The Pocket Guide

The Healthy Homes project has been made possible by the Government of Canada in collaboration with the New Brunswick Lung Association. (Version française disponible)



If you're new to making your own DIY non-toxic cleaning supplies, you may be surprised to learn that you probably have everything you need already in your cupboards!

One of the biggest hurdles to making the switch can be knowing which products are right for which job. Whether you're need a general cleaning spray or you're trying to cut through serious grime, it's possible to replace most consumer cleaning products with common household ingredients - reducing under-sink clutter AND saving you money!

We've put together a Quick Reference Guide to help you understand just how versatile your non-toxic kitchen ingredients can be, as well as some pocket recipe cards with instructions on how to tackle common cleaning obstacles.

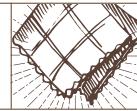
### THINGS TO KNOW BEFORE YOU BEGIN:

- In science, the pH scale is used to measure how acidic something is, on a scale of 1-14, where 1 is the most acidic, and 14 is the least acidic. (Pure water has a neutral pH of 7.)
- Acids like lemon (pH 2), vinegar (pH 3) and even hydrogen peroxide (pH around 6) are useful for breaking down mineral deposits and stains left from hard water.
- Other ingredients which are not very acidic are known as bases, and these are great at dissolving organic compounds like dirt and grease. Baking soda (pH 9) and soap (pH 8) are examples of gentle bases you'll find in your home.

Quick Reference Guide	Baking Soda	Vinegar	Hydrogen Peroxide	Salt	Lemon	Olive Oil	Castile Soap
Whitens clothing	~	~	<ul> <li>Image: A second s</li></ul>	×	~	×	×
Lifts Dirt	✓*	✓*	×	×	×	~	~
Combats mould/mildew	×	~	~	~	~	×	×
Dissolves grease and baked-on residue	~	×	×	×	×	×	~
Breaks up mineral deposits/soap scum	×	~	~	×	~	×	×
Disinfects (antibacterial)	×	~	~	~	~	~	×
Removes odours	~	~	×	×	×	×	×
Gentle scrubbing action	~	×	×	~	×	×	×
Safe for septic systems	~	~	~	~	~	~	~

\*When combined, the acid in the vinegar breaks down baking soda, which releases carbon dioxide gas. (You're likely familiar with this from making homemade science fair volcanoes!) The rapid release of bubbles is what helps lift dirt out of the surfaces you're cleaning.

All Purpose Household Cleaner Our favourite, perfect for daily messes!



# INGREDIENTS

- 1/4 tsp unscented dish soap
- 2 cups warm water
- Spray bottle
- Clean dry cloth

- 1. Mix 1/4 tsp (just a few drops) of unscented dish soap with 2 cups warm water, swirl to combine
- 2. Spray surface lightly (no need to saturate excess water can damage some surfaces)3. Wipe dry with a clean cloth

# The everyday powerhouse! Scouring Powder

# INGREDIENTS

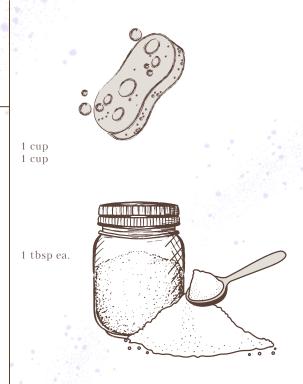
- Plain non iodised table salt
- Baking soda

## DIRECTIONS

Combine salt and baking soda in a non-toxic container, and stir together well.

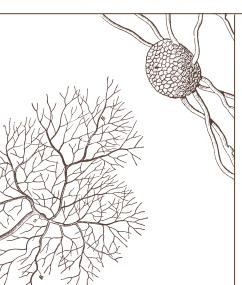
To use:

- mix a small amount of powder with water, to form a thick paste (try equal amounts, and adjust as needed)
- pick up some of the paste using a clean cloth or scrub brush, and work the paste into the soiled surface using a circular motion
- continue until clean; rinse with water and dry when done!



Mould and Mildew Remover

Safe for children, pets, and septic systems!



# INGREDIENTS

- White vinegar
- Spray bottle for easier application
- Water
- Soft cleaning cloth

- 1. Spray undiluted white vinegar generously onto the mouldy surface until the mould is completely wet
- 2. Leave it to sit for 1 hour
- $3. \ensuremath{\operatorname{Wipe}}$  clean with water and let  $\ensuremath{\operatorname{dry}}$

### INGREDIENTS

Baking soda		3/4 cup
Liquid Soap*		1/4 cup
Time	*Castile, or unscented	6-8 hrs dish soap

# DIRECTIONS

- Make a creamy paste of baking soda and soap. You can add more soap (or a bit of water) and baking soda as needed for consistency
- Spread in oven, paying extra attention to baked on oils/grime. (Note: the oven does not need to be cold. After cooking dinner while your oven is still a slightly warm is a great time to start!)
- Let sit overnight with door closed, then wipe off in the morning



It cleans while you sleep! Oven Cleaner

•••



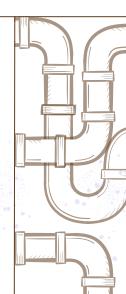
# Drain Cleaner/Deodoriser

Your regular routine to remain clog-free!

# INGREDIENTS

- boiling water
- 1/2 cup baking soda
- 1 cup white vinegar

- 1. Start by pouring a pot of boiling water down the drain
- 2. Next, pour down the baking soda
- 3. Once you've added all of the baking soda, you can pour in the vinegar (you'll hear a fizzing sound - that's ok! The mixture produces carbon dioxide gas, which is harmless in these concentrations)
- 4. Cover drain with plug, and let sit for 5-10 minutes
- 5. Finally, rinse free by pouring a pot or kettle of boiling water down the drain





A little goes a long way!



- 1 cup olive oil
- 1/2 cup vinegar
- Clean soft rag (or wax & polish applicator pad for floors)

### DIRECTIONS

- 1. Mix oil and vinegar in a jar or bottle and shake until well-combined
- 2. Spread evenly on the area to be polished
- 3. Rub vigorously with dry cloth or applicator pad until surface is dry and gleaming!

Note: for smaller spot-polishing, you can mix a smaller quantity simply by remembering this ratio: 2 parts olive oil to 1 part vinegar. (For example, 2 tablespoons olive oil and one tablespoon vinegar.)

Lime and Mineral De-scaler

A one-ingredient miracle worker!





# INGREDIENTS

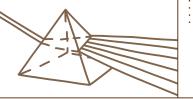
• White vinegar (Yes! That's it!)

# DIRECTIONS

- 1. Apply directly to mineral stains, limescale, and soap scum using a spray bottle. (For clogged shower heads, pour vinegar into a small bag and tie so that the shower head is submerged)
- 2. Let sit for 2 hrs (or as long as overnight!)
- 3. Wipe clean; repeat as required

### For scale in kettles:

- 1. Combine 1 part vinegar with 2 parts water in kettle
- $2.\,\mathrm{Boil}$  and allow to sit 15-20 mins
- 3. Rinse and boil with plain water to remove vinegar residue



Glass Cleaner

With a streak-free shine, every time!

### INGREDIENTS

Water	 2 cups
Vinegar	 1/4 cup

- Begin with 2 cups water in a spray bottle, then add vinegar
- Swirl gently to mix
- Spray, and wipe with soft clean cloth until dry



Tub & Tile Cleaner

The ultimate bathroom scrub!

# INGREDIENTS

1/2 cup baking soda 1/4 cup hydrogen peroxide 1 tsp unscented dish soap



- Mix together the baking soda, hydrogen peroxide, and dish soap to form a paste
- Use a clean cloth to pick up some paste, and spread evenly on soiled surface (for grout, try a small spoon for better precision!)
- Wait 5-10 minutes, and scrub! You can use the same cloth or a small, firm brush (for grout, consider
- repurposing an old toothbrush!)
- Rinse off any remaining cleaner



Toilet Bowl Cleaner

## Ditch the bleach!

# DIRECTIONS

- 1. Pour 1 cup of vinegar into the bowl
- 2. Let sit for 15 minutes (or if you have very hard water up to an hour)
- 3.Scrub! Use your toilet brush to remove stains/hard water marks
- 4. If you need more scrubbing power, sprinkle some baking soda down the sides of the bowl and scrub again. (The fizzing you see is vinegar reacting with baking soda to create carbon dioxide, salt, and water - harmless!) 5 Flush

# **INGREDIENTS**

- 1 cup white vinegar •
- Optional: baking soda (for more abrasive scrubbing)

Tip: Bacteria also love to make a home inside the toilet tank! To clean the tank, just pour in 1 cup of vinegar, let sit for 15-20 minutes, then flush a couple of times.

Laundry Stain Remover Also works on carpets!

### INGREDIENTS

- 1/4 cup liquid Castile soap
- 3/4 cup baking soda
- Hydrogen peroxide (to spray)
- glass jar (to store)

# PREPARATION & STORAGE

- 1. Mix soap and baking soda to form a smooth paste (add extra soap or water to thin to your
  - liking.)
  - 2. Store in a glass jar and keep ready to use with every wash

### DIRECTIONS

- 1. Use an old toothbrush to work a small amount of paste into the stain
- Spritz the area lightly with hydrogen peroxide and scrub with the brush for a couple of minutes.
   Rinse with water, and launder as usual

#### Notes:

Hydrogen peroxide can have a bleaching effect on some coloured materials, so always test first in a hidden spot and rinse immediately after scrubbing the stain.

Never store your paste with hydrogen peroxide already mixed in - the bubbles it makes are harmless, but the pressure buildup could make your container explode or fizz over when opened, like a bottle of pop that's been shaken!

# Microwave Cleaner/Disinfectant

It's as easy as Ready, Set, Cook!

### INGREDIENTS

- lemon, sliced
- microwave-safe bowl
- water (to fill bowl)

- 1. Put lemon slices inside bowl, and fill with water
- 2. Place bowl in microwave and heat until the window steams up
- 3. Stop heating. Without opening the door, let sit for 15 minutes
- 4. Carefully remove bowl from microwave, and wipe inside with a clean cloth. (Those bits of baked-on splatter should easily wipe free!)



# Smells great while it disinfects! Wooden Cutting Board Deep-clean

DIRECTIONS

- 1. Cut lemon into two halves
- 2. Sprinkle salt onto your cutting board
- 3. Place the cut side of one half of the lemon down onto the board, and apply pressure, using it to rub the salt into the entire surface. Scrub vigorously for 2-3 minutes
- 4. Rinse well, and leave to dry.

### Optional, for extra disinfecting:

- 1. Squeeze the juice from the other half lemon into hot water
- 2. Soak cutting board for 5 minutes, then leave to dry.

### INGREDIENTS

- 1 lemon
- Salt (both coarse salt and plain table salt will work!)



Tarnish & Sticky Residue Remover An easy-off one-ingredient shine!

### DIRECTIONS

#### For removing sticky labels & sticker residue:

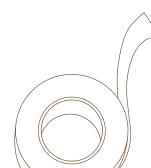
### INGREDIENTS

### Olive oil (that's it!)

- 1. Apply a generous amount of oil onto a folded paper towel (enough to cover the area you want to clean)
- 2. Lay the paper towel over the label/sticker residue, and let sit for several minutes for the oil to soak in
- 3. Remove and discard the oily towel. Using a clean paper towel, rub away the residue

#### For dull or tarnished stainless steel:

- 1. Dab a small amount of oil onto a soft cloth
- 2. Rub all over your dull or tarnished stainless steel (even large appliances!)
- 3. Using a paper towel (or different, clean cloth), buff the surfaces until they shine (this takes a bit of elbow grease!)



Some notes about our Ingredients

### BAKING SODA:

Baking soda is commonly used in baking, so you know it's not toxic! When mixed with liquid soaps, it gives paste that has a gentle scrubbing action - just like toothpaste with baking soda!

It's also great at removing odours. You can place an open box in your fridge to freshen up the smell, or even add it to your laundry to help whiten and remove smells. If you use baking soda with vinegar to clean, remember to use these ingredients in separate steps only. You don't want to mix them together for storage, because you'll end up with a bubbly mess.

### CASTILE SOAP:

Castile soap is a gentle vegetable-based soap. The simplest form is made from just three ingredients: olive oil, caustic soda (lye), and water. On its own lye can be dangerous, but when mixed with oil, the chemical reaction changes these ingredients into glycerin and water. In other words - Soap!

Castile soap can sometimes leave a slight residue on hard surfaces. You can clean this off with just a damp cloth, or some lemon juice or vinegar diluted with a bit of water.

Note: If you mix castile directly with an acid like vinegar or lemon juice, it will react to break apart your soap into a curdled, oily mess! The soap breaks apart into the original oils that made it... and it isn't soap anymore!

Some notes about our Ingredients

### DISH SOAP (UNSCENTED):

When choosing a dish soap, look for products that are unscented and contain no colouring/dyes, and are free of phthalates, phosphates, petrochemicals, and parabens. Look for those certified "Safer Choice", or check the Environmental Working Group's database: https://www.ewg.org/guides/categories/5-Dishwashing

### HYDROGEN PEROXIDE (3%):

Hydrogen peroxide is VERY reactive! Specifically, it reacts with light to release HEAT and water. This is why you will always find it stored inside a dark coloured bottle. (It also likes to react with almost everything it touches!)

\*CAUTION when using Hydrogen peroxide: Because it's so reactive, ALWAYS keep it away from children, and ALWAYS store it in a cool, dark place. Only use as much as you need for your recipe, then return the bottle to its storage place. When you finish cleaning, discard any of the recipe you have left over. (It's safe to wash it down your sink, or flush in the toilet!)

Remember: If you try to store recipes with hydrogen peroxide already mixed in, pressure could build up inside the container and make it explode!)

Some notes about our Ingredients

### LEMON:

Lemon juice (citric acid) has a high acidity, just like vinegar. Like most acids, it can have a bleaching effect on clothing, which means it can be great to help remove some stains...

... BUT! If you leave it too long, it can cause discolouration! For this reason, we don't recommend it for stain removal (we use hydrogen peroxide instead because it's less intense.) What lemon juice is really great at is cleaning in the kitchen. It has antibacterial properties and smells great! In fact, you can replace the vinegar in our recipes with lemon juice to get the same effect (we just prefer vinegar because it's so cheap!)

### OLIVE OIL:

Nothing to worry about here! Olive oil is safe to eat, and even if you accidentally spill some, olive oil contains natural antibacterial compounds. The kind you use for cleaning doesn't need to be an expensive artisanal extra virgin blend; just the cheaper stuff you can buy by the gallon will do the trick!

It's recommended that olive oils be kept under 25 degrees Celsius to keep them fresh for longer, so if your kitchen tends to get hotter in summer, just put it in the fridge!

Some notes about our Ingredients

### SALT:

We've used salt (sodium chloride) in our recipes to help with scrubbing, but it also has some antibacterial and antifungal properties (that's why it was used before refrigeration to help preserve food!) If you struggle with mildew buildup in between the creases of your shower curtain, try adding 1 cup of salt to 1 gallon of water, then let your shower curtain soak for one hour. Hang it up to dry, and repeat every month to keep mildew away.

### WHITE VINEGAR:

Another name for white vinegar is acetic acid. As a natural disinfectant, it has been shown to destroy some unhealthy bacteria and viruses. If you're cleaning mould or removing mineral buildup and need some extra scrubbing power, just mix in some salt! Salt has a neutral pH and can be used directly with vinegar without affecting the vinegar's cleaning power.

\*CAUTION when using vinegar: Never mix with Hydrogen peroxide. The reaction forms peracetic acid, which is highly corrosive to skin and our airways!

Avoid using vinegar on natural stone surfaces like marble, granite, or limestone, or on cast iron pans. The acid in vinegar can break down the sealants used on the stone (and the "seasoning" of your pan), or even etch small holes if the surface is unsealed. Instead of using vinegar, dilute a small amount of unscented dish soap in water instead. Vinegar can also damage the anti-glare coating on electronic screens - just use a soft cloth!



