poo-get-beautiful-hair-with-just-baking-soda-vinegar.html?page=1>>