### SUMMARY - THE "OH WOW" LIST OF EPA CHEMICAL REGISTRATION OMMISSIONS

### The EPA registration process does NOT consider the following issues:

- Epigenetic/Developmental problems
- Endocrine disruption
- Immune function
- Neurological effects
- Combinations of chemicals that can synergistically enhance adverse effects
- Toxins store in fat, including the brain, nervous system, bone marrow, around organs and in the yolk/nucleus of eggs, before or after birth.
- Chemically induced epigenetic changes that occur during a lifetime can be passed to the next 4 generations (the limit of the Michael Skinner studies)
- Atrazine, used on corn and many other crops, <u>abnormally</u> increases the enzyme "Aromatase", which converts testosterone to estrogen., It's a
  one way trip! Can potentially feminize males and trigger breast cancer and reproductive problems in girls. Glyphosate inhibits aromatase, and
  can masculinize females and produce alpha and possibly violent, males.

# The EPA PERMITS/ALLOWS:

- Chemicals to be registered by themselves, not including the "inert" ingredients that cause penetration of skin, lung, brain and placental barriers.
- Only high doses of chemicals typically checked in safety studies. Low doses (ppb-ppt) that are often very active biologically and can falsely
  mimic our own hormones, are not considered.
- Typically only young mature male rats are used in chemical safety studies (they excrete chemicals well)

The following categories of rats are NOT USED in safety studies

Female rats are not checked for adverse effects.

Pregnant rats are not checked for adverse effects.

Elderly rats are not checked for adverse effects.

Baby male rats are not checked for adverse effects.

Baby female rats are not checked for adverse effects.

Teenage (pubertal) rats are not checked for adverse effects.

Immune compromised rats are not checked for adverse effects. Sleep deprived rats are not checked for adverse effects.

Malnourished rats are not checked for adverse effects.

The EPA: Underestimated the effects of low doses of estrogen mimicking endocrine disrupting chemicals by 10,000 times!!! (vom Saal & colleagues)

**The FDA:** According to Michael Taylor, FDA's deputy commissioner for food safety until June 1, 2016 (and a lawyer and former Monsanto Vice President of public policy 1996-2000). The FDA doesn't even know many new substances exist. "We simply do not have the information to vouch for the safety of many of these chemicals,"

# Why doesn't everyone suffer obvious adverse effects immediately?

The wide variety of individual effects of toxic exposure can depend on many factors including:

### Oh WOW! More details - EPA CHEMICAL REGISTRATION OMISSIONS

I didn't know the EPA does NOT look at <u>epigenetic developmental problems</u> when it evaluates and registers new chemicals. (Ie., intrauterine, childhood development, healing, etc.)

I didn't know the EPA does NOT look at <u>endocrine disruption</u> (thyroid, pituitary, hypothalamus, adrenals, gonads, etc., which includes polycystic ovarian syndrome, osteoporosis, gender injury issues and hosts of other glandular/hormone conditions) when it evaluates and registers new chemicals.

I didn't know the EPA does NOT look at <u>immune function</u> (which affects conditions such as asthma, allergic diseases, autoimmune disease, infectious disease, ineffective vaccine response, cancer, cystic fibrosis, male sterility, polycystic ovary syndrome, and hosts more), in the evaluation and registration process for new chemicals.

I didn't know the EPA does NOT look at neurological effects when it evaluates and registers a new chemical.

I didn't know that <u>only young mature male rats</u> are used in chemical safety studies. (They are the most able to excrete/pee or poop out/detoxify), the chemicals.

Female rats are not checked for adverse effects.

Pregnant rats are not checked for adverse effects.

Elderly rats are not checked for adverse effects.

Baby male rats are not checked for adverse effects.

Baby female rats are not checked for adverse effects.

Teenage (pubertal) rats are not checked for adverse effects.

Immune compromised rats are not checked for adverse effects.

Sleep deprived rats are not checked for adverse effects.

Malnourished rats are not checked for adverse effects.

I didn't know that the EPA allows chemicals to be registered by themselves, <u>not</u> including the "inert" ingredients (soaps and surfactants) that are added when we buy them off the shelf. The "inert" ingredients break surface tension or penetrate the waxy barrier on the outside of cells (and our skin, lungs, brain and placental barriers, etc), so the killer chemical can get inside.

I didn't know that the EPA only considers <u>high doses</u> of chemicals for toxicity. It does not consider the effects of <u>very low doses</u> of chemicals, in the parts per trillion range for instance, in the registration process.

Many endocrine disruptive chemicals on the market today are injuriously active at very low concentrations. They can mimic our own hormones and may confuse the body.

I didn't know that research indicates the EPA underestimated the effects of <u>low dose</u> effects of endocrine disrupting chemicals in the food supply by 10.000 times!!!

I didn't know that the Washington Post stated that "the FDA <u>doesn't even know</u> of the existence of new additives, which can include chemical preservatives, flavorings and thickening agents, records and interviews show.

"We simply do not have the information to vouch for the safety of many of these chemicals," said Michael Taylor, the FDA's deputy commissioner for food until June 1, 2016, (and a lawyer and former Monsanto Vice President of public policy 1996-2000).

Therefore many substances in the environment and food supply have never been evaluated for safety. https://www.washingtonpost.com/national/food-additives-on-the-rise-as-fda-scrutiny-wanes/2014/08/17/828e9bf8-1cb2-11e4-ab7b-696c295ddfd1\_story.html

I didn't know that <u>combinations</u> of chemicals can enhance the adverse effects of each (a synergistic effect) and create even worse outcomes. The EPA does not and simply cannot track most of these combinations nor do they consider them in the registration process.

I didn't know that toxins that are not excreted (peed or pooped or sweated out) quickly enough are stored mainly in the fat of the body, including the brain, bone marrow, around organs and in the yolks of eggs even in utero and after birth also. Particularly in tiny amounts, endocrine disrupting chemicals are very very actively injurious biologically and can interrupt normal development in countless ways when that baby girl has her own babies years later.

Endocrine disrupting chemicals are often estrogen mimics and can confuse our hormones and glandular system, interfering with myriads of body functions, including bone development, breast cancer, polycystic ovarian syndrome, and can change gender identity, sexual orientation, and in some cases actual gender related anatomical structure..

I didn't know that chemical injury to genes and how they work (gene mutations), that occur, not only in utero, but during a lifetime, have been observed in research to be heritable (passed to the next generation) to 4 generations, (the limit of the research study) through the male germ line. This information has not been considered in the EPA registration process.

Here is a short interview Dr. Michael Skinner, an author of a paper which reports these issues.

http://archive.sciencewatch.com/ana/st/epigen/09marEpiSkin/

Anway MD, et al., "Epigenetic transgenerational actions of endocrine disrupters and male fertility," Science 308(5727): 1466-9, 3 June 2005. Source: Essential Science Indicators fromThomson Reuters. <a href="http://www.evolocus.com/publications/Anway2005.pdf">http://www.evolocus.com/publications/Anway2005.pdf</a>

I didn't know that Atrazine, a very common chemical (and others in the chloro - s - triazine family), used on corn and many other crops causes an enzyme, aromatase, which converts testosterone to estrogen. This is shown in research to potentially feminize males and can cause reproductive cancers (ovarian, breast, etc.) and various other serious hormone imbalances in females. Such endocrine disrupting effects are NOT considered in the EPA registration process.

These effects vary with precise timing of exposure, dose, individual susceptibility to toxin exposure, ability to excrete toxins, methylate and other factors. <a href="http://www.theglutensyndrome.net/Atrazine.and.aromatase.induction.pdf">http://www.theglutensyndrome.net/Atrazine.and.aromatase.induction.pdf</a>