YOUR HEALTHY HOME

Reducing the Impact of Toxic Chemicals

To be used with accompanying YLU PowerPoint course

Version 1.0 | Published August 17, 2016

In Our Food: Some Common Food Additives

	Notes
Aspartame: An artificial, non-saccharide sweetener used as a sugar substitute in some foods and beverages.	
High Fructose Corn Syrup: A sweetener made from corn starch that has been processed by glucose isomerase to convert some of its glucose into fructose.	
MSG: The sodium salt of glutamic acid, one of the most abundant naturally occurring non-essential amino acids. The U.S. Federal Drug Administration has given MSG its designation "Generally Recognized as Safe" (GRAS).	
Food Colouring: A colour additive, is any dye, pigment or substance that imparts colour when it is added to food or drink. They come in many forms consisting of liquids, powders, gels, and pastes. Food coloring is used both in commercial food production and in domestic cooking.	
Preservatives: A substance or a chemical that is added to products such as food, beverages, pharmaceutical drugs, paints, biological samples, cosmetics, wood, etc to prevent decomposition by microbial growth or by undesirable chemical changes.	
Polysorbates: A class of emulsifiers used in some pharmaceuticals and food preparation. They are often used in cosmetics to solubilize essential oils into water-based products. Polysorbates are oily liquids derived from ethoxylated sorbitan (a derivative of sorbitol) esterified with fatty acids.	
Butylated Hydroxyanisole (BHA): A waxy solid used as a food additive with the E number E320. The primary use for BHA is as an antioxidant and preservative in food, food packaging, animal feed, cosmetics, rubber, and petroleum products.	

Source: Wikipedia

In My Garden

Pesticides: Used by households to eliminate unwanted plants and insect pests to maintain a particular appearance of lawns and gardens.

There are two general varieties of pesticide: natural pesticides, such as nematodes and ladybugs; and chemical pesticides, including herbicides, insecticides and fungicides, which are manufactured.

Chemical pesticides can have negative effects on human and environmental health by contaminating air, water, soil and food sources. In addition to killing target insects, insecticides can kill other species beneficial to lawns and gardens.

Which pesticides do I use in my garden?

_____

_____

_____

_____

Fertilizers: Contain nitrogen, phosphorus and potassium, and are added to lawns and gardens to make them greener and thicker.

There are two general varieties of fertilizers: natural fertilizers like manure and compost; and chemical fertilizers, which are manufactured.

If fertilizer is applied improperly, or in excess, these nutrients can å a river or lake becomes too high, it can cause excessive growth of aquatic plants and algae.

Which fertilizers do I use in my garden?

_____

_____

_____

_____

Source: https://www.ec.gc.ca/indicateursindicators/default.asp?lang=en&n=258BC62B-1

In My Home: The Dirty Dozen

1. BHA and BHT: Used mainly in moisturizers and makeup as preservatives. Also, harmful to fish and other wildlife.

2. Coal Tar Dyes - Artificial colors - also found in processed foods, lipstick. Look for p-phenylenediamine hair dyes and in other products colours listed as "CI" followed by five digits. The U.S. colour name may also be listed (e.g. "FD&C Blue No. 1" or "Blue 1").

3. DEA-related Ingredients: Used to make cosmetics creamy or foaming products, such as moisturizers and shampoos. Also acts as a pH adjuster. Also found in sunscreens, soaps, cleansers, and shampoo. Acute toxicity to aquatic organisms and potential for bioaccumulation

4. Dibutyl Phthalate or DBP: Used mainly in nail products as a solvent for dyes and as a plasticizer that prevents nail polishes from becoming brittle. Phthalates are also used as fragrance ingredients in many other cosmetics. Consumers won't find these listed on the label, as fragrance recipes are considered trade secrets, so manufacturers are not required to disclose fragrance chemicals in the list of ingredients. DBP is commonly used in polyvinyl chloride plastic (PVC) to render it flexible. Health Canada recently announced regulations banning six phthalates (including DBP) in soft vinyl toys and child care articles, but its use in cosmetics is not restricted.

5. Parabens: Used in a variety of cosmetics as preservatives. Suspected endocrine disrupters and may interfere with male reproductive functions. Parabens are the most widely used preservative in cosmetics. They are also used as fragrance ingredients, but consumers won't find that listed on the label.

6. Formaldehyde-Releasing Preservatives: Used in a variety of cosmetics. Slowly release small amounts of formaldehyde, which causes cancer. These formaldehyde-releasing agents are used as preservatives in a wide range of cosmetics. Other industrial applications of formaldehyde include production of resins used in wood products, vinyl flooring and other plastics, permanent-press fabric, and toilet bowl cleaners.

In My Home: The Dirty Dozen

7. Parfum (aka Fragrance): Any mixture of fragrance ingredients used in a variety of cosmetics — even in some products marketed as "unscented." Some fragrance ingredients can trigger allergies and asthma. Some linked to cancer and neurotoxicity. Some harmful to fish and other wildlife.

8. PEG Compounds: Used in many cosmetic cream bases. Can be contaminated with 1,4-dioxane, which may cause cancer. PEGs (polyethylene glycols) are petroleum-based compounds that are widely used in cosmetics as thickeners, solvents, softeners, and moisture-carriers. PEGs are commonly used as cosmetic cream bases.

9. Petrolatum - aka Mineral Oil or Petroleum Jelly: Used in some hair products for shine and as a moisture barrier in some lip balms, lip sticks and moisturizers. The European Union classifies petrolatum a carcinogen and restricts its use in cosmetics. PAHs in petrolatum can also cause skin irritation and allergies.

10. Siloxanes: Look for ingredients ending in "-siloxane" or "-methicone." Used in a variety of cosmetics to soften, smooth and moisten. These silicone-based compounds are used in cosmetics to soften, smooth, and moisten. They make hair products dry more quickly and deodorant creams slide on more easily. They are also used extensively in moisturizers and facial treatments.

11. Sodium Laureth Sulfate: Used in foaming cosmetics. It is common in shampoos, shower gels and facial cleansers. It is also found in household cleaning products, like dish soap. Look also for related chemical sodium lauryl sulfate

12. Triclosan: Used in antibacterial cosmetics, such as toothpastes, cleansers and antiperspirants. Suspected endocrine disrupter and the extensive use of triclosan in consumer products may contribute to antibiotic-resistant bacteria. The Canadian Medical Association has called for a ban on antibacterial consumer products, such as those containing triclosan.

Further information can be found in YLU in the ‘Dirty Dozen Backgrounder’ located in YLU.

Endocrine Disrupters

What are Endocrine Disruptors?

Endocrine disruptors are chemicals that may interfere with the body's endocrine system and produce adverse developmental, reproductive, neurological, and immune effects in both humans and wildlife.

A wide range of substances, both natural and man-made, are thought to cause endocrine disruption, including pharmaceuticals, dioxin and dioxin-like compounds, polychlorinated biphenyls, DDT and other pesticides, and plasticizers such as bisphenol A.

Endocrine disruptors may be found in many everyday products– including plastic bottles, metal food cans, detergents, flame retardants, food, toys, cosmetics, and pesticides.

Why chemicals threaten our health…

- Easy absorption
- Mass production
- Too little testing
- Heavy use of pesticides
- Environmental persistence

The NIEHS supports studies to determine whether exposure to endocrine disruptors may result in human health effects including lowered fertility and an increased incidence of endometriosis and some cancers. Research shows that endocrine disruptors may pose the greatest risk during prenatal and early postnatal development when organ and neural systems are forming.

Source: http://www.niehs.nih.gov/health/topics/agents/endocrine/

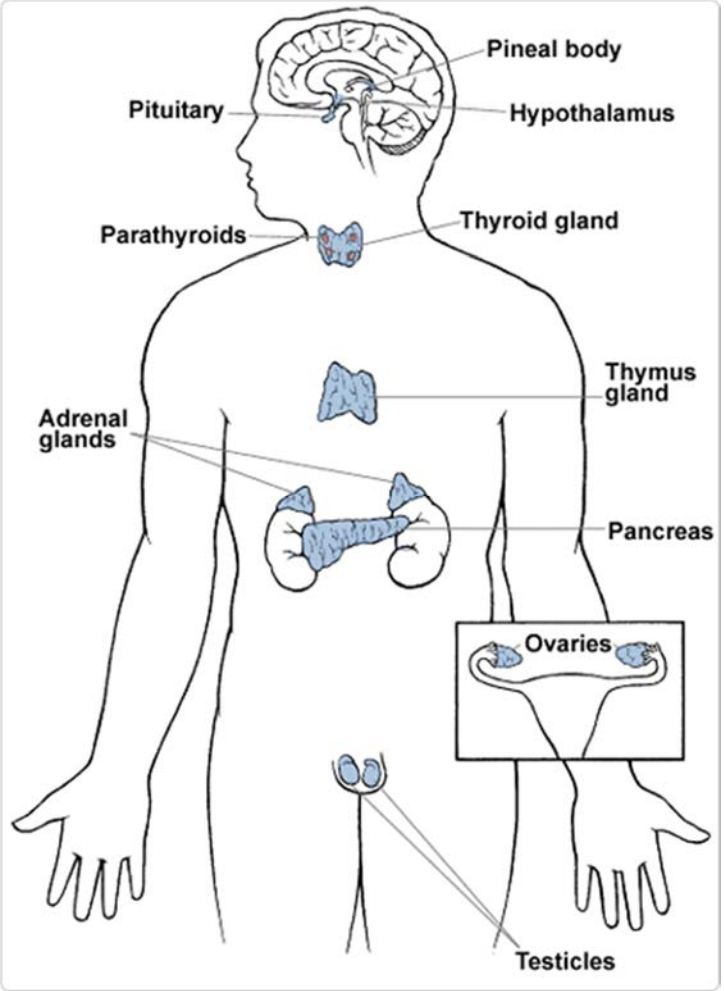
The Endocrine System

Pineal Gland: Produces melatonin, a serotonin derived hormone, which affects the sleep patterns.

Hypothalamus: Controls body temperature, hunger, important aspects of parenting and attachment behaviors, thirst, fatigue, and again sleep.

Pituitary Gland: (master gland) Helps control growth, blood pressure, certain functions of the sex organs, thyroid glands and metabolism as well as some aspects of pregnancy, childbirth, nursing, kidneys, temperature regulation and pain relief.

Thyroid gland: Controls how quickly the body uses energy, makes proteins, and controls the body's sensitivity to other hormones.



Thymus: Immune system.

Adrenal glands: Produce hormones that you can't live without, including sex hormones and cortisol. Cortisol helps you respond to stress and has many other important functions.

Pancreas: A vital part of the digestive system and a critical controller of blood sugar levels.

Testes/Ovaries: Male & female reproductive glands.

Carcinogens

Carcinogens are identified by their ability to cause cancer in exposed workers, other human populations, or in test animals. Many occupational cancers have a long latency period, meaning that cancer may develop 10 -20 years or longer after exposure to the carcinogen.

Examples: asbestos, benzene, vinyl chloride and carbon tetrachloride

Source: http://hc-sc.gc.ca/ewh-semt/occup-travail/whmis-simdut/carcino-eng.php

Bioaccumulation

Bioaccumulation refers to the accumulation of substances, such as pesticides, or other chemicals in an organism. Bioaccumulation occurs when an organism absorbs, a possibly toxic, substance at a rate faster than that at which the substance is lost by catabolism and excretion. Thus, the longer the biological half-life of a toxic substance the greater the risk of chronic poisoning, even if environmental levels of the toxin are not very high.

Source: https://en.wikipedia.org/wiki/Bioaccumulation

Consider the Items You Use and Consume

Which items are you exposed to every day in the morning?

Which household tasks do you perform using products with potentially harmful chemicals?

What pre-packaged food do I eat?

For which products do I need to take a closer look at the ingredients?

What are simple, healthier choices that I can make?

Workshop Checklist

- [x] I have completed YLU's Your Healthy Home Course and accompanying handout.
- [ ] I see that there are significant risks with the continuous exposure to toxic chemicals.
- [ ] I now know about "The Dirty Dozen" and have read the "Dirty Dozen Backgrounder".
- [ ] I understand the concept of the Bioaccumulation and "Body Burden".
- [ ] I have checked and know that some of the products in my home contain substances of concern.
- [ ] I know my next steps, to begin making small simple changes by replacing some of the items I currently use with more natural alternatives.
- [ ] I know that Young Living can provide many natural alternatives.
- [ ] I recognize that buying better doesn't have to mean spending more.
- [ ] I've decided which product I'm going to replace first.
- [ ] I've looked into Essential Rewards to see if it can help me reach my goals of reducing the impact of toxic chemicals in my home.