

# Chemical Consciousness

Hormone Harmony or  
Hormone Hijack?

1981



2014





### Donna's Detox



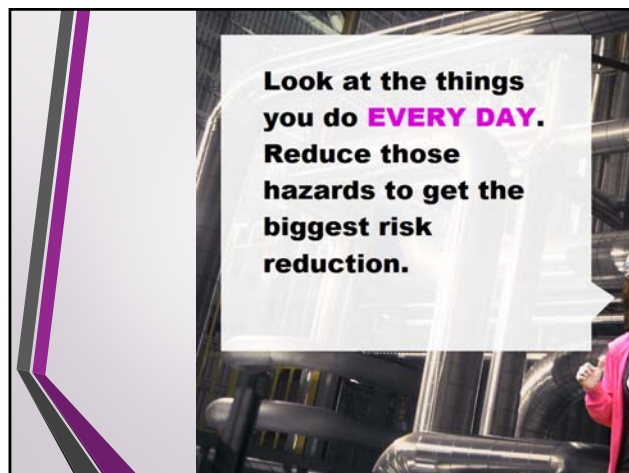
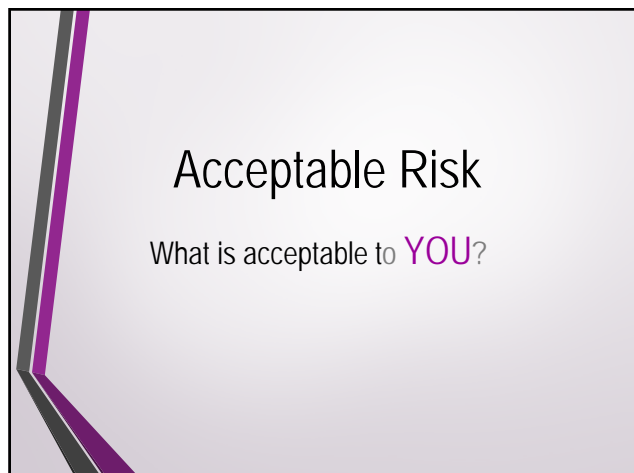
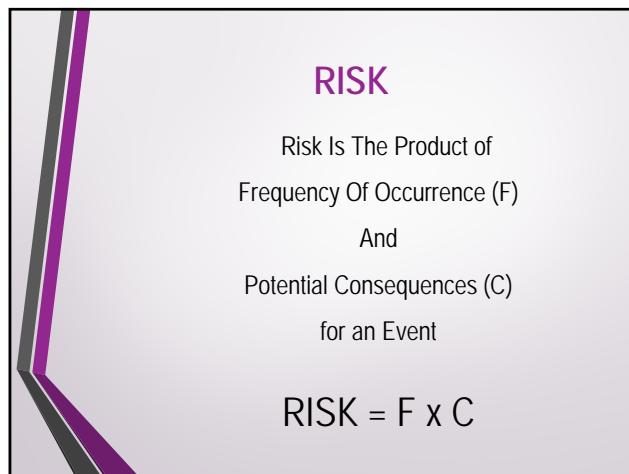
### The Concept of Risk

### A Risky Game



### A Risky Game







## Evaluate the Things that You Do Every Day

Swim    Clean House    Eat Brownies    Chew  
Exercise    Drink Coffee    Paint    Sleep    Travel

## Routes of Exposure

Four ways that toxins enter the body:

- Inhalation
- Absorption
- Ingestion
- Injection

## How Labeling Works

- Ingredients are listed in decreasing order of weight
- Less than 2%, they can be listed in any order or sometimes not at all
- FDA does not require cosmetics companies to conduct safety assessments on their products

INGREDIENTS/INGRÉDIENTS : WATER/EAU, SODIUM LAURYL SULFATE, SODIUM LAURETH SULFATE, COCAMIDOPROPYL BETAINE, GLYCOL DISTEARATE, HYDROLYZED SILK, FRAGRANCE/PARFUM, SODIUM CITRATE, COCAMIDE MEA, SODIUM XYLENESULFONATE, DIMETHICONE, CITRIC ACID, SODIUM BENZOATE, POLYQUATERNIUM-76, SODIUM CHLORIDE, TETRASODIUM EDTA, METHYLCHLORISOTHIAZOLINONE, METHYLISOTHIAZOLINONE, BLUE 1, RED 33.

## What is NOT on the Label

- Processing Aids
- Ingredients that are present in quantities less than 2% by weight are optional
- "Harmless Markers" that producers add to identify their products
- Herbicides
- Pesticides

## Cosmetics and Personal Care Products

- The skin is the largest organ in the body
- *Never put anything on your skin that you wouldn't be willing to eat!*
- Exception: large-molecule substances like titanium dioxide and zinc oxide (found in sunscreens)
- Use [www.ewg.org](http://www.ewg.org) Skin Deep and Sunscreen databases to check all personal care products

## Hormone-Disrupting Chemicals

## Environmental Working Group

*"There is no end to the tricks that endocrine disruptors can play on our bodies: increasing production of certain hormones; decreasing production of others; imitating hormones; turning one hormone into another; interfering with hormone signaling; telling cells to die prematurely; competing with essential nutrients; binding to essential hormones; accumulating in organs that produce hormones."*

## Health Effects

- Non-descended testes in young males
- Developmental effects on the nervous system in children
- Prostate cancer in men
- Developmental effects on the nervous system in children
- Attention deficit /hyperactivity in children
- Thyroid cancer
- Breast cancer
- Obesity
- infertility or reduced fertility
- learning and memory difficulties
- adult-onset diabetes
- cardiovascular disease

### Parabens

- Class of compounds used in cosmetics as antifungal preservatives
  - Butylparaben, ethylparaben, isobutylparaben, methylparaben, propylparaben
- Is absorbed by the skin and mimics estrogen in the body
- Can cause problems with male fertility
- Has been found in breast tumors
- When put on skin, can cause DNA damage and increased skin aging

### Aluminum Chlorohydrate

- Found in antiperspirants
- Aluminum has been found in breast tumors
- Alzheimer victims have elevated levels of aluminum
- Interferes with normal body route of detoxification
- Hazardous process for plant employees

### Phthalates

- May be disruptive to the endocrine system - developmental, reproductive, and neurological damage.
- Ability to mimic human hormones –
  - could cause reproductive abnormalities and decreased production of testosterone in males, and decreased male fertility.
  - Link between phthalates and premature delivery and endometriosis in women.
- Used to plasticize products, making them more flexible or better able to hold in color and scent. Can be grouped under and listed as "fragrance."

### "Fragrance"

- An undisclosed mixture of chemicals
- Can cause irritability, muscle pain, asthma, bloating, joint aches, sinus pain, fatigue, sore throat, eye irritation, gastrointestinal problems, laryngitis, headaches, dizziness, swollen lymph nodes, spikes in blood pressure, coughing, and/or burning or itching skin irritations.
- Many people are allergic to fragrance and often do not know it until they are away from it for a while and then experience an immediate return of symptoms upon re-exposure.

### Butylphenyl Methylpropional

- Used as a fragrance ingredient
- Acts as an allergen, can cause dermatitis
- May act as estrogen within the body and lead to breast cancer.

### Lead

- A proven neurotoxin linked to miscarriage; reduced fertility; and delays in the onset of puberty for females.
- Campaign for Safe Cosmetics found lead in over half of the 33 brands of lipstick they tested. A more recent study by the FDA tested popular brands and found 400 that contained up to 7.19ppm of lead.
- Not added as an ingredient, but enters through contamination. Color additives are some of the most common sources. Buy products colored with fruit and other natural pigments.
- Hazardous to municipal workers

### Cetareth-20

- May contain impurities containing ethylene oxide or 1,4-dioxane, which are known carcinogens.
- Furthermore, it enhances penetration of the skin by other chemicals, which could allow these carcinogens and other harmful substances into the body.

### Siloxanes

Used in cosmetics to soften, smooth, and moisten. They disrupt the endocrine system and are toxic to the reproductive system. These end in -siloxane or -methicone



### Preservatives

- BHA— Causes cancer in mice, rats, hamsters, and fish, and is suspected to be a carcinogen for humans.
- TBHQ—High doses can cause nausea or collapse. Linked to stomach cancer and DNA damage.
- BHT – Linked to organ, developmental and reproductive toxicity. May induce allergies.
- European Commission on Endocrine Disruption lists BHT and BHA as a Category 1 priority substance due to evidence that it interferes with hormonal function

### Triclosan

- Used in cleaning supplies and antibacterial hand washes
- Impairs muscle function
- Mimics estrogen in the body and can increase risk of breast cancer
- Linked to liver toxicity
- Linked to antibiotic resistance
- Destroys probiotic environment in the gut

### Preservatives

- BHA— Causes cancer in mice, rats, hamsters, and fish, and is suspected to be a carcinogen for humans.
- TBHQ—High doses can cause nausea or collapse. Linked to stomach cancer and DNA damage.
- BHT – Mimics Estrogen. Linked to organ, developmental and reproductive toxicity. May induce allergies.
- European Commission on Endocrine Disruption lists BHT and BHA as a Category 1 priority substance due to evidence that it interferes with hormonal function

### Reduce Toxic Body Burden

- Use EWG's Skin Deep Cosmetics Database to choose the safest products
- Products bearing the USDA 100% Organic seal are safest bet.
- Make your own personal care and household cleaning products.
- Look for products that have a Compact for Safe Cosmetics signature.
- Avoid artificial air fresheners, dryer sheets, fabric softeners or other synthetic fragrances.

## Resources

- [www.ewg.org](http://www.ewg.org)
- [www.epa.gov](http://www.epa.gov)
- <http://www.cdc.gov/niosh/>
- [www.ChemConscious.com](http://www.ChemConscious.com)



## Detoxify Your Life Product

- Program that effortlessly guides you through the hazard identification process in 5 areas of your life
- Assess **YOUR** risk based on the likelihood that **YOU** will be exposed to toxins based on **YOUR** own personal habits, behaviors and your environment.
- Risk based online downloadable checklist
- Step-by-step formula for uncovering hidden toxins

## SIV Special Pricing

- Special Pre-launch Pricing
- Regular price \$19.99 – your price today only \$14.99
- Includes lifetime updates at [www.chemconscious.com](http://www.chemconscious.com)
- Includes
  - Checklists and instructions
  - MP3 of never-released call with Donna and Dr. Ritamarie on the topic of Detoxification