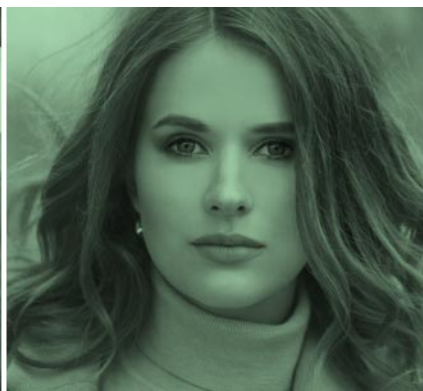
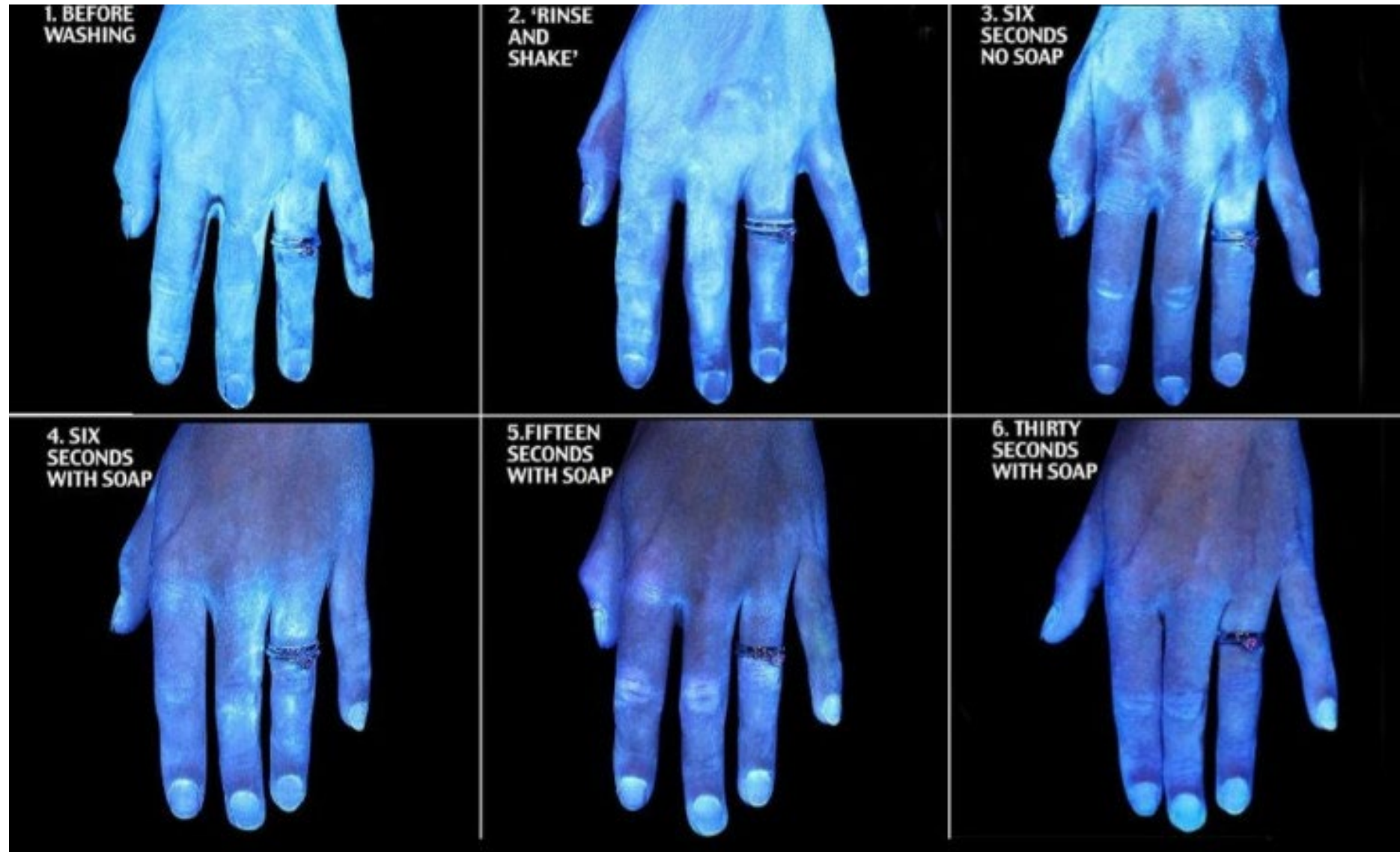


The Other Side of Fear: Balancing the Misinformation Equation

Dennis Abbeduto, Personal Care Business Manager



WASH YOUR HANDS



Outline

- The Proliferation of Fear
- The Facts
- The Product Equation
- Obvious and Unintended Impacts of “Cleanwashing”
- Trends Going Against Green
- Wrap-up

The Proliferation of Fear



TOP 10 HARMFUL INGREDIENTS TO AVOID
in Makeup and Skincare
coconutandskettlebells.com

INGREDIENTS THAT ARE KNOWN ENDOCRINE DISRUPTORS, CARCINOGENS, AND LINKED TO BIRTH DEFECTS

- ✓ Parabens
- ✓ Artificial Fragrance/Parfum
- ✓ Sodium Lauryl Sulfate
- ✓ Toluene
- ✓ Phthalates
- ✓ Polyethylene Glycol (PEG)
- ✓ Formaldehyde
- ✓ Oxybenzone
- ✓ Diethanolamine
- ✓ Triclosan

WHAT TOXIC *chemicals* IS YOUR BODY ABSORBING?

 We absorb up to 60% of what we put on our skin. 

12 toxic and carcinogenic compounds found in beauty & skin care products

Benzyl alcohol Harmful if swallowed, inhaled or absorbed through the skin. Severe irritant for eyes, skin and respiratory system. Petrochemical.	Bismuth Oxychloride A by-product of lead and copper refining, bismuth oxychloride is a heavy metal. Heavy metals have been linked to Alzheimer's and Parkinson's Disease.	Diethanolamine It is a skin irritant. It's close and dangerous cousins are TEA, and MEA.
Fragrance Highly allergenic. Companies do not have to list the chemicals used in fragrances. Contains large quantities of toxins and chemicals not disclosed.	Mineral Oil Occlusive, non-nutritive petroleum derivative. It coats the skin like plastic wrap, disrupting the skin's natural immune barrier and inhibiting its ability to breathe.	Parabens Parabens cause many allergic reactions and skin rashes. They have also been found in breast cancer tissue.
Phthalates Phthalates are synthetic chemical compounds mainly used as softening agents and to create fragrance. Carcinogens, mutation agents.	Laureth Family Sodium Lauryl Sulfate, any ingredient with laureth or lauryl in the name. Carcinogenic, skin irritants may be contaminated with large amounts of toxins in manufacturing process.	Tar & Colors Synthetic colors are derived from petroleum or coal tar sources. Suspected to be a human carcinogen and a skin irritant. The European Classification and Labeling considers it a human carcinogen.
Formaldehyde Used in many cosmetic products. Deemed as a human carcinogen by The IARC. Known to cause allergic skin reactions and it may also be harmful to the immune system.	Petrolatum Derivative also known as petroleum jelly. Petrolatum is very occlusive and can clog pores. Acne producing, may be carcinogenic, causes dry skin, respiratory toxin, may cause dizziness.	Lead Lead is a neurotoxin that is known to accumulate over time. It causes behavioural and learning problems and has been banned in certain industries, such as household paints, since the Seventies.

HEALTH ISSUES LINKED TO TOXIC CHEMICALS IN THE BODY




2 A woman consumes an average of nearly **two kilograms** of lipstick during her lifetime through drinking, eating and kissing

Be aware that a cosmetic company can call a product mineral makeup even if it contains only small amounts of a mineral.

Reject Chemicals

10 HARMFUL CHEMICALS TO AVOID IN BEAUTY PRODUCTS

1. phthalates: NAIL PRODUCTS
2. sulphates: FACIAL, KITCHEN & BATHROOM
3. parabens: CREAMS, LOTIONS & DEODORANTS
4. phenoxyethanol: PERFUMES, SOAPS & COSMETICS
5. formaldehyde: LASH GLUE, BABY SOAP, HAIR DYE
6. BHA & BHT: LIPSTICKS & MOISTURIZERS
7. coal-tar dyes: COSMETICS & SHAMPOOS
8. petrolatum: HAIR CARE
9. siloxanes: FACIAL PRODUCTS, DEODORANT, HAIR CARE
10. DEA compounds: COSMETICS (TO MAKE CREAMY!)



The “Unregulated” Cosmetic Industry

THE
ugly side
OF THE
beauty industry

1938

LAST TIME CONGRESS PASSED A MAJOR
LAW REGULATING THE COSMETICS INDUSTRY

200,000,000,000

NUMBER OF DOLLARS THE
COSMETICS INDUSTRY IS WORTH

1.5

NUMBER OF PAGES
OF FEDERAL LAW
USED TO OVERSEE
THE INDUSTRY

Over 1,400

NUMBER OF HARMFUL COSMETIC INGREDIENTS
BANNED IN THE EUROPEAN UNION

30

NUMBER OF POTENTIALLY HARMFUL COSMETIC INGREDIENTS
BANNED OR RESTRICTED IN THE UNITED STATES

	STANDARDS	NO STANDARDS
FOOD	X	
DRUGS	X	
DRINKING WATER	X	
PESTICIDES	X	
CARS	X	
TOYS	X	
ELECTRONICS	X	
TOBACCO	X	
COSMETICS		X



THE UNREGULATED
CARCINOGEN
1,4-DIOXANE
WAS FOUND IN
THOUSANDS
OF PERSONAL
CARE PRODUCTS



CHEMICALS BANNED
FOR USE IN
COSMETICS

USA: 11

VS.

EU: 1,328



The Cosmetic Industry?



The Facts

Ingredient	Function	Banned in US?	Restricted in US?	Banned in EU?	Restricted in EU?
Parabens	Preservative	No	Yes, benzylparaben	Some	Yes, remaining
Phenoxyethanol	Preservative	No	Not really	No	Yes
Petrolatum	Occlusive	No	No	No	No
Diethanolamine	Residual to amide	No	Effectively by Prop 65	No	Yes, kind of
Silicones	Various	No	No	No	Yes, cyclics
Coal tar dyes	Color	No	Yes	No	Yes
Phthalates	Various	No	No	Some	Not beyond bans
SLS	Foam, detergency	No	Yes	No	No

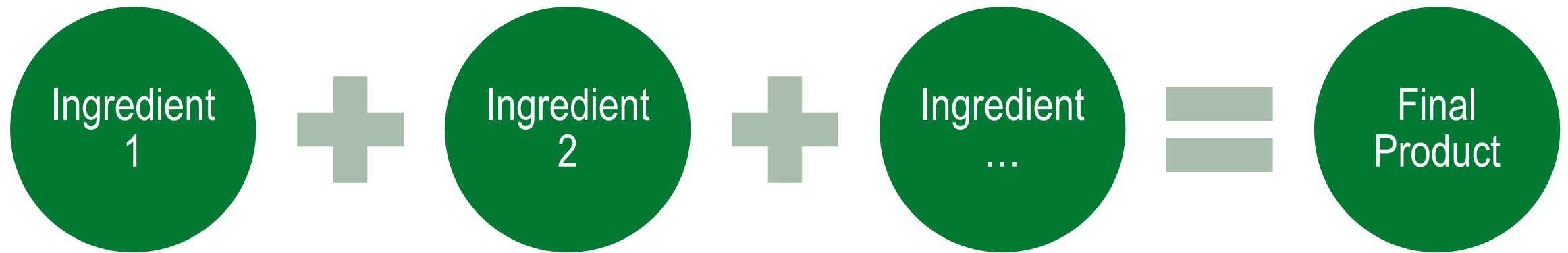
Example EU Banned Ingredients

- Short alkanes with caveats (150+ entries as alkanes, tail gasses, hydrocarbons, petroleum)
 - Long alkanes with caveats (200+ entries)
 - Carbon monoxide
 - Epinephrine
 - Carbon disulfide
 - Chlorine
 - Hydrogen cyanide (and salts)
 - Warfarin
 - Thousands of chemicals with no common/INCI names
-
- So what's going on?

Additional “Hit List” Ingredients

- Palm oil derivatives
- Organic sunscreens
- Synthetic fragrances
- Isothiazolinones
- Formaldehyde donors
- Mineral oil
- Mica
- Ethoxylates
- MEA, TEA
- What's next?

The Product Equation



Final Product Attributes

CONSUMER PERCEIVABLE

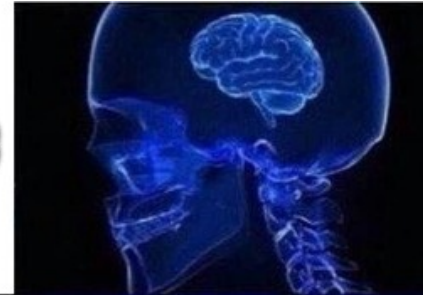
- Scent
- Color
- Opacity
- Rheology
- Product specific attributes
 - Cleansers
 - Cosmetics
 - Sunscreens
 - Skin care

“INVISIBLE”

- Biobased content
- Environmental impact
 - Sustainable sourcing (land use, etc)
 - Manufacturing “costs”
 - Ecotox (aquatic tox, bioaccumulation, etc)
 - Packaging impacts
- Ethical sourcing
- Natural vs nature identical
- Genetic engineering
- Animal products
- Animal testing
- Cost

Evolving Claims

HYPOALLERGENIC



NATURAL



SUSTAINABLE



**ETHICALLY
SOURCED**



Obvious Impacts of Removing Ingredients

Ingredient	Change
Parabens	Few effective antifungals for aqueous systems
Diethanolamine	Higher cost viscosity control and fragrance solubilization
Silicones	Less luxurious aesthetics, another skin protectant
Petrolatum	No silicone-free skin protectants
Coal tar dyes	Difficult to produce certain colors
Phthalates	Less long-lasting fragrance
SLS	Lower foam, viscosity building

Unintended Impacts of Removing Ingredients

Ingredient	Downstream consequence
Parabens	Increased usage of allergenic preservatives Increased incidence of microbial contamination
Diethanolamine	Increased energy usage for high melting additives Increased usage of petrochemical thickeners
Palm Oil Derivatives	Increased land use Increased reliance on GM crops
Ethoxylates	Increased irritation potential Decreased product stability
SLS	Increased usage of petrochemical surfactants Replacement surfactants with equivalent irritancy Replacement surfactants with poor ecotox profiles
Organic Sunscreens	Decreased product application rate Decreased usage in high risk populations

Trends “Going Against the Grain”

- Increased secondary packaging
- Single use products
- Animal products
- Bespoke beauty
- K-beauty routines
- Exclusively using essential oils
- Continued demand for retinoids
- DIY cosmetics
- Endless churn of “important” ingredients
- Decreased reporting to FDA Voluntary Cosmetic Registration Program (VCRP)

Test Case – Body Wash

- Product 1 Ingredients:
 - Sodium Laureth Sulfate, Cocamidopropyl Betaine, Cocamide MEA, PEG-7 Glyceryl Cocoate, Polyquaternium-7, FD&C..., Fragrance, DMDM Hydantoin
- Product 2 Ingredients:
 - Sodium Coco-Sulfate, Coco-Glucoside, Cocamidopropyl Hydroxysultaine, Polyglyceryl-3 Oleate, Polyquaternium-81, Fragrance, Potassium Sorbate, Sodium Benzoate
- Product 3 Ingredients:
 - Potassium Cocoate, Potassium Oliviate, Citrus Aurantium Amara (Bitter Orange) Peel Oil, Santalum Album (Sandalwood) Oil, Citric Acid

Conclusions

- There is a substantial body of evidence that cosmetic products are safe
- Due to differences in manufacturer liability, other countries are more explicit in restrictions
- Looking at total formulation attributes is important for considering ingredient impacts
- Replacing ingredients based on fear, without supporting evidence, is ill advised
- Downstream consequences must be considered
- Perfect should not be the enemy of the good

Webinar Series Upcoming Events

- June 25 – Reduced Irritation in Rinse off Cleansers

<https://bit.ly/3dU4q6m>



Thank you!

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