

How To Choose Your Water Filter

2015-05-29 07:32:22 By Theresa Crouse

There are many reasons that you may want to filter your water.

Maybe you don't like the chemicals used by municipal treatment plants. Perhaps you want a back-up plan in case SHTF.

Regardless of WHY you want to filter your water, knowing how to choose a water filter before you invest your hard-earned money just makes sense.

Why Filter Water?

Even the clearest stream may be full of invisible protozoa, bacteria and viruses that can make you sick or even kill you. Never assume that any water source is safe just because it looks clean; most of the contaminants in water are too small to see with your eyes.

Even if it comes straight from your tap, your water may still contain harmful contaminants. Many water treatment facilities were built so long ago that they're just not equipped to filter water properly. Pipes get old and leak and the sheer mass of pollution produced by a large city can overwhelm an aging system.

Also, many cities add fluoride to your water. The potential dangers of fluoride are a source of controversy, so many people don't want to drink fluoridated water.

If disaster should strike, water services may go down or something may happen to make your tap water unsafe. You may even have to depend upon other sources of water to survive.

In the event of a radioactive event, the water won't be safe to drink. In these cases you absolutely MUST filter and purify your water before you drink it.

What's the Difference Between Water Filtration and Water Purification?

You need to understand the difference here because it's critical to your decision. There are three types of disease-causing pathogens in water, not counting minerals and pharmaceuticals.

We published an article not too long ago about the various contaminants in water that you can read here. Here's a basic rundown for now:

- Bacteria: Some examples that you've probably heard of are E. coli and salmonella. There are many more and, so that you know what filter to look for, they can be as small as 0.1 microns, though a 1-micron filter will capture 99.9% of bacteria.
- Protozoan Cysts: these are hardy little "eggs" that have an extremely hard shell. The only way to kill them is by boiling them but they can be filtered out. Examples include Giardia and Cryptosporidium. They range in size from 1-300 microns.
- Viruses: Right now, these are rarely found in American or Canadian waters but that could change quickly if SHTF. Viruses include hepatitis A and rotavirus and range in size from 0.005-1 micron. Only purification by some means can remove these from the water; filters won't work

How To Choose Your Water Filter by Theresa Crouse - https://www.survivopedia.com/ admin@survivopedia.com/ date:2024-05-08

because the viruses are so small.

Here are the different water filtration units commonly available:

- Standard water filters filter out sediment, Giardia and other large protozoa and some bacteria that may be in the water.
- Micro filters remove most microorganisms including bacteria and protozoa. You'll still need to add a disinfectant to kill viruses. They also often remove most toxic heavy metals such as lead and fluoride.
- Water purifiers remove all microorganisms from the water, including viruses but they may not remove debris such as dirt. They may come in the form of tablets or liquid such as iodine or bleach. Distillation, boiling and desalination processes also purify water.

As you can see, there's a big difference here. Most water filters nowadays are micro filters. Just read the micron size on the box or in the advertisement to make sure that the filter is made of material that will filter the water based upon your needs.

Thanks to modern technology and good old fashioned common sense, there are many different types of water filters and purifiers on the market.

We recommend, at the very least, using a micro filter that's no larger than 1 micron: that will eliminate about 99.9% of the bacteria in the water. Many micro filters start at .2 microns. Of course, viruses are still an issue but there are other alternatives to that.

Video first seen on **Shepherd School**

What Type Of Water Filtration are You Looking For?

This is a major factor in deciding what type of filter is best.

Home Filtration Units

If you want to filter water for your entire house, we recommend using a point-of-entry system or a point-of-delivery system. The latter is going to be much cheaper and just as effective. We recommend using a reverse osmosis (RO) or distillation system if you want to filter out everything.

You can pick a really good RO system up for under the sink for about \$200. The filters are about \$20 but you'll also see a hike in your water bill.

Reverse osmosis filters out the clean water and pours the excess water, or brine, down the drain. Most systems lose about 3 gallons of brine to get one gallon of fresh water.

Many people adjust for this by re-routing the brine to a bucket that they use for watering plants or other uses that don't require purified water.

You can also get standard carbon or ceramic filter units that are just about as good as reverse osmosis, though they don't filter out viruses and some heavy metals. Some do come with chemical components that take care of the viral worries, though.



How To Choose Your Water Filter by Theresa Crouse - https://www.survivopedia.com/ admin@survivopedia.com/ date:2024-05-08

Keep in mind that water distilled or purified using reverse osmosis lacks the minerals that you need, so find out how to re-mineralize your water in our article, here.

Refrigeration Units

You probably already know about these and may even have one in your fridge. It's a carbon or ceramic filtration unit that holds anywhere from a quart to several gallons of filtered water.

They're great for improving the taste of your water and removing particulates, bacteria, heavy metals and most protozoa. The most commonly known brand name for these units is Brita.

Portable Units

These consist of water bottles and survival pieces such as straws that allow you to drink directly from the water source because they filter out impurities, bacteria and some heavy metals as you drink. Most don't filter out viruses though. Examples include the LifeStraw and Brita's water bottles.

There are also portable bags that purify by using the UV rays in sunlight. They're light and take up very little space; in fact, the Life Sack, currently used to purify water in 3rd world countries, doubles as a grain delivery package that is then used as a water purifier. It even has a 15nm water filtration unit at the point of exit.

Desalination Units

This is a biggie for survivalists and preppers that live along the coast. It turns salt water into drinkable water while also removing bacteria, protozoa, heavy metals, most prescription meds and even viruses.

We found a great one called the Survival Still that turns contaminated water, even salt water, into pure drinking water. The unit costs under \$300 and is fairly portable.

Another upside of this unit is that it's made in the USA with USA materials and is stainless steel so rust isn't an issue.

And if you're a bit mechanically inclined, <u>read our article about how to build your own desalination</u> <u>still.</u>

Basically, the type of water filter that you need depends upon what you need it for. Before starting your search, ask yourself these questions:

- Do you want a system for your house or one that's portable?
- What do you want to use the filter for (whole house, drinking/cooking, survival)?
- If you want a portable one, how much space and weight can you allow?
- Compare what the filter removes to what you want it to remove (what is the micron rating?)
- How long does the filter last?
- Can you clean or easily replace the filter?
- How much clean water does the filter produce daily compared to what you need?
- How much water does the filter waste?
- How difficult is the filter to use or install?

How To Choose Your Water Filter by Theresa Crouse - https://www.survivopedia.com/ admin@survivopedia.com/ date:2024-05-08

• How much are you willing or able to spend?

Once you answer these questions, you'll have a better idea of what type of water filter or purifier that you need.

If you have any other questions or suggestions for how to choose a water filter, please share them in the comments section below!



Get Your Own Amazing Device That Turns Air Into Water

Watch Video »

Copyright:

All this contents are published under <u>Creative Commons Attribution-NonCommercial-ShareAlike</u> 2.5 Generic License.

for reproduced, please specify from this website Survivopedia AND give the URL.

Article link: https://www.survivopedia.com/?p=10973