

|                             | <b>#1 Maintain Typical Current Cleaning Practices</b>  | <b>#2 Reduce but not Eliminate Chemical Use</b>  | <b>#3 Convert to use of gentle home-grown cleaning practices</b>   | <b>#4 Upgraded use of gentle home-grown cleaning practices</b>   | <b>#5 Convert to chemical-free cleaning practices</b>                                      |
|-----------------------------|--|--|--|--|--|
|                             | Use a variety of commercially available disinfectant cleaners around the house.  | By introducing high-quality microfiber cleaning tools to reduce chemical use.                      | By eliminating commercial cleaners and using more natural products such as vinegar, hydrogen peroxide and baking soda.             | By introducing high-quality microfiber cleaning tools to products such as vinegar, hydrogen peroxide and baking soda.              | By using high-quality microfibre products for cleaning and polishing throughout the house. |
| <b>Effectiveness</b>        | Based on hospital studies - cleans 75% of dirt and removes 40% - 99.9% of pathogens/allergens* (depends on following instructions exactly) | Based on hospital studies - cleans 99% of dirt and removes 99.9% of pathogens/allergens**          | Based on laboratory studies - cleans 75% of dirt and removes 25% - 30% of pathogens/allergens                                      | Based on laboratory studies - cleans 99% of dirt and removes 99.9% of pathogens/allergens  | Based on hospital studies - cleans 99% of dirt and removes 99.9% of pathogens/allergens    |
| <b>Cost</b>                 | \$300 - \$600 per year   | \$200 start up - followed by \$100-\$300 per year  | \$100 - \$200 per year   | \$200 start up, followed by \$50 - \$100 per year  | \$200 start up, followed by \$20 per year  |
| <b>Time</b>                 | High   | Med-High   | Very High  | High   | Med-Low  |
| <b>Human Health</b>         | Harmful, potentially toxic   | Harmful , but not as bad as #1 due to reduced exposure   | Neutral  | Positive   | Positive   |
| <b>Environmental Impact</b> | Harmful, potentially toxic   | Harmful , but not as bad as #1 due to reduced volume   | Neutral  | Neutral  | Neutral  |
| <b>Safety Precautions?!</b> | wear rubber gloves to avoid absorption of toxins through skin, wear a mask to avoid inhaling fumes   | wear rubber gloves to avoid absorption of toxins through skin, wear a mask to avoid inhaling fumes | wear rubber gloves to protect skin from drying out, wear gloves and a mask when using caustic chemicals such as washing soda/borax | wear rubber gloves to protect skin from drying out, wear gloves and a mask when using caustic chemicals such as washing soda/borax | rubber gloves optional as a matter of personal preference                                  |

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Healthy Home Institute,  
 Kelowna BC

Healthy Home Institute, Kelowna B.C. - Testing was conducted using two types of Formica countertop material (one very smooth and one with a slight texture - both surfaces are typical of those found in a kitchen.) All surfaces were contaminated with a solution containing two microorganisms (Staphylococcus aureus and Escherichia coli) and common dirt taken from a vacuum cleaner bag.

Table 1: Cloth Testing Smooth Formica Surface

| <b>Type of Cleaning Material</b> | <b>Cleaning Agent</b>                   | <b>Percent Effective (%)</b> |
|----------------------------------|---|------------------------------|
| High Quality Micro Fiber (new)*  | Tap Water                               | 99.95%                       |
| High Quality Micro Fiber (used)* | Tap Water                               | 99.95%                       |
| Conventional Dish Cloth (new)    | Lysol Pine Action Cleaner <sup>TM</sup> | 92.78%                       |
| Conventional Dish Cloth (new)    | Bleach Water (60ppm)                    | 99.00%                       |

\*"New" is defined as 12 or less previous uses, and "used" is defined as more than 50 uses.

| Table 2: Cloth Testing Textured Formica Surface  |                             |                              |
|--|-----------------------------|------------------------------|
| <b>Type of Cleaning Material</b>   | <b>Cleaning Agent</b>       | <b>Percent Effective (%)</b> |
| High quality Micro Fiber (new)*  | Tap Water                   | 99.97%                       |
| High Quality Micro Fiber (used)*   | Tap Water                   | 99.96%                       |
| Conventional Dish Cloth (new)  | Lysol Pine Action CleanerTM | 92.36%                       |
| Conventional Dish Cloth (new)  | Bleach Water (60ppm)        | 99.71%                       |
| *“New” is defined as 12 or less previous uses, and “used” is defined as more than 50 uses. |                             |                              |