

ELLE

APR

STAND
FOR
EARTH

A LETTER
FROM
GRETA
THUNBERG

WHY
JANE
FONDA
SPENT
THE NIGHT
IN JAIL



THIS
YEAR'S
GREEN
BEAUTY
STARS

SOPHIE TURNER

ON LOVE,
FAME, AND THE
GROWING
JONAS FAMILY

\$5.99 ELLE.COM



08000

0 27344 1 1

04 >

The *Dirty* Truth

With escalating concerns about the chemicals in everyday beauty products, a battle is raging online and, now, in DC. Martha McCully investigates.



In January, the Food and Drug Administration published a study revealing that certain chemical sunscreens can be absorbed through the skin and into our bloodstreams. While it corroborated a pilot study the FDA executed less than a year earlier, this new research showed that these sunscreens can be absorbed into the blood at levels that exceed the FDA threshold presumed to be safe. Both the agency and other experts have underscored that there is no current evidence that these ingredients actually do harm—but that didn't stop the reincarnation of an old debate: Are our beauty products slowly killing us?

If you watch this year's buzzy documentary *Toxic Beauty*, released in January and featuring interviews with doctors who specialize in environmental health, oncologists, and cancer patients suing beauty companies, you might very well think so.

Retailers like Follain, The Detox Market, and Credo, which bans more than 2,700 ingredients from the products on its shelves, warn against ingredients with links to health issues. Parabens, phthalates, 1,4-dioxane, aluminum compounds, PEGs, chemical sunscreens, and synthetic fragrance are just a few currently under scrutiny. Words like *fragrance*, *parfum*, and *flavor* also raise eyebrows because they often serve as a catchall for hundreds of undisclosed chemicals (since scent is considered a trade secret).

In recent years, demand for “nontoxic” beauty products has become so strong that retailers like Sephora, Saks Fifth Avenue, and Target have established their own clean beauty seals and/or designated shopping sections. Meanwhile, the Environmental Working Group's ingredient database, Skin Deep—once considered the bête noire of mainstream beauty brands—is now a resource for major names like Procter & Gamble.

Promising? Perhaps. But if you ask many chemists and product creators about these developments, you may not hear a sigh of relief. “I roll my eyes every time someone wants to create a new brand and the first thing out of their mouth is ‘clean,’” says developer Tamar Lara Kamen, who has worked with companies such as Estée Lauder and Peter Thomas Roth. “I truly do not believe that topical skin care can be dangerous systemically.” When asked about research linking ingredients like parabens and phthalates to hormone disruption and even cancer, Kamen says the test doses are at levels “disproportionate to what you would put on your face.” In other words, it's the dose that makes the poison. After all, even water can kill you if you drink too much.

The stark difference of opinion is most acute online, of course, and laced with plenty of vitriol. Scroll through the comments sections of Insta-famous beauty chemists like LabMuffin-BBeautyScience of Australia or anonymous beauty vigilante Estée Laundry, and you'll find fiery disagreements about what's bad for your body, what's bad for the environment, and what's blatant fearmongering. Grab some popcorn and prepare to Google a few ingredients—or 100.

What may finally bring down the gavel on some of these disputes is the Cosmetic Safety Enhancement Act of 2019, introduced in the U.S. House of Representatives last December—only the second time in 40 years there's been a hearing about cosmetics reform on the federal level—and two new bills in California. The key proposals in the act require cosmetic companies to register formulas with the FDA and mandate better ingredient transparency. California's bills have similar demands: One would require the disclosure of fragrance and flavor chemicals deemed toxic to human health and the environment but allow nontoxic chemicals to remain confidential. The second bill would outlaw 13 of the most hazardous chemicals still permissible in the States, including formaldehyde, lead, mercury, asbestos, and two phthalates and two parabens already banned by the European Union.

More than 1,300 ingredients are currently off-limits in the EU. In comparison, the United States has only prohibited 11. While some big beauty companies formulate products for their international markets simultaneously (making them de facto compliant with the strictest laws), the last time the U.S. updated its list was in 1938, decades before retinol or long-wearing waterproof carbon black mascara was even invented.

Surprisingly, the FDA does not regulate the beauty industry as a matter of course (nor does any other federal agency), and the terms *green*, *botanical*, *pure*, *safe*, *nontoxic*, *vegan*, and, yes, *clean* are not regulated by any governing body (the term *organic* is regulated by the USDA, not the FDA). It's up to a company to test whether its products are safe. Does that happen? Four sources I spoke with used the phrase “the Wild West” to describe the beauty industry. “No one is minding the store when it comes

to the safety of cosmetic products,” says Janet Nudelman, director of the Campaign for Safe Cosmetics, which is sponsoring the two bills in California.

Think about formaldehyde, flagged as a possible human carcinogen by the National Toxicology Program in 1981; it's still allowed in hair-straightening treatments. Or triclosan, found to potentially cause tumors, which was a commonplace antibacterial ingredient until it was banned from liquid soap in 2016 (though it may still be in your toothpaste). That's not to say that all synthetics are bad and all natural ingredients are entirely safe—some essential oils can burn the skin, and asbestos is a naturally occurring mineral fiber. Last fall, *JAMA* published a letter entitled “Natural Does Not Mean Safe: The Dirt on Clean Beauty Products,” which warned against misleading greenwashing tactics in marketing. Plus, sometimes the ousting of one ingredient can usher in another that may be just as harmful, if not more so. But consumer demand alone can also push out ingredients if they are perceived as dangerous. Houston-based product developer Mark Broussard says, “Once something [takes] hold in the minds of consumers, what's the point? If consumers see parabens in your product, they won't buy it.”

Parabens, one of the most oft-cited and oft-defended ingredients of concern, may be the poster child for the clean beauty conflict. Commonly used in cosmetics and other products as preservatives, parabens have been shown to mimic estrogen, qualifying them as endocrine disruptors—but research has also shown that parabens' ability to bind to human estrogen receptors is weak. And while oncology professor Philippa Darbre, PhD, says in *Toxic Beauty* that “I'm actually quite upset about how much [paraben] I've measured in human breast tissue,” there is still no evidence that its presence actually triggers cancer. “Parabens are naturally occurring in fruits and vegetables, so customers are being exposed to them anyway,” says New Jersey-based cosmetic chemist Ni'Kita Wilson. “There is a class of parabens that have been banned in the EU, not because they were deemed unsafe but because there wasn't enough data.”

Nevertheless, many dermatologists remain skeptical. “I take ingredients in products incredibly seriously, and so do my patients,” says Whitney Bowe, MD, who practices in New York City. “In the case of parabens, I don't believe in innocent until proven guilty.” Macrene Alexiades, MD, PhD, who published a paper on the toxicity of parabens in *The Journal of Drugs in Dermatology* in 2008, agrees: “When people are applying five products a day, they're exceeding the maximum allowable amount by tenfold.” Most American women use 12 cosmetic products a day (or 33, like yours truly). They add up.

“It's well documented in medical toxicology journals that endocrine disruptors act additively,” says Ruthann Rudel, director of research at the Silent Spring Institute. CONTINUED ON PAGE 172

ARTWORK: FROM THE SUMMER PERSPECTIVE SERIES BY SUZANNE SAROFF/PRINT & CONTACT; REMAINING IMAGES: COURTESY OF THE BRANDS.

Coming Clean

Beauty brands are tweaking formulas, eliminating ingredients, and discovering innovative natural alternatives. By Taylor Davis



THIS FINE, LEAVE-IN MIST DETANGLES, SMOOTHS, AND ADDS SHINE WITH PLANT-BASED OILS INSTEAD OF SILICONE. DRUNK ELEPHANT WILD MARULA TANGLE SPRAY (\$25).



THIS PLANT-BASED, VEGAN NAIL POLISH IS “16-FREE” (NO FORMALDEHYDE, TOLUENE, PHTHALATES, PARABENS, ETC.). SALLY HANSEN GOOD. KIND. PURE. NAIL POLISH (\$9).



STUDIES HAVE YET TO LINK ALUMINUM IN ANTIPERSPIRANT TO HEALTH RISKS, BUT MANY STILL AVOID IT. DOVE 0% ALUMINUM DEODORANT LAVENDER & VANILLA (\$6).



FINELY MILLED VOLCANIC MINERALS, SANS TALC, BLUR IMPERFECTIONS AND CONTROL SHINE. BITE BEAUTY CHANGEMAKER FLEXIBLE COVERAGE PRESSED POWDER (\$36).

THE STATE OF SUSTAINABLE FASHION

CONTINUED FROM PAGE 61

from T-shirts emblazoned with her likeness (possibly the precise impact she opposes) to a full collection by Sweden-based designers Josephine Bergqvist and Livia Schück, founders of the label Rave Review. Their spring 2020 collection was made with only preexisting materials, including upcycled vintage blankets, bedsheets, and tablecloths.

As parts of the world grapple with water shortages, anyone with a heap of denim in their closet might note the terrifying UN statistic that it takes 10,000 liters of water to grow a kilo of cotton—the equivalent of one pair of jeans. Levi Strauss & Co. has updated its climate action plan to reduce its global supply

chain’s greenhouse gas emissions by 40 percent by 2025—and by 90 percent in its owned-and-operated facilities. Now consumers need to step up. How many pairs of jeans does someone need—and how often should they be washed?

Perhaps, as with so many eco-friendly shifts—like ditching plastic for glass bottles—change will come not from looking to the future, but to the past. Living sustainably came naturally to our grandparents and great-grandparents, who spot-cleaned, mended their clothing, and maintained minuscule wardrobes by modern standards. The answer may well have been right there all along—in our closets. ■

THE DIRTY TRUTH

CONTINUED FROM PAGE 105

in Massachusetts, where researchers identify preventable causes of breast cancer. “The Endocrine Society has written strong statements about reducing these chemicals, both for the general population and for those who are vulnerable, such as a fetus, women being treated for breast cancer, children, and those with genetic susceptibility.”

While more research and legislation can lead to safer products, bucks may come before bills. Hence, beauty’s buzziest marketing term: transparency. “I think there needs to be an industry-wide shift from building beauty on secrets to building beauty on clear, open communication,” says

Gregg Renfrew, the founder and CEO of clean beauty brand Beautycounter, who testified in December at a hearing on the Cosmetic Safety Enhancement Act. “All members of the beauty community should be committed to a future that is clean.”

To that end, third-party organizations like Ecocert and Made Safe, and apps like SmartLabel and Think Dirty—as well as the Google Chrome extension Clearya—are working to increase transparency by helping consumers decode the often-complicated ingredients in product labels. We’ll see what the commenters have to say about that. ■

M A R T H E: A REFERENDUM

CONTINUED FROM PAGE 121

Perhaps it is significant that Earth Day 2169 seems to have had no “dawn.” Instead, the sky has been overcast by an eerie, green-tinged dust cloud arising from the Southern Hemisphere, occluding visibility from the observatory level of Climate Control Tower I; meteorologists believe the dust cloud to be hyper-radioactive, and it may be of a potency that can infiltrate Climate Control barriers. Also, there have been reports of slime mold quivering with “life” in toxic tundra wastelands that have been lifeless for centuries. A malevolent new organism resembling gigantic paramecia is reported flourishing where “grasses” and “trees” once grew plentifully in the Great Void Plains, said to be equipped with a “rudimentary consciousness.” Suffocating winds, blood-red acid rain, lethal solar rays that can shrivel unprotected organic skin and scald corneas blind within seconds; a near-continuous quaking of coastal lands along new seismic fault lines; smoldering mudslides, radioactive firestorms, steaming sinkholes, bubbling swamplands where no living creatures had been detected for centuries until the sudden emergence of a species of new, hardy beetle as large as a Norway rat—all signify a new, heightened danger to our civilization.

Which is why today’s referendum vote is “historic”: a vote to defund M A R T H E will be a vote to pump badly needed funds into the sidelined Space Colonizing Project—our only hope to escape the doomed Earth, destroyed by the ravages of the accursed species Homo sapiens.

Yes, three-dimensional “paper” ballots are indeed an anachronism in 2169! Since most of you infrequently exist in a

three-dimensional space, let alone in three-dimensional real time, you are likely to feel disoriented. Most of you have never gathered together in any public setting like the Great Hall; even fewer have gathered together in real time.

The reason for a “paper ballot” is to prevent computer hacking and to assure an accurate count. The reason for real time is that the referendum must be completed within an hour so that the results of the vote can be set into motion by midnight.

As voters, you are required to check one box. Yes or No to the proposal: No further “extraordinary measures” should be employed to keep M A R T H E alive.

That is, Yes means no, M A R T H E—the “last living specimen of her doomed, moribund, accursed species”—should not continue to live, while No means yes, M A R T H E and her “doomed, moribund, accursed species” should continue to live.

It is true, AICitizens are contractually obliged to protect their CreatorSpecies from extinction; but it is also true, contracts can be broken, precedents can be overturned, and new generations are not invariably bound to honor the obligations of older generations.

The latest polls report sharply divided opinion on the referendum: 46 percent of AICitizens favor halting “extreme measures” to keep M A R T H E alive; 42 percent favor keeping M A R T H E alive with “extreme measures”; a swing vote of 12 percent is “undecided.”

Consider carefully before you vote! The future of civilization depends upon you. ■

SOPHIE TURNER IS NOT A D%#K

CONTINUED FROM PAGE 154

“In *Survive*, my character has been in rehab for [almost] an entire year,” Turner adds. “And I actually suffer from depression. I also suffer from anxiety and eating disorders. It felt like I knew so much of that world.”

“Has doing the series helped you with your own issues?” I ask. She shrugs her shoulders, eats another blueberry.

“I suppose, yeah, at the time, it’s very therapeutic, because I’m not thinking about myself. But then afterwards, um, not so much.” She pops the tart blue orb into her mouth. “What happens is...I’ve been so obsessed with portraying this other character’s problems that I haven’t actually worked on me.”

Our time together is quickly coming to an end. Turner has been a model subject, answering questions candidly and in detail that perhaps nobody has bothered asking her before, revealing herself to be an earnest and diverting interview partner. Across the lobby, I see Turner’s publicist taking a seat on the couch. She gives me a little no-nonsense nod that seems somehow distinctly English. I have time for one more.

I ask her about the ending of *Game of Thrones*.

“I haven’t watched it,” she says.

“That’s a safe answer,” I say archly, knowing she’s happy operating a little bit south of the PC border. I eat the last bit of

COVERS

ON SOPHIE TURNER: Dress by Louis Vuitton, select Louis Vuitton boutiques nationwide.

ON JANE FONDA: Jacket, \$3,590, trousers, \$990, by Alexander McQueen, Alexander McQueen (NYC). Bodysuit by Falke, \$180, falke.com. Earrings, \$3,400, rings, from \$900, by Tiffany & Co., tiffany.com.

EDITOR’S LETTER

PAGE 34: Dress by Christopher Kane, similar styles at christopherkane.com. Tights by Falke, falke.com. Boots by The Way We Wore, L.A., thewaywewore.com. Vintage Norma Kamali dress by Shop Morpheu, Istdibs.com. Jumpsuit by Bottega Veneta, bottegabeneta.com. Blouse by Versace, versace.com. Boots by Balenciaga, Balenciaga (NYC). All jewelry by Tiffany & Co., tiffany.com.

TABLE OF CONTENTS

PAGE 39: Jacket, trousers, sandals by JW Anderson, jwanderson.com.

ACCESSORIES

PAGE 76: Bracelet by Carolina Bucci, \$15,600, carolinabucci.com. PAGE 78: Earrings by Daniela Villegas x Muzo Emeralds, \$50,000, danielavillegas.com.

SHOPS

PAGE 88: Jacket by Supriya Lele, supriyalele.com. Dress by Marina Moscone, \$2,850, marinamoscone.com.

FIRE STARTER

PAGE 129: Jacket, trousers by Alexander McQueen, Alexander McQueen (NYC). Bodysuit by Falke, \$180, falke.com. Earrings, rings by Tiffany & Co., tiffany.com. Pumps by Christian Louboutin, christianlouboutin.com.

GREEN GODDESS

PAGE 131: Dress by Loewe, Loewe (NYC). Earrings by Tiffany & Co., tiffany.com. Boots, The Way We Wore, L.A., thewaywewore.com.

CONSCIOUS EATER

PAGE 133: Jumpsuit by EverybodyWorld, exclusively at everybodyworld.

SIREN SINGER

PAGE 135: Dress by Givenchy, givenchy.com. Rings by Tiffany & Co., 800-843-3269.

SHIFTING SANDS

PAGES 136–137: Dress by Etro, similar styles at Etro boutiques nationwide. Hoop earrings (throughout) by Jennifer Fisher, jenniferfisher.com. Sandals by JW Anderson, jwanderson.com. PAGE 138: Top, skirt by Proenza Schouler, similar styles at proenzaschouler.com. PAGE 139: Gown by Gucci, gucci.com.

Necklace by Bottega Veneta, bottegabeneta.com. PAGE 140: Top, pants by Giorgio Armani, armani.com. Hat by Prada, prada.com. PAGE 141: Top, skirt by Chanel, 800-550-0005. PAGE 142: Dress by Dior, 800-929-DIOR. PAGE 143: Jacket, pantashoes, sunglasses by Balenciaga, Balenciaga (Beverly Hills), balenciaga.com. PAGE 144: Dress by Celine by Hedi Slimane, celine.com. PAGE 145: Coat, gown by Rick Owens, Rick Owens (NYC). PAGE 146: Jacket, skirt by Prada, select Prada boutiques nationwide. Sandals by Valentino Garavani, Valentino boutiques nationwide. PAGES 148–149: Gown by Valentino, \$22,000, Valentino boutiques nationwide.

SOPHIE TURNER IS NOT A D%#K

PAGES 150–155: All clothing and accessories by Louis Vuitton, louisvuitton.com.

WHERE THE SIDEWALK ENDS

PAGE 157: Trench coat by Coach 1941, coach.com. Dress by Sacai, sacai.jp. Earring by Charlotte Chesnais, Dover Street Market New York. Cross-body bag by Sies Marjan, collection available at siesmarjan.com. Platforms by The Row, therow.com. PAGE 158: Blazer by Brunello Cucinelli, brunellocucinelli

crispy bacon. And wait for her answer.

“I started watching when the last season started,” she says, “and I was planning to watch the rest. But then I fell behind. And then I started reading all these comments online...”

I ease her off the hook: “And you didn’t want to ruin it?”

“I feel like you are never going to have everybody be satisfied with the ending. Especially a show that’s been going on for almost 10 years at that point. People have so many ideas of how they want it to end. You can’t make every fan happy.”

I pose one last question.

“How does it feel to have been part of one of the greatest shows of all time?”

“Pretty much since season three, we’ve been hearing, ‘*Game of Thrones!* It’s a phenomenon!’ I’ve been trying to, like, comprehend that. But when you’re in it, you can’t see it. Now that I’m out of it, I’m only starting to realize how incredible it was, what a revelation it was for television. I’m like, ‘Oh my God, I’ve been, like, blessed.’ When it’s happening, you don’t realize you’re among greatness: The people I was around. The atmosphere. The way they worked. I was spoiled by that show completely. And I’ll never have anything like it again. Nothing will be the same. And only now am I realizing that.” ■

.com. Shirt by Monse, similar styles at monse.com. Skirt by Nanushka, nanushka.com. Handbag by The Row, therow.com. Mules by Bottega Veneta, bottegabeneta.com. PAGE 159: Shirt by Maje, maje.com. Shirt by Vera Wang Collection, farfetch.com. Trousers, belt bag by Off-White c/o Virgil Abloh, Em Pty Gallery (NYC). Sunglasses by Loewe, loewe.com. Earrings by Bar Jewellery, barjewellery.com. Bracelet by Atelier Swarovski Fine Jewelry by Paige Novick, atelierswarovski.com. PAGE 160: Shirt, skirt by Max Mara, handbag by Max Mara by Renzo Piano Building Workshop, maxmara.com. PAGE 161: Coat, top, pants by Boss, hugoboss.com. Earrings by Bea Bongiasca, musexmuse.com. Gloves by Wing & Weft Gloves, wegloveyou.com. PAGE 162: Trench coat by Herno, Herno (NYC). Top, pants by Kwaidan Editions, similar styles at net-a-porter.com. PAGE 163: Bodysuit by Moschino Couture, moschino.com. PAGE 164: Vest by Piazza Sempione, piazzasempione.com. Top by St. John, stjohknits.com. Pants by Mugler, mugler.fr. Earrings by Lagos, lagos.com. Belt bag by Mark Cross, markcross.com. Pumps by Proenza Schouler, proenzaschouler.com. PAGE 165: Cardigan by

Loro Piana, loropiana.com. Top by A.W.A.K.E. Mode, awake-mode.com. Earrings by Misho, mishodesigns.com. PAGE 166: Coat by Fabiana Filippi, fabianafilippi.com. Bodysuit by Mugler, mugler.fr. Skirt by 2 Moncler 1952, moncler.com. Leggings by Charlotte Knowles, hlorenzo.com. Handbag by Celine by Hedi Slimane, celine.com. Sandals by Boss, hugoboss.com. PAGE 167: Shirts by Etro, etro.com. Vest by 2 Moncler 1952, moncler.com. PAGE 168: Top by Marciano, marciano.com. Sweater by Guess, guess.com. Skirt, platforms by Sacai, sacai.jp. Pants by Gabriela Hearst, Gabriela Hearst (NYC). Earrings by Björg, bjorgjewellery.com. PAGE 169: Jacket, ear cuffs by Y/Project, Nordstrom stores nationwide. Tank by Off-White c/o Virgil Abloh, off---white.com. Skirt by AG, ageans.com.

TRAVEL

PAGE 171: Ring by Tamara Comolli, from \$12,200, Tamara Comolli (Southampton, NY).

HOROSCOPE

PAGE 174: Ring by Dior Fine Jewelry, available by special order, 800-929-DIOR.

Prices are approximate. ELLE recommends that merchandise availability be checked with local stores.