#### FOAMER PUMP SOAP

1 c. water

2 Tbsp. liquid castile soap

Depending on how thick you like your soap, you can add between 4 tsp. – 4 Tbsp. of liquid castile soap to a cup of water. Mix, then place in a foamer pump bottle (a regular pump bottle will not make foam). The soap will turn cloudy, but this should not clog the pump. After sitting for a few days, the cloudy material will settle on the bottom. If you don't like the look of cloudy soap, either use distilled instead of tap water, or make a big batch, allow it to settle for a few days, and refill your container by decanting the clear soap off the top.

#### **DO-IT-YOURSELF SANITIZER**

6 T grain alcohol

Use 151 proof - do not use

vodka or other liquor - it does

not contain enough alcohol to
kill germs!

1 T water

2 drops skin-safe essential oil (optional)

Mix ingredients, use to refill a sprayer from hand sanitizer or a new mini-sprayer pump.

Commercial alcohol-based hand sanitizers' active ingredient is 62.5 - 65% ethyl alcohol. This recipe, if correctly made, makes a 64.7% ethyl alcohol solution. Your home-made sanitizer may be subject to measurement errors, evaporation, etc., so it may not contain the same amount of ethyl alcohol as is found in FDA-approved hand sanitizers. If you are immune-compromised or have a serious health condition, please consult a health care professional before making your own sanitizer.

If you do not wish to purchase grain alcohol, an alternative is to refill your sprayer with 70% isopropyl alcohol from the drugstore. 70% isopropyl alcohol is an FDA-approved antiseptic, but it is more drying to the skin and is made from chemicals produced from petroleum. However, it has no added fragrances like commercial sanitizers.

#### LIQUID LAUNDRY DETERGENT

8 c. water

1 oz grated bar soap\* (see explanation below)

¼ c. borax

1/4 c. washing soda

10 drops essential oil (optional - I like to use rosemary, peppermint, or lavender)

Place 4 c. of the water in a pan that will hold 1 gal.; heat until almost boiling (small bubbles rising). Add the grated bar soap, borax, & washing soda, turn off the heat, and stir until the ingredients dissolve. You will end up with a cloudy liquid with no grit or soap pieces. Slowly add 4 c. warm tap water, stirring. Stir in 10 drops essential oil, and place in a sturdy container. Label the container with its contents, and keep out of reach of children.

This will be a thin liquid, not a gel. It may separate or form clumps over time, so gently invert the bottle to mix before each use. It contains no artificial foaming agents, so it will not produce foam in your wash. *Not officially approved for HE washers*, but many people (me too) use it successfully in them. Not intended for wool or silk.

Use ¼ - ½ c. per load for a top-loader, 2 T. - ¼ for a high efficiency washer. Use 2 times this amount for heavily soiled loads. For best results, put ¼ c - ½ c white vinegar in the fabric softener compartment to avoid soap deposits in areas that have hard water.

\*Fels Naptha is a powerful soap designed for laundry. You can buy it at some grocery stores, in the laundry area or sometimes with the bar soap. Fels Naptha is not all-natural; it does contain artificial color, fragrance, and optical brighteners. Dr. Bronner's bar soap and Kirk's castile soap are more natural options, or you may be able to find a hand-made "Grandma's lye soap" type of soap. Do not use soap with lotions or moisturizers for laundry - they don't clean well!

#### **FABRIC SOFTENER**

Put ½ c. (¼ c for HE washers) white vinegar in the rinse cycle. Or, for a nice fragrance, mix 4 c. white vinegar + 20 drops essential oil, then put ½ c. in the fabric softener area of your washer. Be sure to shake before use. The vinegar odor evaporates.

# GREEN & CLEAN

# Making Your Own Household Cleaners FROM Everyday Ingredients

Making your own natural cleaning products allows you to avoid exposing your family to the harmful substances found in many commercial cleaners, and it's easy and economical as well! Here are the staples you'll need:

**Liquid castile soap:** A little goes a long way. Dr. Bronner's soap is made with certified organic & fair trade oils and is available in 8 natural scents.

Vinegar: Surprisingly, much of the vinegar on the market is a petrochemical byproduct. Organic white vinegar is best, if you can afford it, but a good compromise is to buy white vinegar that says "distilled from natural grains" on the label.

Baking soda: Buying it in the 4-lb box is generally more economical. The name-brand baking soda can be less clumpy than the generic.

Washing soda: Find it in the laundry isle of the grocery store. Washing soda is about twice as alkaline as baking soda; so although both are good at removing grease, washing soda is twice as strong. Do not eat, inhale, or get in the eyes.

Borax: This mineral that is mined in the

southwestern US. You can find it in the laundry aisle of the grocery store. It is a strong grease-cutter and deodorizer. Do not ingest, inhale the powder, or get in your eyes.

Essential oils: These concentrated natural oils not only provide nice scents, but many can kill bacteria & mold, cut grease, & more. Don't use internally!

#### LIGHT DUTY SPRAY CLEANER

½ tsp. washing soda

½ tsp. liquid castile soap

2 cups hot tap water

Place in a 16-oz (or larger) spray bottle and shake to dissolve the washing soda. This cleaner is good for light cleaning jobs.

# HEAVY DUTY SPRAY CLEANER

1 tsp. washing soda

2 tsp borax

1 tsp. liquid castile soap

 $2 \ \mathrm{cups} \ \mathrm{hot} \ \mathrm{tap} \ \mathrm{water}$ 

10 drops essential oil of your choice

(I like the clean scents of lemon, peppermint, orange, or rosemary)

Place in a 16-oz (or larger) spray bottle and shake to dissolve the washing soda. This works well for greasier cleaning jobs.

#### **CREAMY SOFT SCRUBBY CLEANER**

3 Tbsp. liquid castile soap (Dr. Bronner's peppermint works well)

½ c. baking soda

1 tsp vegetable glycerin (optional; stays soft longer with it)

Mix together until it reaches the consistency of frosting. Add more soap or soda if needed. Store in a jar with a tight lid. For delicate surfaces, test on a hidden area first.

# **MOLD AND MILDEW KILLER #1**

Spray the area with undiluted vinegar. Allow to sit until the vinegar evaporates. Wipe clean with water.

# MOLD AND MILDEW KILLER #2

2 tsp. tea tree essential oil

2 c. water

Combine in a spray bottle, shake to mix. Spray on problem areas, do not rinse off. This is reported to be the best natural mold & mildew remover by Care2.com. Make only as much as you need for one application - essential oils can oxidize and lose potency when exposed to air.

#### BASIC FLOOR CLEANER

2 Tbsp. liquid castile soap

2 Tbsp. white vinegar

1 gallon water

10 drops essential oil of your choice

Combine ingredients and use to mop the floor. For wood floors, be sure to use a damp mop (don't soak the floor), and follow with a damp mop wet with clean water.

#### **OVEN CLEANER**

1 c. or more baking soda

Water

A squirt or two of liquid detergent

Sprinkle water generously on the bottom of the oven, then cover dirty areas with enough baking soda to make the surface totally white. Sprinkle some more water on top, then let it sit overnight. In the morning, the grease will have loosened, and you can wipe up the worst of the mess. If any is left over, use a little liquid detergent on a sponge. If this doesn't work for you, try using more baking soda or water.

# **DISHWASHER DETERGENT**

2 Tbsp. baking soda

2 Tbsp. borax

Place 1 Tbsp. borax + 1 Tbsp. baking soda in each of the detergent cups of the dishwasher.

# KITCHEN DISINFECTANT SPRAY #1

Spray with undiluted white vinegar, wait a few minutes, wipe off, or just let it evaporate. Do not inhale!

#### KITCHEN DISINFECTANT SPRAY #2

Spray first with hydrogen peroxide (3%, from the drug store or grocery store), wipe off, then spray with undiluted white vinegar, wipe off. Do not inhale!

#### **WINDOW CLEANER #1**

1/4 - 1/2 tsp. liquid castile soap

3 Tbsp. vinegar

2 cups hot tap water

Place in a 16-oz (or larger) spray bottle and shake. Spray on and wipe off with a soft, lint-free cotton rag, a newspaper, or a microfiber cloth.

# WINDOW CLEANER #2

1 c. vinegar

1 cup water

Place in a 16-oz (or larger) spray bottle and shake. Spray on and wipe off with a soft, lint-free cotton rag, etc.

#### **TOILET BOWL CLEANER #1**

Prevention is the best medicine. Here is an easy way to keep the toilet clean: once a week, before bed, spray under the toilet rim with 100% vinegar in a spray bottle, then put about a ½ c. of vinegar in the toilet bowl. The next morning, brush out the toilet bowl and flush away.

# **TOILET BOWL CLEANER #2**

For hard water deposits and stubborn stains, use the above recipe, then scour with a pumice stone. This should not scratch porcelain, but be sure to test a hidden area first.

#### SOAP SCUM REMOVER

Sponge the area with undiluted white vinegar, allow to sit for 5-10 minutes, then wipe the area with baking soda on a wet sponge. Be sure to test an inconspicuous area first.

#### FLOOR SPRAY CLEANER

1 c. white vinegar

1 c. water

20 drops peppermint essential oil

For those who like to scrub the floor on their hands and knees, this works well. The peppermint helps to cut the smell of the vinegar. Mix together in a spray bottle, spray on, wipe with a wet rag, then buff with a dry rag before moving to the next spot