A high-contrast, black and white close-up of a woman's face. Her eyes are heavily shadowed with dark makeup, and her lips are coated in a vibrant, glossy red lipstick. The skin has a grainy, textured appearance. The text 'TOXIC BEAUTY' is superimposed in the center in a bold, black, sans-serif font.

TOXIC BEAUTY



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In December 2018, Health Canada issued a safety alert for talc.

- **OVARIAN CANCER**
- **LUNG IRRITATION**

HEALTH CANADA ON TALC:

Lung Damage: Breathing in loose talcum powder can cause decreased lung function, talcosis, coughing, and trouble breathing

Ovarian Cancer: Exposure to perineal (genital) area has been identified as a possible cause of ovarian cancer.

GOOD ALTERNATIVES:

- Corn Starch
- Arrowroot Flour
- Baking Soda
- Oat Flour
- Tapioca Powder

WHAT THE TALC?!



Why would a product claiming to make us look and feel better be bad for our health?

From glowing skin to reversing wrinkles, the health and beauty claims made by the products we use are nothing short of inspiring. Yet one look at the ingredients list shows us there are hazardous chemicals found in makeup, lotions, shampoos, soaps and perfumes that inspire concern and confusion .

When talc (or talcum powder), the main ingredient in baby powder was flagged by Health Canada (2018) as something that may be harmful to human health, we wondered: why would a product with the word 'baby' in its name be linked to ovarian cancer and lung irritation?

The first research that links talc and ovarian cancer was published in 1982, and corporations were aware of this link as early as the 1950s! Yet, they still marketed baby powder as a hygiene product for women, and talc can still be found a wide range of genital hygiene products.

IN OCTOBER 2019, JOHNSON & JOHNSON RECALLED ASBESTOS-CONTAMINATED BABY POWDER.

MODERN EXPOSURES

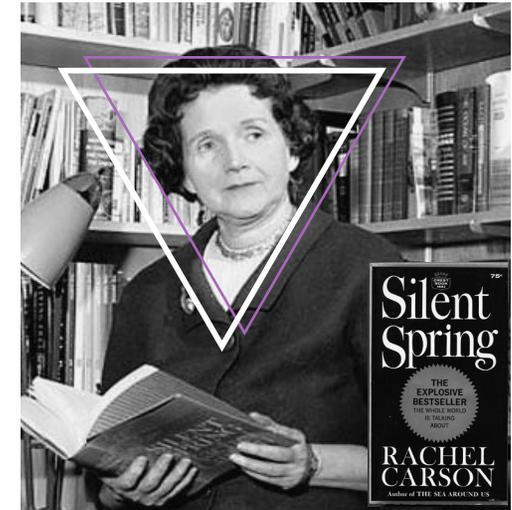
When we think of pollution, we imagine smokestacks puffing industrial byproducts into the sky, or an ocean that has more plastic than fish. Gross! But our exposures to hazardous chemicals aren't as clear as a smokestack or a plastic island. This is especially true for the personal care products we use on a daily basis (shampoo, deodorant, makeup, lotion). These products contain a variety of toxic ingredients, such as phthalates and parabens, which can impact our health.

What are Phthalates?

Phthalates are chemicals that are often used to soften plastic, and are "endocrine disruptors," which means they interfere with our hormones (estrogen and testosterone). Phthalates are linked to menstruation issues (such as early periods in girls), ovulation dysfunction, increased risk of endometriosis, higher risk of hormone-related cancers, and increased risk of miscarriage (Lyche, 2009).

What are Parabens?

Parabens are used as preservatives in health, beauty, and personal care products. Parabens are also endocrine disruptors - they disrupt hormone function by mimicking estrogen, and binding to estrogen receptor cells. This can trigger an increase in breast cell division and the growth of tumours, which is why exposure to parabens has been linked to breast cancer and reproductive issues (Witorsch, 2010).



ORIGINS OF A MOVEMENT

When did our awareness and resistance to toxic pollution begin? The environmental movement as we know it is credited to the writings and activism of Rachel Carson. A marine biologist, Carson spent her life advocating for the protection and conservation of the environment.

"Our heedless and destructive acts enter into the vast cycles of the earth and in time return to bring hazard to ourselves."

Her book, *Silent Spring* (1962), warned people of the dangers that chemical pesticides, such as DDT, have on the environment and on overall health. Not only did this book help implement a ban on DDT, but it also paved the way for the creation of the U.S. Environmental Protection Agency. By showing that all biological systems are dynamic and by urging the public to question authority, Rachel Carson allowed environmental activism to flourish.

THE CHEMICAL BODY BURDEN

Many of us grow up looking at photo shopped magazines, ads, and social media posts showcasing flawless light skin, perfect-looking straight hair, glossy colourful nails, and thin bodies. If you scroll through a fashion magazine or celebrities' Instagram, you'll probably end up wondering how to create the impossible look you see. This is because beauty industry has ingrained unachievable standards of beauty in order to keep us on this insecurity treadmill and pressure us into buying their products.

Unrealistic beauty standards, created by the cosmetics industry, make us spend our money and put our health at risk. The more products we use, the more likely we're being exposed to a number of hazardous ingredients, including phthalates and parabens.

These exposures are problematic because they are chronic - we absorb and inhale them every day that we're using them. Our body's natural processes for dealing with these exposures (kidneys, liver, lungs and skin) can be overwhelmed or bypassed, and can cause long-term health impacts.

The synthetic chemicals we absorb are known as our "body burden" (Shin et al., 2014). We can actually measure our body burden by using a body burden kit. The kit uses our urine, hair, or blood to test for the presence of synthetic chemicals.

This helps us understand the types of exposures we're dealing with, and what we can do to lower our exposures.



MYMY NGUYEN STUDIES HERSELF

Mymy Nguyen wanted to know how her cosmetics and personal care products affect her body. As a Master's student in Medical Sciences at Boston University, she works with Dr. Shruthi Mahalingaiah studying the relationship between fertility and personal care products, so this opportunity to study her own exposures was both professionally and personally significant.

Working with the Silent Spring Institute, she was able to measure the levels of harmful personal care product ingredients in her body using a chemical body burden kit. This test demonstrated the direct relationship between the high levels of parabens and phthalates in her body with the products she uses, and the significant drop in these levels once she switched to non-toxic or 'clean' products.

35x: Mymy's test showed her paraben levels were very high when using conventional products 35 times higher than her 'clean' product use.

Mymy's research offers us all some hope that, with some understanding and motivation, we can rapidly reduce our body burden by using less personal care products, and switching to clean alternatives.

BEAUTY IS PAIN

“Being a woman of colour meant that I was not only subject to the pressures of Eurocentric Canada, but I was also expected to meet certain standards according to Indian culture.

When my sister and I were younger, we were always complimented for our ‘fair skin’ as if having darker skin would make us less attractive. This always perplexed me, and I was shocked to discover an entire line of beauty products in India – Fair and Lovely – that was advertised as a way to become light skinned and therefore “beautiful”. This was just one of the many times that I felt rage towards society’s idea of beauty.”

-KANISHA ACHARYA-PATEL, 22

“As the daughter of Chinese immigrants, I grew up watching my mother apply her daily ritual of creams promising whiter and brighter skin.

Every outing involved layers of sunscreen and staying in the shade to ensure we kept the pale skin of Asian beauty ideals.

Over time, I dove into the world of tanning oils in my quest to fit into the prized bronze skin of the beauty standards here. After one too many painful sunburns, I experimented with self-tanners and had a prolonged period of alarmingly orange skin. Beauty doesn’t have to hurt and it definitely should not include tanning oils - which concentrate the radiation from the sun and increase the risk of skin cancer - or self-tanners - which are filled with harmful ingredients.”

-EMILY LEUNG, 22



“I remember the first time I ever dyed my hair, I was probably in 3rd grade.” “The smell of ammonia from the hair dye began to burn my nose..

My mom told me that if I wanted my hair to be the color I wanted, I would have to just suffer through the smell.

I continued to dye my hair until my freshman year of college, trying everything I could to hide the “dirty dishwater” blonde I was born with. While I do not regret dying my hair, the normalization that to look pretty or feel confident has to be associated with pain is a norm I continue to struggle with today.”

-LINDSEY QUINT, 20



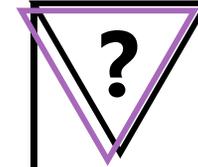
WHY ARE WE ONLY HEARING ABOUT THIS NOW?

LABELLING



We still don't have the right to know what's in our products. The hazardous ingredients found in personal care products have been a problem for decades, yet there is still very little information about these toxins available to consumers. Companies can list dozens of potentially harmful chemicals under blanket terms like "parfum" or "fragrance", preventing consumers from knowing exactly what their products contain.

WEAK REGULATION



Despite Safety Alerts, asbestos contamination and product recalls, there hasn't been any action by regulators or companies to place warning labels on talc products themselves (which would caution consumers about the risks of ovarian cancer and lung damage), or to prohibit talc from being an ingredient in baby products and self-care products.

POST-MARKET PRODUCT TESTING



Our products have not necessarily been tested by our regulators for safety, or approved prior to sale. Instead, products are tested only when an incident is reported, after they've been placed on store shelves. This means that we are the guinea pigs, and that it's on us to report these products in order for them to be investigated.

WOMEN'S HEALTH MATTERS

Hormone disruption. Slower metabolism. Gendered beauty norms. Gendered labour. These are just a few of the biological and social aspects of toxic exposures that make women more vulnerable to the harmful effects of chemicals.

The products we use, and the ways that toxic chemicals accumulate in our bodies, can have a significant impact on our health. Unfortunately, there are few laws and regulations aimed towards protecting women's health. The governmental regulations that oversee products targeted at women (cleaning products, cosmetics, hygiene products) do not provide us with the health protection and product safety we need to keep toxic chemicals out of our bodies and our environment. This lack of regulation could put women at higher risk of endocrine disruption and hormone-related cancers (Wallack, 2019).



Vaginal hygiene products are a great example of how gendered products impact women. When companies market these unnecessary and potentially dangerous products, they use a marketing technique called 'demand creation', to create a need or provide solutions to problems that the consumer previously was unaware of (Ferranti, 2010). Marketing campaigns aimed towards vaginal hygiene products problematize women's genitalia by suggesting women need to use these products to attain an 'ideal' vagina (Crann et. al., 2017).

Unfortunately, women of colour face even more pressure to meet unrealistic eurocentric beauty standards. This pressure translates into a higher use of personal care products that tends to be more hazardous than those marketed to white women, placing women of colour at a higher risk of exposures and health impacts.

"Higher use of cosmetics and personal care products sends up a red flag...that women are particularly vulnerable."

- Anne Rochon-Ford

"The hair care products used more by black women have shown to have higher levels of parabens, as well as placenta from animals, and other hormones."

-Dr. Ami Zota

"Exposures that we can have using personal care products can be as high or higher than certain pharmaceuticals. I also wonder why there hasn't been more attention to cosmetic ingredients, especially because children are exposed to these as well."

-Dr. Shruthi Mahalingaiah



WATCH OUT!

Our products can contain the following health hazards:



DEODORANT=

Endocrine Disruptors, Formaldehyde
Hormone Disruption, Reproductive Problems,
Tumours



FRAGRANCE=

Endocrine Disruptors, styrene, hexyl cinnamal, BHA
(plus non-disclosed ingredients)
Allergies, Reproductive Disorders, Cancer



LIPSTICK=

Lead, Coal Tar
Kidney Damage, Neurological Damage,
Miscarriage



NAIL PRODUCTS=

Toluene, Acetone
Dermatitis, Lung Disorders, Miscarriage



SHAMPOO=

Formaldehyde, Endocrine Disruptors
Allergies, Depression, Cancer



SKIN CREAM=

Mercury, Coal Tar, Endocrine Disruptors
Tremors, Insomnia, Cognitive Dysfunction



SKIN LIGHTENERS=

Hydroquinone, Mercury
Skin Disease, Organ Damage, Cancer

SOAP=

Endocrine Disruptors, Coal Tar 1, 4-Dioxane
Allergies, Infertility, Heart Disease

TOOTHPASTE=

Triclosan, arsenic
Abnormal Cell Growth, Reproductive Toxicity

READ YOUR LABELS, AND USE A LABEL-READING APP:



GoodGuide



EWG's Healthy Living



Think Dirty

QUIZ: ARE YOU A TOXICS AVENGER?

1. You see baby powder with talc at the pharmacy; your first instinct is to:

- a. GASP IN ABSOLUTE HORROR! You ask the store manager about it, and describe the risks.
- b. Buy it! You love that baby powder smell.
- c. Don't buy it - you've heard about baby powder causing ovarian cancer.

2. You are walking to work in the morning, when a protest for better regulations in the cosmetic industry marches past you in the streets. You:

- a. Wonder what the march is about, and want to look it up later.
- b. Keep on walking, oblivious to the march.
- c. Join them! You want to advocate for better regulations.

3. Endocrine disruptors, which affect our hormones, are found in:

- a. Dangerous products that have clear warning labels.
- b. Everyday cosmetic and personal care products.
- c. There's no such thing as endocrine disruptors.

4. You receive an email in your inbox, asking that you sign a petition to bantalc.com - you:

- a. Ignore it and let it sit with the 3,000 other emails you haven't read.
- b. Open it, read it, and then forget to sign it.
- c. Read it, go to the website, and sign the petition. Then forward it to everyone you know!

5. Our personal care products are:

- a. Rigorously tested for their impacts on our health and the environment.
- b. Only tested when there's a reaction - it's a post-market regulatory system, and it sucks!
- c. Not something you need to worry about, corporations have our backs.

6. You would best describe yourself as:

- a. An informed and Motivated Activist, you are vocal about what you believe in and take action to create change
- b. An informed Citizen, you try to stay in the know as much as possible, however; you just don't have the time or energy to go out and change the world.
- c. A sideliner, when it comes to participating and educating, you leave it to the rest of the world.

14-18: NON-TOXIC AVENGER!

YOU'RE READY TO FIGHT AGAINST INJUSTICE AND TAKE AN ACTIVE ROLE IN SOCIETY.

10-13: SUBSTANCES SIDEKICK!

YOU KNOW THE BASICS AND YOU ARE READY TO TAKE THE NEXT STEPS AND LEARN MORE.

6-9: TOXICS NEWBIE!

YOU'RE LEARNING ABOUT HARMFUL SUBSTANCES IN THE ENVIRONMENT.

Scoring: 1a: 3pts, 1b: 1pt, 1c: 2pts, 2a: 2pts, 2b: 1pt, 2c: 3pts, 3a: 2pts, 3b: 3pts, 3c: 1pt, 4a: 3pts, 4b: 2pts, 4c: 1pt, 5a: 1pt, 5b: 1pt, 5c: 3pt, 6a: 2pt, 6b: 2pt, 6c: 1pt

THE **5** STAGES OF **MAKEUP BAG GRIEF**

1. DENIAL

YEAH, RIGHT. HOW COULD MY LIPSTICK BE POISONING ME?!

Denial is a totally normal reaction when you learn that you've been lured into a false sense of security by corporations. Trust me, we have been there as well! The key to making it through this stage is by continuing to educate yourself. Check your personal care products and makeup for harmful substances! You can do this by googling the product or using a label-reading app, like Think Dirty. It's crucial that you are aware of what is going on and in your body! As long as you continue to educate yourself, you won't fall back into the hands of treacherous companies.

2. ANGER

HOW DARE THEY!

There is nothing worse than realizing that the companies you have loved for years have been dishonest to you about what is in their products. We recommend directing this anger towards action. Contact the companies you used to support, tell your elected representatives to do better, educate your friends and family, and sign the bantalc.com petition! That anger is well deserved and channeling it into productive solutions is one of the best ways to change the status quo. Let that anger fuel your hate fire!

3. BARGAINING

WHAT IF THIS COULD HAVE BEEN PREVENTED?

Often times, this is when you feel the most guilt towards your makeup bag. Trust us, it's not your fault! You had no idea your personal care products could cause harm. No amount of bargaining will change the fact that the regulatory systems within the government failed us. Instead of playing the what-if game, go through your makeup bag, product by product, to determine if any of the items are extremely hazardous, and if they are, get that toxic energy out of your life! The best way to come to terms with the situation is by taking the bull by the horns, replace or drop those products from your routine, and move forward into a cleaner and safer lifestyle.

4. DEPRESSION

HOW WILL I EVER FIND THE PERFECT SHADE OF NUDE AGAIN?

The devastation you might experience when you realize your favorite lipstick or face powder is actually harming your health will probably be soul crushing. But, have no fear, green beauty companies are here! There are so many wonderful cosmetic lines that don't have the toxic chemicals that other cosmetics have! We know that your tried-and-true beauty products are held near and dear to your heart, but is it really worth it? The perfect shade of nude, or your health and wellbeing?

5. ACCEPTANCE

I GUESS I'LL HAVE JUST HAVE TO CHANGE THE SYSTEM!

At this stage you have probably accepted that your makeup bag will no longer look the same, and that's a good thing. It is absolutely possible to work to change the regulatory system for cosmetics and personal care products. Your voice is powerful, needed, and can have a huge impact on a company's decisions. Instead of accepting that the world may never change, you should accept that you can be the change!

THE HEALTH DEFENDERS



THE WHISTLE BLOWER

When Deane Berg was diagnosed with ovarian cancer in her late 40's, she learned that her daily use of talcum powder could be linked to her disease. In 2013, she filed a lawsuit against Johnson & Johnson, who offered her a monetary settlement. However, Deane refused the settlement because the company was unwilling to put warning labels on their product about ovarian cancer.



THE DOCTOR

In 1982, Dr. Daniel Cramer was the first to publish research linking talc to ovarian cancer. As a professor of Obstetrics and Gynecology at Harvard, his research on ovarian cancer was widely publicized, and closely monitored by companies that sell talc-based products.



THE LAWYER

Allen Smith was Deane Berg's attorney in the case against Johnson & Johnson. His law firm now has a talc litigation group that is working to represent people who have been exposed to this hazardous product, and helping others understand and avoid the harmful effects of talc.



THE AUDITOR

"There was no testing of cosmetics for whether or not the labels were accurate, and no testing for the presence of prohibited substances, heavy metals and microbial contamination."
-Julie Gelfand, Commissioner of the Environment & Sustainable Development



THE MAKEUP ARTIST

"In my thirties, I started feeling really sick. I had problems with a lot of makeup because it was burning my skin."
-Rose-Marie Swift, Founder of RMS Beauty



THE BUSINESS OWNER

"Companies develop these slow release formulations of formaldehyde, and as such, they were able to give it a new name [on the ingredients list]."
-Alain Menard, Founder of The Green Beaver Company



THE PROFESSOR

"Once populations have been exposed [to endocrine disruptor's] and the discovery has been made about the association, we have already lost a generation to that exposure."
-Dr. Shruthi Mahalingaiah, Endocrinologist, Reproductive Surgeon, Scientist.

READ

The Internet is your friend! You can learn more about specific chemicals, and the ingredients in a product, as there are some excellent resources, apps and organizations here to help you. Google Scholar is a great way to find scholarly literature on a wide variety of topics.

References:

- Carson, R. (1962). Silent spring.
- Cramer, D. W., Welch, W. R., Scully, R. E., & Wojciechowski, C. A. (1982). Ovarian cancer and talc. A case-control study. *Cancer*, 50(2), 372-376.
- Crann, S. E., Jenkins, A., Money, D. M., & O'Doherty, K. C. (2017). Women's genital body work: Health, hygiene and beauty practices in the production of idealized female genitalia. *Feminism & Psychology*, 27(4), 510-529.
- Ferranti, M. (2010). From birth control to that "fresh feeling": A historical perspective on feminine hygiene in medicine and media. *Women & health*, 49(8), 592-607.
- (FDA) U.S. Food and Drug Administration. (2019). Johnson & Johnson Consumer Inc. to Voluntarily Recall a Single Lot of Johnson's Baby Powder in the United States. Retrieved from <https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts/johnson-johnson-consumer-inc-voluntarily-recall-single-lot-johnsons-baby-powder-united-states>
- Health Canada. (2018). Talc - Potential Risk of Lung Effects and Ovarian Cancer. Retrieved from <https://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2018/68320a-eng.php>
- Lyche, J. L., Gutleb, A. C., Bergman, Å., Eriksen, G. S., Murk, A. J., Ropstad, E., . . . Skaare, J. U. (2009). Reproductive and developmental toxicity of phthalates. *Journal of Toxicology and Environmental Health, Part B*, 12(4), 225-249. doi:10.1080/10937400903094091
- Shin, H. M., McKone, T. E., Sohn, M. D., & Bennett, D. H. (2014). Tracking contributions to human body burden of environmental chemicals by correlating environmental measurements with biomarkers. *PLoS one*, 9(3), e93678.
- Wallack, G. (2019). Rethinking FDA's Regulation of Cosmetics. *Harv. J. on Legis.*, 56, 311.
- Witorsch, R. J., & Thomas, J. A. (2010). Personal care products and endocrine disruption: A critical review of the literature. *Critical Reviews in Toxicology*, 40(S3), 1-30. doi:10.3109/10408444.2010.515563

Additional reads:

- There's Lead in your Lipstick by Gill Deacon
- Doubt is the Product by Dr. David Michaels
- Death by Rubber Duck by Dr. Rick Smith and Dr. Bruce Louri

Advocate for better regulation

Contact your elected representatives and encourage them to support legislation that requires ingredient disclosure and strict chemical safety screening that puts public health first.

Contact companies directly

Call or email the customer service of your favourite companies and ask them to disclose all chemicals and eliminate harmful ingredients.

Put your money where your values are

By spending money on products and companies that use healthy and environmentally friendly ingredients, you are investing in a greener future!

Give to good causes!

Environmental Defence
Ecojustice
Canadian Association of Physicians for the Environment (CAPE)
David Suzuki Foundation
Canadian Environmental Law Association
Breast Cancer Action Quebec

Get a label-reading app

Think Dirty
Good Guide
Healthy Living

Sign the petition!

WWW.BANTALC.COM

Spread the word!

You can support this publication with a donation at womenshealthyenvironments.ca/give

Catch us on January 5th on the Documentary Channel, and subscribe: cbc.ca/documentarychannel/subscribe

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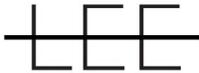
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channel**

GET INVOLVED

TOXIC BEAUTY

ARE YOU WORTH IT?

A FILM BY **PHYLLIS ELLIS** PRODUCERS **BARRI COHEN** EXECUTIVE PRODUCERS **PETER RAYMONT, STEVE ORD, CHERYL STAURULAKIS** SUPERVISING PRODUCERS **STEPHEN PANICCIA, ANDREW MUNGER** CINEMATOGRAPHER **IRIS NG** EDITOR **JAMES YATES** MUSIC **ROBERT CARLI** CONCEIVED BY **SARAH JAY** PRODUCED BY **WHITE PINE PICTURES** IN ASSOCIATION WITH **DOCUMENTARY CHANNEL, SRC** WITH THE PARTICIPATION OF **CANADA MEDIA FUND, ROGERS CABLE NETWORK FUND** DEVELOPED WITH THE PARTICIPATION OF **ONTARIO CREATES** INTERNATIONAL DISTRIBUTION **KEW MEDIA** A SPONSORED PROJECT OF **WOMEN MAKE MOVIES**



Since 1994, WHEN has been educating the general public, media and policy makers that environmental health is a key determinant of public health, and has promoted public action for the prevention of environmental health harms.

www.womenshealthyenvironments.ca

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