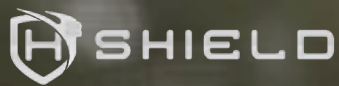


Water Filter Buyers Guide



Welcome to the H2 Shield Water Filter Buyers Guide

At **H2 Shield**, we believe clean water isn't a luxury—it's a foundation. Our mission is simple: to help families take back control of what flows through their homes by providing advanced, science-based, health-first water filtration systems that go far beyond the industry standard.

We're not just another water filter company. H2 Shield was built to solve the real threats in modern tap water—like **PFAS, pharmaceuticals, heavy metals, fluoride, and microplastics**—with **layered, intelligent filtration** and powerful enhancements like **alkaline water balancing** and **molecular hydrogen infusion**.

Our systems are designed with integrity, simplicity, and long-term health in mind—offering everything from **whole-house protection** to **next-generation under-sink systems** with **on-demand hydrogen activation** and **no-compromise filtration performance**.

I founded H2 Shield because I was tired of seeing people misled by gimmicks, overpriced systems, or filters that “look good on paper” but don't deliver in real life.

This guide isn't a sales pitch—it's a **resource**. My goal is to give you honest, well-researched answers so you can make a confident decision for your home and health. Whether you choose H2 Shield or not, I want you to be informed, empowered, and protected.

Let's take the guesswork out of water—and put peace of mind back in.

To Your health,

Ron Pagliarulo

Founder, H2 Shield Water Systems

h2shield.com

516-550-4344

Chapter 1: What's Really in Your Water



The Illusion of Safety

If you're like most people, you probably assume that the water coming from your tap is clean—maybe not perfect, but “safe enough.” After all, it's regulated by the government, right?

Unfortunately, that assumption doesn't hold up under scrutiny.



In America today, millions of homes receive water that contains dangerous levels of contaminants—some regulated, many not. Even when a water utility is in full legal compliance, that doesn't mean the water is safe by modern health standards.

According to the Environmental Working Group (EWG), more than

160 unregulated contaminants have been found in U.S. tap water—chemicals linked to cancer, brain and nervous system damage, developmental disorders, and fertility issues.

Many of the legal limits for contaminants were set decades ago and have not been updated in light of new science. In fact, some of the most dangerous toxins in tap water today are not regulated at all, meaning utilities aren't even required to test or remove them.



How to Check What's in Your Water

You don't have to guess. You can look up your local water quality in minutes



Step-by-Step: Use the EWG Tap Water Database

- Go to <https://www.ewg.org/tapwater>
- Enter your ZIP code
- Select your water utility from the list
- Review the list of detected contaminants, including:

How levels compare to legal limits

How they compare to independent health guidelines

"You may see chemicals like hexavalent chromium, PFAS, or arsenic listed as "below legal limits" but still flagged as significantly above safe health thresholds."



Key Insights

- Many contaminants are invisible and tasteless—you won't know they're there
- Legal limits $\neq$ safe limits. Many federal standards are decades out of date.
- Your utility may be compliant and still delivering water that poses long-term health risks.
- Children, pregnant women, and the elderly are especially vulnerable to chemical exposure.



The Need for In-Home Filtration

Municipal water systems are designed to disinfect, not purify. They kill bacteria—but they're not built to remove the modern industrial, agricultural, and pharmaceutical contaminants that now plague our water supply.

And because pipes can leach contaminants after treatment, even perfectly “treated” water can be re-contaminated before it reaches your glass.

This is why point-of-use and whole-house filtration systems are no longer optional—they're essential for anyone serious about protecting their family.

“Systems like H2 Shield are designed to go beyond outdated standards—targeting PFAS, VOCs, heavy metals, and emerging contaminants using advanced multi-stage filtration technologies.”



Chapter 1 Summary:

-
- 01 Don't assume your water is safe just because it's legal.
 - 02 Use ewg.org/tapwater to check your local supply.
 - 03 Look beyond the “usual suspects” like chlorine and lead.
 - 04 Understand the long-term health risks of modern contaminants.
 - 05 In-home water filtration—especially a system designed for today's threats—is a critical layer of protection.
-

Chapter 2:

Hidden

Contaminants

You Should

Know About

Most people have heard of chlorine, lead, and maybe “hard water.” And while those are legitimate concerns, they barely scratch the surface of what may be flowing through your tap.

In reality, the most dangerous threats in your water are often the ones you can't see, taste, or smell. Many are not even regulated by the EPA, meaning utilities aren't required to test for them—let alone remove them.

This chapter breaks down the less obvious—and more dangerous—contaminants that commonly appear in U.S. drinking water and the science-backed risks they pose to your health.

Where These Toxins Come From

These contaminants come from a variety of sources:

Industrial runoff (factories, refineries, landfills)

Agricultural practices (fertilizers, manure, pesticides)

Aging infrastructure (corroding pipes and tanks)

Modern living (plastics, pharmaceuticals, personal care products)

Many are byproducts of water treatment itself, created when disinfectants like chlorine react with organic matter in the water.

Hidden Contaminants in U.S. Tap Water

Below is a table summarizing the most concerning emerging and unregulated contaminants, what they are, and what they can do to the human body:

Contaminant	What it is	Health Risk
PFAS / PFOS	“Forever chemicals” from nonstick coatings, packaging, firefighting foam	Kidney/testicular cancer, hormone disruption, immune suppression
Hexavalent Chromium	Industrial chemical (think Erin Brockovich)	Lung and stomach cancer, liver damage
1,4-Dioxane	Solvent byproduct from manufacturing, cosmetics	Probable carcinogen, liver and kidney damage
Disinfection Byproducts (DBPs)	Chemicals formed when chlorine reacts with organic matter in water	Bladder cancer, birth defects, developmental toxicity
Lead	Leaches from old plumbing and solder joints	IQ loss in children, neurological impairment, cardiovascular risk
Arsenic	Occurs naturally in groundwater	Skin/lung/bladder cancers, cardiovascular disease

Contaminant	What it is	Health Risk
Nitrates/Nitrites	Agricultural runoff (fertilizers, manure)	Blue baby syndrome, increased cancer risk
Fluoride	Added for dental health	Skeletal fluorosis, thyroid suppression, possible IQ reduction in children
Radium	Radioactive element found in natural rock and groundwater	Bone cancer, leukemia, internal organ cancers
Uranium	Radioactive heavy metal, common in well water	Kidney damage, radiation exposure risks
Microplastics	Tiny particles from plastic waste, packaging, and textiles	Hormone disruption, inflammation, cellular stress (under continued study)



Key Insight:

“Many of these contaminants are found in concentrations below legal limits but above health advisory levels, meaning the government considers them “acceptable”—even when medical science shows they’re not safe.”

Why Most Filters Miss These Threats

Most basic filters—like pitchers and faucet-mounted systems—only address:

- ✗ Chlorine
- ✗ Taste and odor
- ✗ Some sediment



They are not built to remove:

- PFAS and VOCs
- Heavy metals like uranium or radium
- Pharmaceutical residues
- Microplastics
- or 1,4-dioxane

Even mid-tier systems may lack the media or contact time needed to effectively treat these contaminants. That's why layered, multi-stage filtration systems are becoming the modern standard for in-home water protection.



What This Means for Your Family

These aren't obscure academic risks. The research is clear and growing:

- PFAS have been found in 98% of U.S. blood samples
- 1,4-Dioxane is present in over 7 million Americans' water
- Radium and uranium are found in hundreds of wells and rural water systems
- An EWG analysis of federal data from nationwide drinking water tests shows that Hexavalent Chromium (Chromium 6) contaminates water supplies for more than 200 million Americans in all 50 states.
- Disinfection byproducts are created by the very chlorine used to "treat" your water
- Even low levels of exposure over time can lead to bioaccumulation—where toxins build up in the body, triggering health issues years later.

“

It's not about fear—it's about stewardship. The more we understand what's in our water, the more empowered we are to protect what matters most. "

The H2 Shield Advantage

While many systems on the market focus only on taste, smell, or “filtering sediment”, H2 Shield was developed with modern water realities in mind. Our approach is based on three core principles:

A.S.M. Multi-stage filtration

P.U.R.E. Technology – Precision Utilization of Reactive Elements

Whole-home & point-of-use coverage – protecting both water and people

Future-focused filtration – addressing not just what's regulated today, but what's being researched for tomorrow

In short: We don't wait for regulation to catch up to science.



Chapter 2

Summary:

-
- 01 Most dangerous contaminants are invisible, unregulated, and legal.
 - 02 Many are introduced after water leaves the treatment plant.
 - 03 Health effects range from cancer to hormone disruption to neurological damage.
 - 04 Pitcher filters and single-stage systems aren't enough for true protection.
 - 05 Layered systems like H2 Shield address both legacy and emerging threats.
-

Chapter 3:

The Truth

About

Water

Testing

You've looked up what's in your local water and discovered some serious concerns—but how do you verify what's actually coming out of your tap?

This is where water testing comes in... and also where a lot of misinformation and manipulation happens.

Let's separate truth from hype

The TDS Trap: Why It's Misleading

Many water filters and so-called “test kits” rely on one number: TDS, or Total Dissolved Solids. It sounds impressive—but it's often used incorrectly or even deceptively in water sales pitches.

What TDS Actually Measures:

- Dissolved minerals (calcium, magnesium, potassium)
- Salts and metals (sodium, iron, copper)
- Conductivity (how easily water conducts electricity)

What TDS Does Not Measure:

- ✗ PFAS / PFOS
- ✗ Pharmaceuticals or pesticides
- ✗ 1,4-Dioxane, DBPs, VOCs
- ✗ Bacteria, viruses, or chlorine
- ✗ Chromium 6
- ✗ Heavy metals like lead or arsenic (unless in ionic form)

A TDS meter can tell you something is in the water—but not what or whether it's dangerous.



TDS MEASURES ✓	TDS DOES NOT MEASURE ✗
Minerals (Ca, Mg, Na)	PFAS / VOCs
Conductive metals (Fe, Cu)	Pharmaceuticals
Salts and some ions	Disinfection Byproducts
Overall conductivity	Bacteria / Industrial toxins

Bottom Line:

TDS is only useful for monitoring reverse osmosis system performance—not for assessing actual safety or contaminant levels.

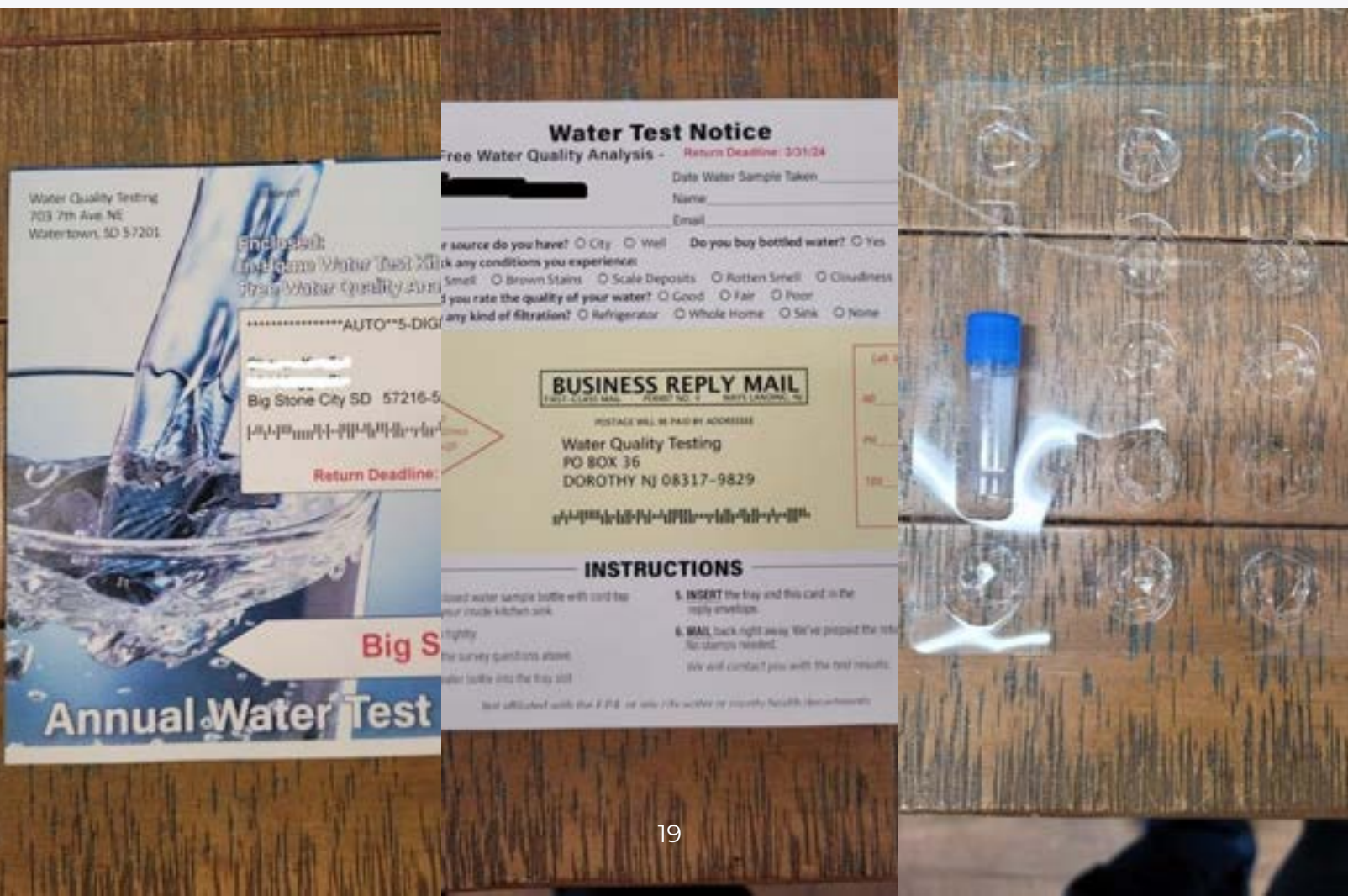


The "Send Us Your Water" Scam

Some companies offer to “test your water for free” by having you mail in a vial. Here’s how that works:

1. You fill a tiny bottle with tap water and mail it off.
2. They run a basic test—or sometimes none at all.
3. You receive a “report” highlighting whatever their system is good at removing.
4. A sales rep calls with a pitch.

This is not testing—it’s a sales funnel. The “report” is often scripted to create fear, not clarity.





What Real Water Testing Looks Like

If you truly want to know what's in your water, here's what it takes:

1. Lab-Grade Water Testing:
2. Certified labs (like [MyTapScore.com](https://www.MyTapScore.com))
3. Mail-in kits that follow EPA testing standard
4. Multi-panel options for city water, well water, or custom concerns





Testing Methods Used

GC/MS (Gas Chromatography)

Volatile organic compounds, solvents

ICP-MS (Mass Spec)

Heavy metals (lead, arsenic, mercury)

Ion Chromatography

Nitrates, fluoride, chlorides

Culture-Based Tests

Bacteria, coliform, E. coli (for wells)

Spectrophotometry

Disinfectants, hardness, iron



What It Costs:

- City water panels: \$150–\$2800
- Well water comprehensive: \$400–\$800+
- Annual testing for vulnerable homes is a smart investment—but not always necessary for every household



When to Test vs. When to Filter

You don't have to test for every contaminant to make a smart filtration decision.

If you're on:

- City water, you can review your local utility data (EWG or CCR reports) and apply a system that addresses the common threats in your area.
- Well water, periodic testing is essential since no one is monitoring it for you.

Regardless of your source, the best systems assume unknowns exist—and build in broad-spectrum filtration to protect you even when contaminants aren't obvious.



Why System Design Matters More Than a Test

Even the best test can only detect what it's looking for—and it's only accurate at the moment of sampling. Your water quality can change with:

- Seasonal shifts
- Construction nearby
- Aging pipes
- Treatment plant changes

That's why the smartest approach is filtration designed for uncertainty—systems that provide redundant layers of protection, rather than narrowly targeting one problem.



The H2 Shield Philosophy

**Some companies react to problems.
H2 Shield designs for prevention.**

- ✓ We don't rely on hype like TDS readings or scare tactics.
- ✓ We build systems with multiple filtration layers, because no single media can remove everything.
- ✓ We aren't just a copy cat company, replicating what everyone else is doing. We stay on the cutting-edge of what works to give you clean and healthy water
- ✓ You shouldn't need a chemistry degree—or a lab report—to have safe, healthy water.



Chapter 3 Summary

-
- 01 TDS $\neq$ safety. It's a conductivity reading, not a contaminant scan.
 - 02 Most "free water tests" are marketing tricks—not diagnostics.
 - 03 Real testing is lab-grade, EPA-compliant, and specialized—but often expensive.
 - 04 For most households, known data + smart system design is the best path forward.
 - 05 Modern water calls for modern protection: layered, flexible, and proactive
-

Chapter 4: Filtration Methods – Pros and Cons

You now know what's in your water, and why it matters. The next question is: how do you get it out?

Here's the truth most companies won't tell you:

No single filtration method removes everything.

Each system has strengths and limitations. The key is understanding what you're solving for—and choosing technology that fits the problem. Let's break it down clearly...





1. Pitchers & Faucet-Mount Filters

How it works: Uses basic activated carbon or GAC (granular activated carbon) to reduce chlorine and improve taste and odors.

Pros:

- + Affordable
- + Easy to use
- + Better than nothing

Cons:

- ✗ Removes few actual contaminants
- ✗ Doesn't reduce PFAS, heavy metals, DBPs, or fluoride
- ✗ Small capacity = constant refilling or cartridge changes



Best used as an entry-level stopgap, not a long-term health-grade solution.





2. Standard Carbon Filters (Countertop, Under-Sink, Whole House)

How it works: Activated carbon block filters reduce chlorine, taste, odor, and some volatile organic compounds (VOCs).

Pros:

- + Affordable
- + Readily available
- + Some reduction in pesticides, chlorine, and odors

Cons:

- × Most do not reduce PFAS, fluoride, arsenic, or heavy metals
- × Limited contact time = limited effectiveness
- × Varies wildly in quality between brands



Often over-marketed as a “complete” solution, but really just a first layer.



3. Water Softeners

How it works: Ion-exchange resin swaps calcium/magnesium with sodium or potassium to reduce hardness.

Pros:

- Prevents scale buildup +
- Extends appliance life +
- Helps soap lather better +

Cons:

- Does not filter contaminants ✗
- Adds sodium to drinking water ✗
- Doesn't improve taste or odor ✗
- Can't remove PFAS, metals, bacteria, or VOCs ✗



A softener isn't a filter. It solves a plumbing problem—not a health one.



4. Reverse Osmosis (RO)

How it works: Pushes water through a semipermeable membrane, removing nearly everything—good and bad.

Pros:

- + Removes fluoride, lead, arsenic, nitrates, and more
- + Highly effective at contaminant removal
- + Widely used in hospitals and labs

Cons:

- ✗ Removes healthy minerals (strips water “naked”)
 - ✗ Water becomes acidic unless remineralized
 - ✗ Wastes 2–4 gallons per gallon of water produced
 - ✗ Requires pre-filtration and regular maintenance
- ✓ **Best when paired with natural remineralization or hydrogen enhancement to restore water quality**





5. Remineralization Units (Post-RO or Add-On)

How it works: Adds minerals back to purified water, restoring taste and pH balance.



Not all remineralization is created equal.

- ✗ Many cheap systems use calcium chloride, which:
- ✗ Is chemically harsh on kidneys
- ✗ Is nearly identical to gypsum (found in drywall)
- ✗ May cause mineral imbalance or poor taste



Visual Analogy:

"Would you drink water that had been dripped through drywall? No?
Then avoid systems using calcium chloride as a primary mineral source."



Better remineralizers use natural calcium carbonate, magnesium, and trace minerals from coral, volcanic rock, or mineral stones.

H2 Shield uses a proprietary blend of natural mineral media—no calcium chloride, no shortcuts.



6. UV and Ozone Systems

How it works: Ultraviolet light or ozone gas sterilizes bacteria and viruses in the water.

Pros:

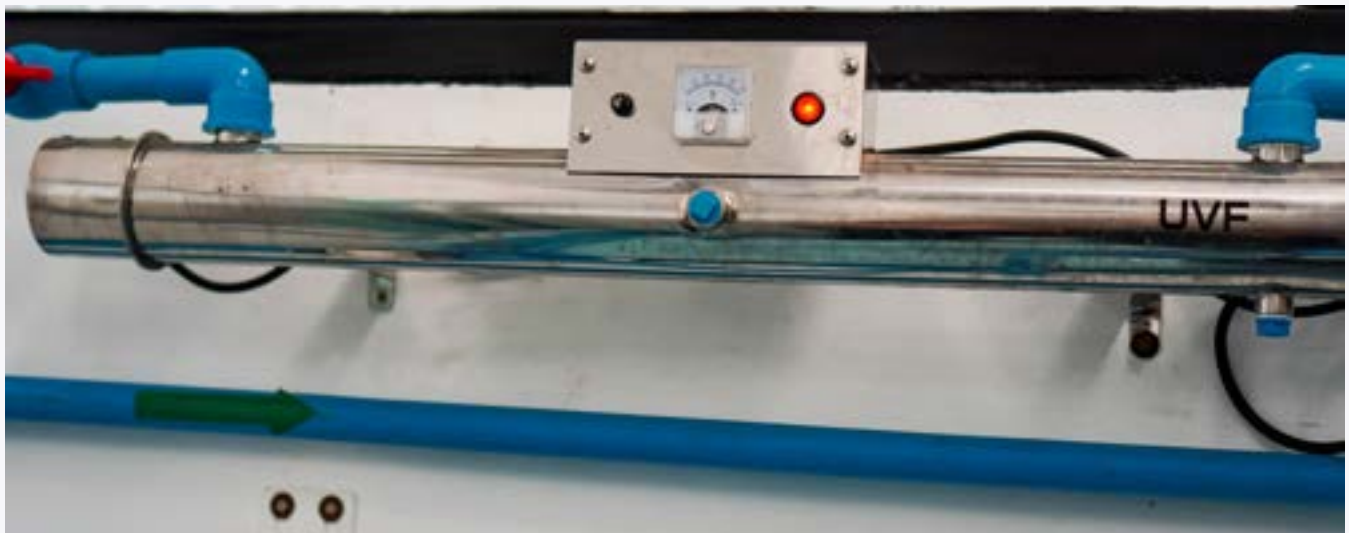
- + Effective against pathogens
- + Useful for well water or off-grid homes

Cons:

- ✗ Does not remove chemicals or metals
- ✗ Requires clean water to be effective (UV won't work in cloudy water)
- ✗ Needs power and bulb replacements



A good add-on for microbiological safety—not a standalone solution.





7. Multi-Stage Systems (e.g., H2 Shield)

How it works: Combines layers of sediment filters, specialized carbon, specialty media using different methods of filtration, scale prevention, remineralization, and hydrogen enhancement—tailored to your home.

Pros:

- ✓ Broad-spectrum contaminant removal
- ✓ Can address PFAS, heavy metals, fluoride, DBPs, VOCs
- Often paired with scale control, pH balance, and remineralization
- ✓ Modular and expandable

Cons:

- Higher upfront cost
- Requires professional installation (in many cases)



This is the gold standard for modern homes—a layered defense system built for 21st-century water threats.



8. Bottled Water: Convenience at a Cost

It's tempting to think bottled water is a safe fallback—but the science says otherwise.



Bottled Water Concerns:

- ✗ Up to 70% of bottled water is just filtered tap water
- ✗ Often stored in soft plastic, leaching BPA, phthalates, and microplastics
- ✗ Micro- and nano-plastics have been detected in nearly all major bottled water brands
- ✗ Environmental waste is staggering—billions of plastic bottles annually



Bottled water isn't a solution. It's a reaction—and an expensive one over time.



FILTRATION METHOD COMPARISON CHART

Method	Removes Contaminants	Improves Taste	Addresses PFAS	Adds Minerals	Kills Bacteria	Ideal Use Case
Pitcher Filter	✗ Limited	✓ Yes	✗ No	✗ No	✗ No	Basic entry-level filtering
Carbon Block	⚠ Some	✓ Yes	✗ No	✗ No	✗ No	Better taste, some VOCs
Water Softener	✗ No	✗ No	✗ No	✗ No	✗ No	Scale prevention only
Reverse Osmosis	✓ Yes	⚠ Flat taste	✓ Yes	✗ No	✗ No	Point-of-use purification
Remineralization	✗ No (adds only)	✓ Yes	✗ No	✓ Yes	✗ No	Post-RO or taste adjustment
UV/Ozone	✗ No	✗ No	✗ No	✗ No	✓ Yes	Well water/pathogen control
Multi-Stage (H2 Shield)	✓ Broad	✓ Yes	✓ Yes	✓ Yes	✓ Yes (if added)	Whole house + drinking water



Chapter 4 Summary

-
- 01 Every filtration method solves part of the problem—none solve it all.
-
- 02 Most homes need a layered approach to truly protect against modern threats.
-
- 03 Cheap remineralizers using calcium chloride may do more harm than good.
-
- 04 Bottled water is convenient but unregulated and often contaminated with harmful micro and nano plastics.
-
- 05 Systems like H2 Shield offer integrated protection and long-term cost savings by combining the best of filtration, enhancement, and intelligent design.
-



The Science of Water, Perfected!

Chapter 5:

Whole

House vs.

Point-of-

Use

Systems

When it comes to filtering your water, where you filter is just as important as what you filter.

There are two main categories of in-home filtration:

1. Whole-House Systems (Point of Entry)
2. Point-of-Use Systems (Drinking or Cooking Water)

Understanding the difference—and the unique strengths of each—will help you avoid common mistakes and make a smarter long-term investment in your family's health.





Whole-House Filtration Systems

Also known as: **Point-of-entry systems**

Where it's installed: At the main water line entering the home

Purpose: Treats all the water used in your home—every faucet, appliance, shower, and toilet



Best For:

- Removing chlorine, chloramine, sediment, and VOCs
- Reducing rust stains and pipe corrosion
- Protecting laundry, dishwashers, and hot water heaters
- Eliminating chlorine vapors in the shower (which are absorbed through skin and lungs)
- Improving water for bathing, cleaning, and brushing teeth



Limitations:

- Doesn't provide fine-level purification for drinking water unless paired advanced media and more expensive filtration methods are used
- May not remove fluoride, PFAS, arsenic, or pharmaceuticals, and deep embedded chemicals and toxins unless specially designed for that purpose



The H2 Shield whole-house system uses advanced P.U.R.E. Technology – (Precision Utilization of Reactive Elements) and a Cutting-Edge Carbon Elevation Process (CEP) to reduce a wide range of threats—including many that other POE systems miss.



Point-of-Use Filtration Systems

Also known as: Under-sink or countertop filters

Where it's installed: Directly under or at a specific faucet (typically kitchen sink)

Purpose: Provides high-grade purification for drinking, cooking, baby formula, pets, and other ingestion-sensitive uses

✓ Best For:

- Hydrogen water generation or alkaline enhancement
- Taste improvement and final-stage polish
- Fluoride, lead, arsenic, and nitrate removal
- PFAS, VOC, and pharmaceutical reduction
- pH balancing and remineralization

⚠ Limitations:

- Only treats water from one tap
- Doesn't protect your skin, plumbing, or appliances
- Can require separate faucet installation (see note below)
- Requires cartridges to be changed (every 6 months to annually)





The Cold Water Line Mistake

Many under-sink systems are advertised as “easy to install” because they hook up directly to your cold water line—letting you use the same kitchen faucet for both filtered and unfiltered water.

Every time you:

- ✗ Wash your hands
- ✗ Rinse dishes
- ✗ Wet a rag or sponge

You're wasting expensive filtered water on non-drinking tasks.

Think of it like using organic olive oil to grease a squeaky door hinge—it's effective, but totally unnecessary and expensive.

Not only are you burning through your filters faster, but you're also driving up replacement costs and potentially overburdening your system.

Sounds convenient, right? But here's the problem:



It leads to massive water waste and unnecessary filter wear. The companies that sell you the replacement filters, LOVE IT!





The H2 Shield “Magic Button” Solution

To solve this problem, H2 Shield offers a smart bypass button under the sink.

Here's how it works:

1. Turn on your faucet and run the cold water.
2. Press the button = filtered water for drinking or cooking (You'll see the flow change and know it's working)
3. Shut off cold water. The button resets and the faucet goes back to normal function automatically



Benefits:

Extends filter life by 2–3x

Reduces waste

Eliminates the need for a second dedicated faucet

Seamless user experience for any household member



This is a perfect example of design that respects both your wallet and your daily routines.



Chapter 5 Summary

01 Whole-house filtration protects every drop that touches your body or appliances.

02 Point-of-use filtration is essential for what goes into your body.

03 Cold water line setups waste expensive filter capacity—unless intelligently controlled.

04 The H2 Shield “Magic Button” solves this waste problem and simplifies daily use.

05 The best system isn’t one or the other—it’s a layered solution built to protect and optimize.

Chapter 6: The Benefits of Alkaline and Hydrogen Water

Until now, we've talked about what you want to take out of your water.

But truly optimal hydration doesn't stop at purification—it's about what you put back in, and how that water supports your energy, performance, and long-term health.

This chapter dives into two powerful water enhancements:

→ Alkaline water

→ Molecular hydrogen (H₂) water

Let's explore the real science—not the hype—behind these innovations.

 What Is Alkaline Water?

Alkaline water has a pH level above 7—typically in the range of 8.0 to 9.5.

Why does this matter?

Advocates claim it:

- Helps neutralize excess acidity in the body
- Supports better hydration at the cellular level
- Reduces acid reflux and indigestion
- Provides gentle mineral support (calcium, magnesium)



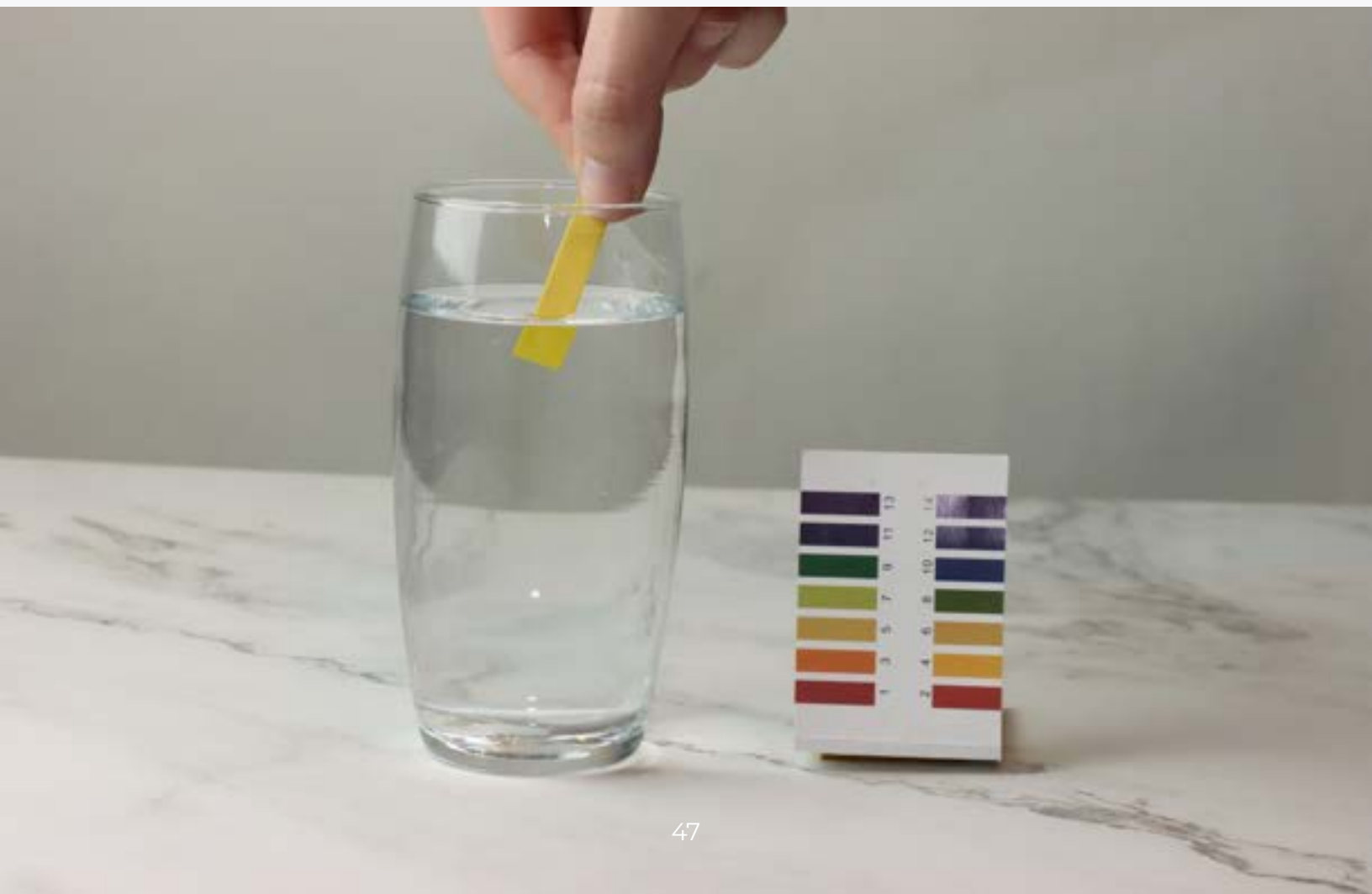
Is There Science to Support It?

Yes—but with important context.

A 2012 study published in *Annals of Otology, Rhinology & Laryngology* found that alkaline water at pH 8.8 inactivates pepsin, the enzyme linked to acid reflux.

Other studies show that alkaline water may reduce blood viscosity after exercise, meaning it improves circulation and hydration efficiency.

While it's not a miracle cure, alkaline water may offer real benefits—especially for those with digestive sensitivities or high water intake needs.





Important Warning About Alkaline Water

Alkaline water should still be mineral-rich. Artificially “alkalized” water using electricity (ionization) without minerals can be ineffective or even harmful over time.



A Warning About Cheap Alkaline Systems

Many systems use low-quality minerals like calcium chloride to raise pH. As noted in Chapter 4:

Calcium chloride is harsh on kidneys

Chemically, it's almost identical to gypsum (used in drywall)

It can make water taste chalky or “off”



Visual Analogy: Imagine drinking water that had been dripped through a piece of sheetrock. That's what calcium chloride-based systems effectively do.



✓ The best systems use natural mineral blends like coral calcium and magnesium oxide for a balanced, body-friendly pH.





What Is Molecular Hydrogen Water?

This is where things get exciting.

Molecular hydrogen (H_2) is a gas that, when dissolved in water, becomes a powerful, targeted antioxidant.

How It Works:

- ✓ H_2 selectively neutralizes harmful free radicals (especially hydroxyl radicals)
- ✓ It crosses the blood-brain barrier and enters mitochondria
- ✓ It acts as a cellular protector and repair agent



Backed by Research

The Molecular Hydrogen Institute has compiled over 3,000 peer-reviewed studies supporting H_2 's benefits.



The Health Benefits of Molecular Hydrogen (H₂)

Health Benefit	Supported Findings
✓ Reduces Inflammation	Downregulates pro-inflammatory markers (TNF- α , IL-6, etc.)
✓ Improves Metabolism	Enhances mitochondrial function and energy production
✓ Protects Brain Function	Shown to reduce oxidative stress in Parkinson's and Alzheimer's models
✓ Enhances Athletic Recovery	<u>Reduces</u> muscle fatigue, lowers lactic acid buildup
✓ Promotes Skin & Organ Health	Antioxidant effects help liver, kidney, and dermal function
✓ Safe and Non-Toxic	Used by deep-sea divers since the 1940s without harmful effects

Clinical trials have shown hydrogen water improves outcomes for metabolic syndrome, type 2 diabetes, arthritis, radiation recovery, and more.



Why Timing Matters: The Dissipation Problem

- Hydrogen is the smallest molecule in the universe—and that's part of the challenge. It dissipates quickly:
- Bottled hydrogen water often loses potency within hours
- Tablets and powders vary in dosage and may not dissolve fully
- Storage containers often leak hydrogen gas through the plastic



The best way to get effective hydrogen delivery is on-demand infusion, right at the point of use.



The H2 Shield Advantage

Many systems sell you “alkaline” or “hydrogen-rich” water based on gimmicks and hype.

H2 Shield does it differently:

We use natural remineralization, not cheap chemical additives

Our hydrogen enhancement is on-demand and cartridge-based

No electricity, no guesswork, no tablets or gimmicks

You simply press a button—and drink powerful, proven, health-supporting water that works with your body, not against it.



Chapter 6 Summary

-
- 01 Alkaline water may support digestion, hydration, and energy when done right.
 - 02 Avoid cheap minerals like calcium chloride, which can be harmful.
 - 03 Molecular hydrogen is a breakthrough antioxidant with growing clinical support.
 - 04 Bottled hydrogen water isn't stable—on-demand delivery is essential.
 - 05 H2 Shield's system combines mineral-rich alkaline balance and optional hydrogen infusion in one intelligent design.
-

Chapter 7: Choosing the Right Filtration System for Your Home

By now, you know what might be in your water. You've seen the pros and cons of different technologies. You've learned what purification can do—not just for your health, but for your quality of life.

Now it's time to make a decision.

But not just any decision—a smart, long-term one.

This chapter gives you a framework to evaluate your water situation, prioritize your needs, and choose a system that works for your health, your home, and your values.



Step 1: Know Your Water Source

City Water:

Treated with chlorine or chloramine

Often contains disinfection byproducts (DBPs)

May have trace levels of lead, fluoride, PFAS, or pharmaceuticals

Regulated—but only for a fraction of known contaminants

Well Water:

Untreated and unregulated

May contain bacteria, nitrates, uranium, arsenic, or radium

Requires regular testing and advanced filtration

 Start by checking [ewg.org/tapwater](https://www.ewg.org/tapwater) or reviewing your annual water utility's Consumer Confidence Report (CCR).





Step 2: Clarify Your Priorities

Ask yourself:

Do you have children, elderly, or immune-sensitive people in your home?

Do you cook daily? Make smoothies? Hydrate often?

Does anyone have skin, respiratory, or digestion issues?

Is taste and odor a major concern—or is your focus safety and longevity?

Are you looking for a low upfront cost or long-term value?

Your answers should guide the technology and installation type you choose.



Step 3: Understand the Cost of Ownership

It's easy to compare price tags—but short-term cost doesn't tell the whole story.

Here's what else to consider:

Cost Factor	What to Ask
Initial System Cost	Is this cost for one tap... or your whole home?
Filter Replacement Frequency	How often will I need new filters? Are they easy to get?
Maintenance Requirements	Will I need to change filters monthly, quarterly, or annually?
Installation & Plumbing	Is it DIY or Pro Install? Are there hidden costs?
Warranty & Lifespan	How long will it last? What happens if a part breaks?



H2 Shield systems include a 10-year media effectiveness guarantee with their whole house system because the system self-cleans weekly, a feature that extends the life of the media and reduces replacement frequency.

That's long-term value most systems can't match.





Step 4: Ask Smarter Questions

Use this checklist when comparing systems:

1. What contaminants does this system actually remove?
2. Are the removal claims independently tested by a reputable lab or agency?
3. Does it address emerging contaminants like PFAS, Chromium 6, 1'4-Dioxane, and pharmaceuticals?
4. Do they rely on sales tricks like TDS readings or color-changing gimmicks?
5. How long do filters last, and how much do they cost?
6. Are they pushing expensive service contracts?
7. What type of research has gone into the development of the systems they offer?
8. Are they reselling generic products widely available?
9. What makes their systems and technology unique?
10. Will this system grow with your needs—or lock you into limitations?
11. What are the specifics of their warranty and guarantees? Are they in writing?

Water Filter Decision Making Guide

START

↓

Do you use well water?

→ YES → Test regularly → Choose whole-house + UV + metal removal + drinking unit

→ NO

↓

Are you on city water?

→ YES → Check local report → Target chlorine, DBPs, PFAS, fluoride, heavy metals, and industrial waste products

↓

Need whole-home protection?

→ YES → Whole-house system (catalytic carbon + scale + VOC)

→ NO

↓

Need drinking water optimization?

→ YES → Add point-of-use with fluoride + hydrogen + minerals

↓

Want low maintenance?

→ YES → Choose system with long-life media or self-cleaning

→ DONE 



Why H2 Shield Fits This Decision-Making Model

- ❌ No sales hype, gimmicks, or bogus “free tests”
- ✅ Engineered to cover real-world threats, not just regulatory checkboxes
- ✅ Modular options that adapt to your water and goals
- ✅ Low-maintenance systems that self-clean and protect for a decade or more

You're not just buying a filter. You're investing in a water stewardship strategy—and H2 Shield was built with that exact mindset.





Chapter 7 Summary

-
- 01 Choose your system based on source, goals, and lifespan—not just price
 - 02 Ask the questions most people don't know to ask
 - 03 Compare cost of ownership, not just sticker cost
 - 04 Look for certified, scalable, self-cleaning systems that solve modern challenges
 - 05 H2 Shield helps homeowners become informed protectors, not just customers
-

Chapter 8:

Better

Water = A

Better Life



You started this journey with a simple question: “Is my water clean?”

Now you’ve learned that clean water isn’t just about what comes out of the tap—it’s about what goes into your body, your family, and your future.

And more than that: it’s about the mindset you carry as a steward of your health, home, and environment.

Water Touches Everything

- You drink it
- You cook with it
- You bathe in it
- You wash your clothes, your pets, your dishes, and your children with it
- Water flows into every room and every routine of your life.
- When it’s neglected, toxins accumulate, skin dries out, and peace of mind slips away.

But when it’s purified, protected, and enhanced—everything gets better.



The Ripple Effect of Better Water

Better water is more than a chemical improvement. It's a quality-of-life upgrade:

A water system isn't a gadget—it's a guardian of your home.

Impact Area	Result of Better Water
Health	Fewer toxins, more hydration, enhanced immune resilience
Skin & Hair	Softer showers, reduced irritation, better absorption
Taste	Cleaner water, better food, fresher coffee and tea
Confidence	No fear of <u>unknowns</u> —just clarity, safety, and peace of mind
Longevity	Reduced load on kidneys, liver, and detox organs over decades
Cost Savings	Fewer bottled water purchases, longer-lasting appliances



Don't Wait for a Wake-Up Call

- ✗ Most families don't upgrade their water until something goes wrong:
- ✗ A child develops unexplained skin issues
- ✗ A neighbor discovers lead in their pipes
- ✗ A weird taste raises questions that should have been asked years ago
- ✗ But by the time you notice the damage, the exposure may have already happened.
- ✗ Don't wait for a headline, a diagnosis, or a crisis. Choose prevention now.



What H2 Shield Stands For

We created H2 Shield for people like you—people who don't settle for “safe enough.”

We believe:

- ✓ Clean water is a right, not a luxury
- ✓ You shouldn't need a chemistry degree to make good decisions
- ✓ Filtration should be smart, simple, and sustainable
- ✓ Stewardship matters—because your health and your family are worth protecting
- ✓ That's why we engineer layered, long-term solutions—systems that work with your lifestyle, not against it.



Your Next Step

You've read this guide because you care.

Now it's time to act—whether that means:

1. Reviewing your EWG water report again
2. Talking with a trusted professional
Call us. We are here to help **516-550-4344**
3. Or choosing a system that gives you the protection and peace of mind you deserve

Don't overthink it.

Just take the next right step—and build from there.





Chapter 8 Summary

-
- 01 Water affects every part of life—your health, your home, and your legacy
 - 02 Better water improves energy, confidence, and long-term wellness
 - 03 Waiting can cost more than acting—especially when it comes to health
 - 04 H2 Shield was built to give you clarity, confidence, and control
 - 05 You've learned what matters—now you're ready to protect what matters most
-



Final Word

You're no longer just a water consumer.

You're a water steward.

And your decision to take responsibility for what flows through your home is a powerful one.

When you choose better water, you don't just improve your health—you elevate your whole life.

Welcome to a cleaner, clearer, more confident future.
Welcome to H2 Shield.

