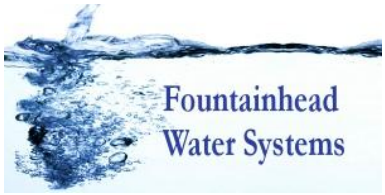


FAQs

Q: What is TDS?

A: Total Dissolved Solids, the total measurement by weight of all solids that are dissolved in water. The dissolved solids in water are primarily calcium and magnesium and should not be a measurement of contamination.

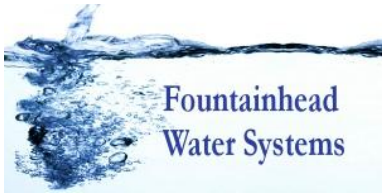
Checking the efficacy of your reverse osmosis system can be done with a TDS meter. For a home system, keeping your system well maintained, with scheduled filter changes, and periodically sanitizing your system, should be enough to keep it working properly.

Q: Why don't filtration systems reduce TDS?

A: “Filtration” systems are designed to selectively remove contaminants and to leave in dissolved trace minerals such as calcium and magnesium. These water-borne minerals are healthful and give water a more natural flavor. Systems that remove minerals lower the pH of water and cause it to be more aggressive. Low pH water will seek to balance itself by leaching elements such as copper, lead or aluminum from plumbing fixtures and cooking utensils. Cooking in de-mineralized water will also draw the minerals from your foods causing a reduced nutritional value. Water with a balanced mineral content has a much less tendency to take on foreign elements. TDS (total dissolved solids) is primarily made up of dissolved minerals and is not related to harmful contaminants. It is very deceptive for companies to imply that a reduction in TDS means improved water quality, in most cases it does not. Filtration does not reduce TDS. A TDS test is meaningless for under sink, and counter top filters

Q: Why would the filtered, or reverse osmosis water from a unit appear cloudy sometimes?

A: Occasionally, filtered water may appear milky or cloudy. The siphon action in closing the faucet can create air pockets in the filter. These air pockets will produce tiny air bubbles in the filtered water that can cause the appearance of cloudiness. This air will disappear if the glass of water sits for a minute. If cloudiness is noticed in the filtered water, turn the filter upside down and allow water to run for two to three minutes. This will allow the air pockets to purge out of the filter cartridges. This is particularly noticeable when you first install a filter system, as there is much trapped air in new filters.



Q: Can filters be used on hot water?

A: It is not recommended to use drinking water filters on hot water due to the potential for leakage. The soft rubber tubing on most systems and the o-ring seals can soften and create leaks when exposed to hot water. High temperatures can also warp the plastic housings for the filters. There are special order housings and components for a hot water system. Unless you ordered one specially for hot water, do not use it for that purpose.

Q: Is Chlorine harmful?

A: Chlorine was first added to a community water system in 1908 in Chicago and was instrumental in eliminating many types of water-borne disease such as Cholera and Typhoid fever.

Prior to chlorination, many major cities had death tolls of 1 in 1000 people from Typhoid alone. Chlorine has been used to disinfect municipal water for over 80 years and has had some positive effects on public health.

In the 1970's it was discovered that chlorine, when added to water, forms Trihalomethanes (chlorinated by-products) by combining with certain naturally occurring organic matter such as vegetation and algae.

In 1992, the American Journal of Public Health published a report that showed a 15% to 35% increase in certain types of cancer for people who consume chlorinated water. This report also stated that much of these effects were due to showering in chlorinated water. The National Cancer Institute estimates cancer risks for people who consume chlorinated water to be 93% higher than for people who do not.

The effects of drinking chlorinated water have been debated for decades. However, most experts now agree that there are some significant risks related to consuming chlorine and chlorinated by-products.

Q: How about Chloramines?

A: NH_2Cl is commonly used in low concentrations as a secondary disinfectant in municipal water distribution systems as an alternative to chlorination. This application is increasing. Chlorine (referred to in water treatment as **free chlorine**) is being displaced by chloramine—to be specific monochloramine—which is much more stable and does not dissipate as rapidly as free chlorine. NH_2Cl also has a very much lower, however still present, tendency than free chlorine to convert organic materials into chlorocarbons

such as chloroform and carbon tetrachloride. Such compounds have been identified as carcinogens and in 1979 the United States Environmental Protection Agency began regulating their levels in U.S. drinking water.

Some of the unregulated byproducts may possibly pose greater health risks than the regulated chemicals.

Adding chloramine to the water supply may increase exposure to lead in drinking water, especially in areas with older housing; this exposure can result in increased lead levels in the bloodstream, which may pose a significant health risk. Catalytic carbon is a great filter to use to eliminate or reduce chloramines in your water supply

Q: Why do some areas test negative for chlorine?

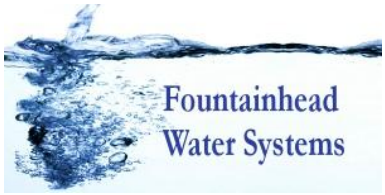
A: Virtually all city water systems contain some level of chlorine. The level will vary based on outdoor temperature, the season, distance from water utility and current usage. While chlorine may sometimes be undetectable on a certain day with a standard OTO test kit, that level can change dramatically day to day. Also, some cities use ammonia at certain times as a disinfectant in order to reduce chlorination by-products. Without chlorine, the dangers of water borne disease would be too significant. An undetectable chlorine level, on a certain day, does not eliminate the need for an effective chlorine removal system.

Q: What do you do if you have water contaminated by radioactive matter?

A: Move! Radioactive water is not very common in this country and is a more serious problem than should be dealt with by a home water treatment system. Many people confuse the contaminant “Radon” with radioactivity when in fact they are quite different. Radon is produced from decaying Uranium ore and can be effectively removed by carbon filtration.

Q: What are VOCs?

A: Volatile Organic Chemicals are synthetic compounds that turn into vapor at relatively low temperatures. VOCs typically vaporize at a much lower temperature than water. Most synthetic chemicals found in water, such as pesticides and herbicides, are VOCs.



Q: How does a water softener differ from filtration products?

A: Water softeners are not designed to improve the healthfulness of water, but rather to decrease dissolved minerals and reduce scaling of pipes and appliances. These systems typically use a sodium charged exchange medium that releases sodium ions and removes minerals such as calcium, magnesium, or potassium. From a health standpoint, the minerals would be preferred over the sodium. Filtration systems are designed to specifically remove harmful contaminants and leave in the natural minerals.

Q: Are filtration products considered purifiers?

A: Technically, a purifier would be a system that provides “pure” water – hydrogen and oxygen with no other components. Pure water of this sort does not exist except in the controlled environment of a laboratory. Most references to “pure water” are in relation to the bacteria content and not the chemical contaminant concentrations. The EPA defines “pure” as water free from all types of bacteria and viruses. Each of these definitions would describe a system significantly different from a drinking water filter. Many filtration systems are designed to eliminate chlorine resistant parasites like cryptosporidium and giardia, but should not be sold as a means of treating water of unsafe bacteriological quality.

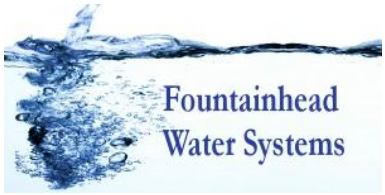
Q: Are water products EPA approved?

A: No, the EPA does not approve anyone's product. Only products that contain regulated contaminants, like silver in silver impregnated carbon filters, are required to have an EPA “registration” number.

Q: Do water treatment products require FDA approval?

A: No, however certifications that apply to certified products require proof that all component materials meet FDA requirements for food grade materials. The performance claims of a filtration system should be validated and certified by Departments of Health, like the California Department of Health Services, to ensure compliance.

Q: How do filters compare to reverse osmosis or distillation systems?



A: Reverse osmosis and distillation are non-selective de-mineralizing processes. The water produced by these systems has been stripped of all mineral content, which causes water to be acidic and aggressive. The healthiest water is water that is free from contamination but still contains a natural mineral balance. Filtration systems are designed to selectively remove contaminants and allow the natural minerals to pass through.

Q: Are whole house systems (P.O.E.- point-of-entry) better than counter-top filters (P.O.U.– point-of-use)?

A: P.O.U. systems are by far the best way to ensure the highest quality water since many water-borne contaminants come from the plumbing in your house, especially lead and vinyl chloride from the piping. By filtering water at the point-of-use you remove contaminants just prior to consumption, eliminating the chance of recontamination.

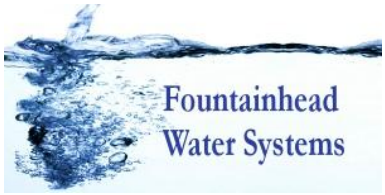
Point-of-entry systems are very beneficial in that they provide filtered water to all baths and showers as well as other water appliances. By filtering all the water going into your home you improve not only the healthfulness of the water, but you greatly improve the indoor air quality by removing chlorine and other chemicals that vaporize and get into the indoor air.

Q: How do you know if there are contaminants in your water?

A: All public water systems contain some level of one or more unhealthful chemicals. Regulations only require periodic testing of about 86 chemicals. There are now more than 75,000 chemicals used in our society with over 1000 new ones being developed each year. Contaminant levels fluctuate throughout the year making it impossible to know the actual level of contamination in a central water system. So far over 2100 toxic chemicals have been detected in North America's water systems. The risk is high and the cost for a sure solution is low. All public water utilities publish their water report. Ask your utility provider for the report. It's most probably on their website. If you are on well water, you should get a water analysis report, to safeguard the health of your family.

Q: What are some good web sites to find documentation on water problems?

A: Natural Resources Defense Council , Environmental Working Group , Environmental Defense Fund , Environmental Protection Agency and Centers for Disease Control and Prevention are all good informational sites with numerous documented studies on water problems.



Q: Do filter systems remove radon?

A: Radon is a gas produced by decaying uranium and is more often a problem when airborne, however some areas may have radon in the water, which can be effectively removed by most carbon filters.

Q: Is a Whole House Reverse Osmosis System a good idea?

A: We only recommend this course if the water quality is too low to be properly treated with less aggressive methods. A whole house reverse osmosis system is costly, high maintenance, and complex. Reverse osmosis water is very aggressive, copper pipes will not fare well. With a ratio of 4 parts of discarded water to 1 part of product water, your water bills will be extremely high.

Q: What is the best system to address contaminants and scale, and provide good quality drinking water in my home?

A: We recommend