Green Cleaning, Clean Living



Peter DuBois



Learning objectives

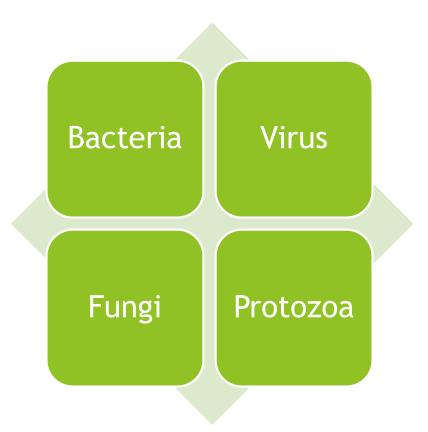






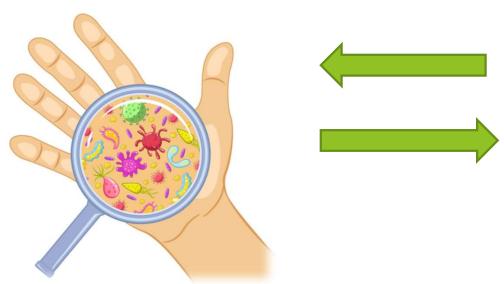
What are germs?

- Germs are tiny organisms, or living things, that can cause disease
- ► There are 4 main types of germs



How are germs spread

- Our hands become contaminated when we touch different surfaces.
- Germs enter your body when:
 - ▶ We touch our eyes, nose or mouth with our dirty hands
 - We eat without washing our hands first





What about antibacterial soap?

- The health department recommends against using an antibacterial soap, both for cleaning or for washing hands
- Refillable foaming soap dispenser 5 parts water and 1 part liquid Castile soap



A fragrance-free castile soap is safer for you and the environment.

Cleaning, sanitizing and disinfecting

CLEANING is the process of removing dirt, debris and up to 99% of germs.

Sanitizing kills bacteria on surfaces using chemicals. It is not intended to kill viruses.

Disinfecting kills viruses and bacteria on surfaces using chemicals.

Cleaning - the First Step

Removes dirt and organic matter that contain and protect germs.

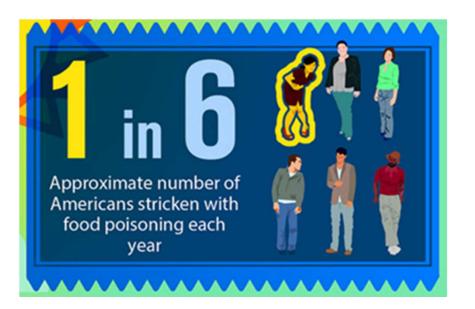
Breaks down oils and allows dirt, contaminants and germs to be more easily removed.

Store bought cleaners are not necessarily more effective than homemade soapy water solutions.

In most areas of your home, cleaning is enough.

Sanitizing

- Food prep surfaces, cutting boards and utensils.
- Different foods can introduce harmful bacteria during food preparation that can lead to foodborne illness.
- Automatic dishwashers can sanitize for you.





High risk areas



Disinfectants

- What are the health concerns:
 - ► Hazardous chemicals are common ingredients in disinfecting products.
 - People using these products and people in the spaces where they are used, can get sick or develop illnesses, including asthma.
 - Some ingredients can interfere with your hormonal system and reproductive health.
 - Some ingredients can also damage skin or other body systems.



How to disinfectant

- Apply to a clean surface.
 - Disinfectant is not effective on dirty surfaces and does not remove germs.
- Follow label instructions for safe use, concentration and contact time.
 - Contact time is the time needed to deactivate germs at given concentrations.
- ▶ The frequency depends on the environment.

Overuse of disinfectants does not provide any additional protection and can expose you to harmful chemicals.

Using disinfectants safely

- Do not spray, fog, fumigate or mist chemicals into the air.
 - Aerosolizing chemicals is not recommended and can be harmful to human health.
 - ▶ The CDC recommends using liquid products and cloths.

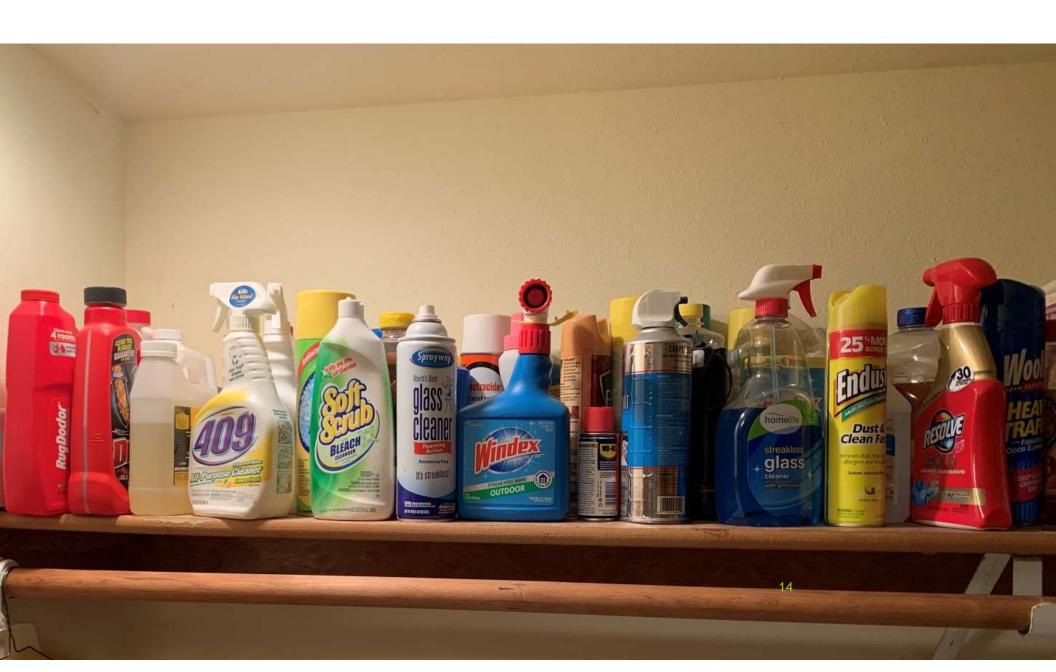


Finding Safer Disinfectants

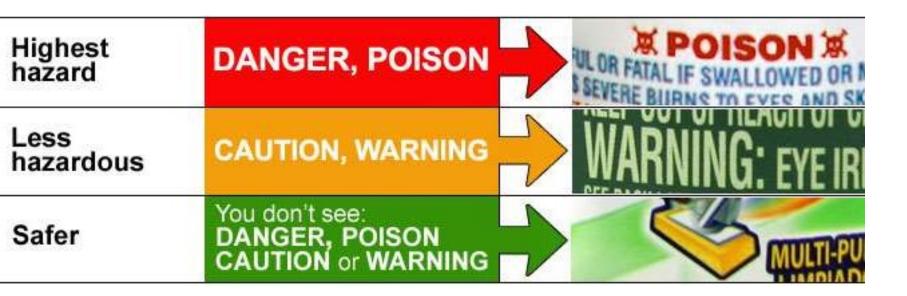
Hydrogen peroxide

- Not the same as hydrogen peroxide in the first aid aisle.
- Must be registered with the EPA for surface disinfecting. Check the label.
- Search for hydrogen peroxide products at https://www.ewg.org/guides/cleaners/

Does this look familiar?



Cleaning Label Signal Words



Non-Toxic - does NOT mean "safe," it only means it does not qualify for signal words.

Make Sure To Read The Label



EWG SAFETY RATING SCALE Cleaning Products













MODERATE HAZARD









Skin Deep Database

EWG scientists have rated more than 160,000 food, cosmetics and cleaning products based on the health, safety and transparency of their ingredients. Each product is given a rating on a scale of 1 to 10, or A to

LOWEST CONCERN

Few/no known or suspected hazards to health or the environment. Good ingredient disclosure.

realeverything.com

LOW CONCERN

Limited potential for hazards to health or the environment. At least some ingredient disclosure.

MODERATE CONCERN

Some potential for hazards to health or the environment. At least some ingredient disclosure.

HIGH CONCERN

Likely hazards to health or the environment. May also have poor ingredient disclosure.

HIGHEST CONCERN

Potentially significant hazards to health or the environment or poor ingredient disclosure.

About the ratings: EWG provides information on cleaning product ingredients from the published scientific literature, to supplement incomplete data available from companies and the government. The ratings indicate the relative level of concern posed by exposure to the ingredients in this product - not the product itself - compared to other product formulations. The ratings reflect potential health hazards but do not account for the level of exposure or individual susceptibility, factors which determine actual health risks, if any.

What's really in those cleaners?





Finding Safer Products

- Buy products certified as safer for human health and the environment by an independent third-party agency
- ▶ Look for Safer Choice, Green Seal©, Ecologo©, and Design for the Environment (DfE) labels on products









Greenwashing?



Cleaning products do not have to list ingredients Manufacturers do not have to prove that they are safe.

Green Washing labels are unregulated by the government.

products labeled "green" often have as many toxic chemicals as conventional cleaning products.

Disinfectants only have to list the active ingredient that kills germs.

Look at the label to choose safer cleaners

Safest

Somewhat harmful

Avoid



Products certified to have safe ingredients or products with no signal words



Products labeled CAUTION should be used with care



Products labeled
DANGER, WARNING
or POISON are the
most harmful



Cleaner	Find it in	Use it to	It replaces
baking soda (sodium bicarbonate)	grocery store baking ingredients aisle	scrub sinks, pots and stains, polish sterling or silver	abrasive cleaners like Ajax, silver polishes
white distilled vinegar	grocery store condiments aisle	clean glass, remove soap scum, grease and mineral deposits	window cleaners like Windex, drain treatments like Drano
hydrogen peroxide, 3 percent	pharmacy or grocery store first aid aisle	brightens whites in the laundry, disinfect surfaces	chlorine bleach
plant-based liquid soap (Castile soap)	grocery store natural products section	mop floors, wash clothes, clean marble counters	laundry detergents, floor care products
washing soda (sodium carbonate)	grocery store laundry supplies aisle	cut oven grease, remove wine stains, boost cleaning power of laundry soap	oven cleaners, all- purpose cleaners ²⁵ like Oxi-Clean



All Purpose Cleaner

Ingredients

3 cups hot water Tap Water = \$0.01

1 teaspoon washing soda Super Washing Soda = \$0.01

2 tablespoons vegetable oil soap Soap = \$0.40

1 spray bottle \rightarrow *Total = \$0.42*

Add water and soda to a spray bottle and shake. Add soap and mix gently. Spray and wipe clean.

Good for countertops, floors, walls woodwork, appliances, etc.



Window Cleaner

Ingredients Cost

3 cups hot water Tap Water = \$0.01

½ cup white vinegar = \$0.08

½ cup rubbing alcohol Alcohol = \$0.64

ightharpoonup Total = \$0.38

Add ingredients to a spray bottle. Shake gently to combine.

Apply to surface and gently wipe with a cloth or squeegee.



Safer Scrubber

Ingredients Cost

1/2 cup warm water Tap Water = \$0.01

1 2/3 cup baking soda (approx.) Baking Soda = \$0.03

1/2 cup vegetable oil soap Soap = \$0.60

ightharpoonup Total = \$0.70

In an airtight, screw-top container, add water and soap. Stir in baking soda until mixture forms a paste.

Good for sinks, tubs, showers, etc.



Cleaning tools



Sponges

- Not recommended
- Harbor bacteria and are not easily cleaned.
- Should be kept away from raw meat.
- Need to be replaced regularly.



Microfiber clothes

- Releases microplastics into waterways and oceans when washed.
- Negatively impacts marine life and the environment.

Recommended: cotton cloth, old t-shirts, scouring pad, dish brush

Resources

- Clark County Household Hazardous Waste Information
 - https://www.clark.wa.gov/publichealth/household-hazardous-waste
- OR Metro
 - https://www.oregonmetro.gov/toolsliving/healthy-home/green-cleaning
- Environmental Working Group Home cleaning products database
 - https://www.ewg.org/guides/cleaners/
- ▶ Toxics Free Future
 - https://toxicfreefuture.org/healthyliving/healthy-homes/
- HealthData.gov
 - https://healthdata.gov/dataset/householdproducts-database
 31

Other Questions?

https://clarkcountycomposts.org/virtual-learning#green-faq



info@clarkcountycomposts.org 564.397.7333 www.clarkcountycomposts.org

It's not only about us!





Creating a scent-free environment

White Vinegar

- Neutralizes odors.
- Can be used on carpet, shoes, trash cans, diaper pails.
- Fill a spray bottle with white vinegar and spray as needed.
- Can also be applied with a cloth.

DIY Air deodorizer

- ▶ 1/4 cup isopropyl alcohol
- ▶ 1 cup water
- Optional: Approximately 20 drops of a combination of 1-3 essential oils of your choice.
 - Read the label
 - Ensure it is safe to inhale

Properly dispose of unused cleaning products

Central Transfer and Recycling Center

West Van Materials Recovery Center

Washougal Transfer Station

11034 NE 117th Avenue Vancouver, WA (360) 256-8482 6601 NW Old Lower River Rd Vancouver, WA (360) 737-1727

4020 S. Grant Street Washougal, WA (360) 835-2500

Friday, Saturday, Sunday 8 a.m. to 4 p.m.

Friday & Saturday 8 a.m. to 4 p.m.

First & third Saturday 8 a.m. to 4 p.m.







