

Table of Content

Spring + Mountain Water 2

Water Distillation 3

Reverse Osmosis 4

Lab Test Results 5

Brita 6

Berkey 7

What to Avoid 8



SPRING + MOUNTAIN WATER



Spring and mountain water are the top sources when it comes to your water supply. Aside from the fact that it's a zero-cost option, it's also nature's most mineral-rich water that hasn't been exposed to any contamination. Since water originating from high above sea level is depleted of deuterium, such as that of spring and mountain water, this is the best you can possibly drink.

However, there is one clear downside: the availability of this type of water. Its sources are disappearing due to manmade environmental changes, but there are still many places around the earth where these have yet to be found.

If you visit www.findaspring.com, you can pinpoint your geographical location and search for any natural springs nearby.



WATER DISTILLATION



Water distillation was my first filtration system, which I used over the span of many years while living in an apartment. It's transportable and requires no installation, making it a very versatile option.

The cost is relatively low, but it requires effort and consistency to filter the water. Typically, a distiller has a capacity of 3-4 liters, meaning you'd need to fill it with that amount of tap water to receive the same amount of filtered water. The filtration process takes as long as the capacity of the distiller, so, for example, filtering 4 liters would take around 4 hours. Depending on the number of people using it, you'd have to manually filter your water every day or every other day. Additionally, the machine needs to be cleaned a few times a week.

Regarding the quality of the water output, it is as clean as you can get it, containing pure H₂O with no contaminants whatsoever. However, a downside is that it filters out all essential minerals, leaving the water mineral-depleted and acidic. While this might not be significant if you have a balanced diet, it's still preferable to obtain essential minerals through water, such as magnesium, which contributes to alkalinity.

If you choose a water distiller and aren't completely certain about the abundance of micronutrients in your diet, I recommend manually remineralizing the water to err on the side of caution.

— Water distiller link found below this document.



REVERSE OSMOSIS



Reverse osmosis (RO) is my recommendation for anyone who doesn't have access to spring or mountain water as their primary water supply but resides in a place where they can install this system.

Typically installed underneath your sink, RO systems provide filtered water through a separate faucet. The tap water passes through several filtration stages in the RO system before reaching a remineralizing filter, which adds minerals back into the water. However, not all RO systems include this remineralization option, so it's important to ensure yours does; otherwise, you'll end up with the same clean but mineral-depleted water produced by a water distiller.

Regarding the remineralization filter, it's rarely highly efficient. I had my own RO water tested in a lab, which clearly showed the removal of all contaminants while the water still retained its minerals, though not in significant amounts. Lab results are attached on the next page.

The cost of an RO system is slightly higher than that of a water distiller, and it requires filter changes once or twice a year. However, once installed under the sink, the system runs smoothly, providing clean and great-tasting water for the rest of your life.

LAB TEST RESULTS

Analysis	Tap water	Filter	Unit
Temperature	8-10	20	C
pH	7,76	6,88	pH
Conductivity	68,3	5,1	mS/m
TOC (Total Organic Carbon)	1,46	0,16	mg/L
Phosphorus	0,006	0,019	mg/L
Nitrogen	0,195	0,014	mg/L
Alkalinity	5,26	0,43	mmol/L
Bicarbonate	320,6	26,2	mg/L
Fluoride	0,227	<0,030	mg/L
Ammonium+Ammonia-N	<0,0030	<0,0030	mg/L
Nitrite-N	<0,0003	<0,0003	mg/L
Nitrite+Nitrate-N	0,154	0,012	mg/L
Phosphate-P	0,0083	0,0238	mg/L
Silicate	9,118	0,805304	mg/L
Chloride	47,5	2,1755	mg/L
Sulfate	86,3	1,7665	mg/L
E-coli	Not detected	Not detected	
Sodium	16,665	2,884	mg/L
Potassium	2,551	0,372	mg/L
Calcium	125,324	5,586	mg/L
Magnesium	14,899	1,314	mg/L
Iron	0,0135	<0,010	mg/L
Manganese	<0,0020	<0,0020	mg/L
Lithium	10,1088	1,9927	µg/L
Beryllium	0,0027	0,0028	µg/L
Aluminum	0,3004	0,4261	µg/L
Vanadium	0,0721	0,0074	µg/L
Chrome	0,0637	0,0269	µg/L
Cobalt	0,0119	0,0088	µg/L
Nickel	0,4161	0,7686	µg/L
Cobber	1,4977	0,2358	µg/L
Zinc	14,7196	8,0437	µg/L
Arsenic	0,2753	0,0267	µg/L
Selenium	0,0647	0,0338	µg/L
Strontium	549,47	21,8	µg/L
Molybdenum	2,8046	0,0488	µg/L
Cadmium	0,0057	<0,0030	µg/L
Tin	<0,020	<0,020	µg/L
Antimony	0,212	0,25	µg/L
Barium	74,7113	3,7335	µg/L
Thallium	<0,050	<0,050	µg/L
Lead	0,1664	0,0247	µg/L

IV

BRITA



The Brita water filter usually comes in the form of a jug. You simply fill it up with water from the tap, and through a simple filtration system, the water is filtered.

There's a reason why this is a low-cost solution. It's great if you don't have any other opportunity whatsoever, but its filtration capabilities are quite basic.

I do not have personal experience with this type of water filter, but according to Brita, their filters are able to remove some particles, including chlorine, some pesticides, and some pharmaceuticals if they are present in the water. However, the levels are unspecified, so you are unable to determine how much it actually filters out. Notably missing from the list are fluoride, PFAS, toxic metals, etc.

The bottom line is, this is a low-cost filter, and its qualities match its price. It's better than nothing, but it ranks lowest on my list of water filtration systems.

V
BERKEY



The Berkey water filter falls between Brita and other filtration systems in terms of effectiveness. However, it comes at a very high cost, almost comparable to a reverse osmosis filtration system, which seems unusual given the considerable difference in performance.

While the Berkey filter is slightly more advanced than the Brita filter, it remains portable. Filters are included, but if you require fluoride removal, you'll need to purchase an additional add-on, adding to the inconvenience.

Although I lack personal experience with Berkey, according to their claims, they can remove over 200 common drinking water contaminants, although without providing specific details. This includes chlorine and pesticides. Allegedly, they can also reduce nitrites and toxic metals, but an additional filter is necessary for fluoride removal.

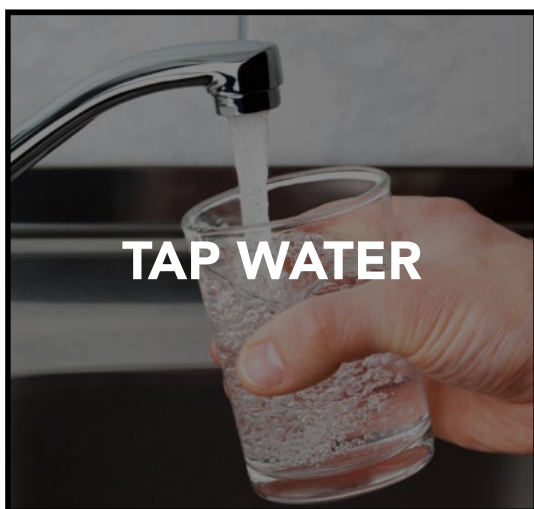
Despite potentially removing more contaminants than Brita, Berkey still falls short in eliminating a significant number of hazardous substances from drinking water, all while being a costly solution.

VI

WHAT TO AVOID



The content of bottled water is often unspecified, leaving you unaware of what's actually in the water. Even when stated on some water bottles, they frequently contain fluoride, including the risk of consuming microplastics from the bottle itself. Many of these brands even promote themselves as 'natural' or 'spring water', which is often misleading or outright false.



There's a significant difference in the severity of water contamination across countries worldwide. However, generally speaking, you can expect to find fluoride, chlorine, pesticides, toxic metals, and even pharmaceuticals in places that allegedly have the cleanest water. With a few exceptions, I would generally avoid drinking tap water as much as possible.



Believe it or not, but boiled tap water is often more contaminated than unboiled tap water. Although the heating process kills germs, viruses, and bacteria, it can actually concentrate the contaminants present in the tap water.