



ASK THE EXPERT:

Common Water Quality and Water Filtration Questions

I read about contaminants in my water and worry about how they may affect my family. Will a water filtration system protect my family from health risk associated with these contaminants?

No single home water treatment system is capable of removing all contaminants. Different types of contaminants require different types of treatment systems. The annual water quality report from your water district or water utility will list the drinking water contaminants detected in your local drinking water.

Why does my tap water taste or smell funny?

Some reasons your water has a bad taste or smell are the presence of chlorine or chlorine compounds, the interaction of chlorine with organic matter in your household plumbing system and/or the mineral or dissolved solids content in the water. A point of use activated carbon water filtration system will reduce most taste and odors from your tap water but will not address the mineral content. To lower mineral content, you should consider a 3M™ Reverse Osmosis Drinking Water Filtration System.

I have heard we have pharmaceuticals in our drinking water? Will a water filtration system remove pharmaceuticals?

Currently, the EPA does not require testing for pharmaceuticals in drinking water. While specific product performance standards have not been developed for pharmaceuticals, the American Water Works Association (AWWA) testing has shown reverse osmosis is one of the most effective means of reducing the majority of these contaminants.

What causes the white scale around my faucets and inside my dishwasher?

The easiest way to recognize the presence of hard water chemicals in water is the spotting or scaling left behind on faucets, glassware and counter tops when water dries. This is due to the minerals in the water being left behind as the water evaporates. On your dishes this is just an inconvenience. But the same process can have a much more damaging effect on your fixtures, clothing, appliances and your plumbing system. The most effective solution for hard water staining and scaling is to reduce calcium and magnesium from the water, making it "soft", using the tried and true "ion exchange" method. The hard water goes through a tank filled with beads made from a special resin. These beads have a negative electrical charge. The calcium and magnesium molecules,



called "ions", have a positive charge. The positively charged "hard water" mineral ions are basically stuck to the resin beads and replaced with either sodium or potassium, so the water leaving the tank is now "soft". A water softener system is commonly connected to the water line as it enters the home to provide a whole house solution to all points of use.

Can I remove chlorine from my drinking water?

Installing a carbon based water filtration system will significantly reduce chlorine levels in your drinking water. You have the option of installing an under sink activated carbon water filter system with or without a dedicated faucet. Reverse osmosis systems typically contain activated carbon filters as a part of the filtration train, and therefore also reduce chlorine taste and odors from drinking water, in addition to the reduction of many other contaminants.

We live in an older home and are concerned about lead leaching into the water. Does a water filtration system remove lead?

Typically, lead enters a water supply after it leaves the local treatment plant. Lead plumbing is common in homes built before 1986, and can contribute to contamination of the home's water. Because the contaminant can be present in people's homes and not the water supply itself, lead content may not be accurately represented in water quality reports. The most common cause of lead in the water is corrosion, a reaction between the water and the lead pipes or solder. A point of use water filtration system or a reverse osmosis system can be installed to reduce the risks associated with lead ingestion. Make sure that you choose a system and faucet, if applicable, that has been certified by a third party such as NSF International.

Can fluoride be removed from my water?

Virtually all water contains some amount of fluoride. Water fluoridation is the process of adding fluoride to the water supply. An effective way to reduce fluoride from drinking water is to install a point of use 3M™ Reverse Osmosis Drinking Water Filtration System.

Does a reverse osmosis system remove minerals from the drinking water that I need to be healthy?

Many people express concern that the reverse osmosis process removes "healthy" minerals from water. Indeed, the reverse osmosis process effectively separates water molecules from the other non-water constituents that may be present in water. Water does contain some minerals that can be used by our body in some of our bodily functions, but at the same time, water may contain constituents that many of the minerals found in drinking water are inorganic and cannot be assimilated very well by the



body. The main source of minerals should always be from food and diet, not from drinking water.

How do I know if I need a water filtration system?

Your public water authority does the best it can to provide you with water that is potable. However, water that is passed through a series of pipes to reach your home may contain sediment. Therefore, a sediment reduction filtration system is advisable on the incoming water line. Our sediment reduction filtration systems help protect washers and seals from premature wear, help prevent aerators and valves from plugging, and help keep your water heater from collecting excessive sediment.

I have a moderate amount of hardness (calcium and magnesium) in my water, but don't want to use a softener. What can I do?

The 3M™ Scale Inhibition Treatment System incorporates a scale inhibitor that utilizes two important mechanisms to help inhibit scale buildup and corrosion. The first helps prevent scale from forming and the other treats the surface of the piping to help prevent the negative effects of hard water scaling or corrosive water.

Can lead be removed from a home's water supply?

Lead can be reduced from a home's water supply; however, there is always a chance lead can be reintroduced into the water downstream of a whole house lead reduction system. In addition, the water demand for a household makes it impractical to treat the water at the point of entry. Therefore, it makes sense to focus treatment at the point of use, such as the kitchen, with an under sink, point of use water filtration system.

ⁱ <http://today.msnbc.msn.com/id/19872160>