

# THE BEE LINE

April 2020

Published exclusively for clients of Clean Bee and The Cleaning Studio



## How WATER Cleans Better

H<sub>2</sub>O is an amazing liquid. It is useful for manufacturing, transportation, firefighting, energy production, cooking, agriculture, recreation and of course, drinking.

Water also has some unique qualities that make it an excellent cleaner.

Water is a polar molecule, meaning it has both positively and negatively charged sides. Without going into too much chemistry in this article, this means that water can attract to and surround a great variety of substances. Think about everything that water can dissolve or dilute and you begin to understand why water is referred to as the “universal solvent”.

But water can't dissolve everything. Dirt and grime usually adhere to skin, clothing, and other surfaces by

combining with body oils, cooking fats, lubricating greases, and similar substances. Because these substances don't mix with water, washing with water can't remove them or the bonded soil. Sometimes it needs a little help. Here are some ways that we can help water clean better.

Emulsification- Detergent and soap molecules have a dual nature. One end of the molecule called the head, attracts to water; the other end, the tail, attracts to oily soils. The tails attach to the soil; the heads remain in the

*See “WATER” on next page*



815.578.0233

[www.cleanbee.net](http://www.cleanbee.net)

Prefer to receive your newsletter  
via email?

Visit our website, [www.cleanbee.net](http://www.cleanbee.net)  
to sign up.

## WATER continued from page 1

water. This action breaks the oil and soils into tiny soap-enclosed droplets called micelles, which disperse throughout the solution. The micelles repel each other because of their charged surfaces, so the oils can't join together once separated. This process of separating and suspending oils in a water-based solution is called emulsification. With the oil no longer bonding the dirt to the soiled surface, the soap-enclosed oils and soils can easily be rinsed away.

**Water softeners-** Hard water usually contains minerals, primarily calcium and magnesium dissolved from rock and soil as water passes through earth. Hard water is a problem because it reduces the effectiveness of soaps and detergents. Detergents react with calcium and magnesium so it takes more detergent to get the job done. The hard water reaction with soaps is what creates the sticky residue called soap scum.

**Water softeners** remove calcium and magnesium, increasing the effectiveness of cleaners. Soft water cleans better, rinses better and allows you to use less soap or detergent.

**Temperature-** Heat reduces the surface tension of water, making it easier to penetrate and dissolve soils. Heat increases the effectiveness of soaps and detergents, so they work more efficiently. Hot water also helps melt and dissolve greases, oils and waxes.

**pH-** One way to help water clean better is by adjusting its pH. Pure water has a neutral pH, neither acidic nor alkaline. By adding cleaning agents, we can change the pH of water. Since most common soils are acidic, most detergents are alkaline. When an alkaline detergent contacts an acidic soil, the soil is neutralized. In most cases, this results in more efficient cleaning, easier rinsing and less scrubbing.

**Saponification-** Saponification is a process that changes natural fats and oils into soap. Many years ago, people made their own soap by combining animal or vegetable fats with lye, a strong alkali. Similarly, using an alkaline detergent has a similar effect on fats and food oils, basically turning them into soap, which can then be rinsed away with water.

There is much more to cleaning than what we have discussed here. For best results, you need the right tools, techniques, training and experience. Fortunately, you don't have to be a chemist or engineer to keep your house clean and healthy. Following manufacturer instructions on appliances and cleaning products generally yields good results.

You can be confident that educated **Clean Bee** technicians will use the right cleaning agents, equipment and techniques to produce fantastic results with "plain old" water!

## The Good Life



### Good Clean Funnies

**What do you call a line of rabbits walking backwards?  
A receding hareline.**

**Why is everyone so tired on April 1? Because they've just finished a long, 31 day March!**



This bright and flavorful vegetable dish makes a great side to any Easter or spring menu.



## Lemon Parsley Green Beans

### Directions

Bring a large pot of salted water to a boil over high heat: add sugar, and beans. Cook until beans are bright green and tender, 3 to 5 minutes. Drain, and place in a large bowl of ice water to stop cooking.

Combine the butter and olive oil in a large skillet over medium-high heat; cook until butter melts.

Stir in the garlic; cook until pale beige and fragrant. Stir in the beans; cook until wilted, and garlic is dark brown, about 4 minutes.

Toss beans with parsley and lemon zest, and cook 1 to 2 minutes more. Season to taste with salt and pepper. Transfer beans to a serving dish, and garnish with lemon wedges.

### Ingredients

- 1 pinch white sugar
- 1 pound fresh green beans, trimmed
- 2 tablespoons butter
- 2 teaspoons olive oil
- 3 cloves garlic, minced
- 1 tablespoon lemon zest
- 1/4 cup chopped fresh parsley
- salt and pepper to taste
- 1 lemon, cut into wedges

Recipe courtesy [allrecipes.com](http://allrecipes.com)



## Make Your HEARING Last for Life



One in every 10 Americans has some degree of hearing loss. That includes teenagers, children, and adults.

Though age can be a factor, hearing loss isn't a definite condition of advancing years. By protecting your hearing, you could have excellent hearing throughout your retirement years. The main cause of hearing loss is on the rise: loud noise.

Much of the damage is from sound systems in movie theaters, cars, and home theaters. Also, power devices like leaf blowers and snow blowers can be extremely harmful.

There are many things you can do to preserve your hearing. Don't blast

the music. Use earplugs or insulated ear muffs when operating loud power equipment. Learn to recognize the signs of hearing loss, and have your hearing checked.

Early treatment of infection or disease affecting your ears is a proven way to make the most of the hearing you have.

Unfortunately, while the damage cannot be cured or reversed, the progression of hearing loss can be prevented by protecting the ears from further high-noise exposure.

## Pay DOWN Student Loans



Part of the Secure Act, signed in December 2019, the new use for college loans went into full effect on Jan. 1, 2020.

A 529 college savings plan allows families to save after-tax dollars for college costs. Contributions grow tax free and you can use money in the account for qualified educational and college expenses.

A total of 34 states and Washington D.C., also offer a state income tax deduction or credit for the money you put in a 529 plan.

However, the expanded use of 529 funds for loan paydown, may not apply in every state. Some states limit uses of 529 plans to such things as tuition, fees, textbooks and supplies only at a post-secondary school.

Do your research first. It's possible that some states will actually hit savers with penalties if they use their 529 savings to pay down their student loans.

Check with an accountant about the process, especially if you live in New York or California.



The federal government has expanded the use of the 529 college savings plan to pay down college loans up to \$10,000.



## PROTECT Against Termites



Termites are active year-round and spread most commonly underground.

Termite damage is not always covered under homeowner's insurance. That's why it's essential to get periodic home inspections and treatment.

In addition, here are some key ways to prevent infestations of all termite types.

Keep home foundations dry: Don't regularly spray water on foundations. Slope gutters so that they drain away from the house.

Be careful with mulch. Don't mulch around foundations. Keep wood mulch as far away as possible from the house. Also, remove any scrap wood and

wooden debris. Quickly dispose of any fallen branches from around your house.

Avoid using timbers or railroad ties as edging around your house. Metal, plastic or brick edging is a better choice for plantings.

Build decks and stairs on concrete pads. Regularly treat the area around posts and pads.

Cut clinging vines so they do not grow on the wall of the house. Termites love these.

Keep crawl spaces as dry as possible and sealed, if feasible.





# CLEAN BEE

**815.578.0233**

[www.cleanbee.net](http://www.cleanbee.net)

- Carpet cleaning**
- Upholstery cleaning**
- Area rug cleaning**
- Tile & Grout cleaning**
- Wood floor cleaning**
- Stain Protection**



**IICRC**  
Institute of Inspection Cleaning  
and Restoration Certification



Clean Bee  
5922 Castlewood Trail  
McHenry IL 60050



The Meintz Family

**Spring Cleaning Special**  
**11% OFF**  
**Your next in Home Cleaning Service.**

Details and Restrictions: Residential orders only. Minimum of \$199.00 must be met in order to qualify. Not applicable to specialized treatments or coatings, call office for details. Not valid with any other offer or discount except referral reward certificates (they are just like cash). Commercial accounts ask about commercial rates. Offer expires and must be used by 04-30-20.

