

What is the difference between Reverse Osmosis water and distilled water?

There is practically no significant difference, at least as far as drinking is concerned. Distillation, especially multiple distillation provides pure water which is used in laboratories to assure controlled experimenting. Under laboratory conditions it should be gas free and is then pH neutral and its composition created by autoprotolysis is 1 H_3O^+ and 1 OH^- to 10 million water molecules.

Reverse osmosis water ROW still contains further ions, which can be determined by means of a TDS measuring instrument, but also non-ions such as not dissolved salts and of course gases. By absorbing particularly CO_2 it gets a slightly acid pH value, which physiologically does not play any role as it is not buffered.

Please see the following extract from

Karl Heinz Asenbaum
Electro-activated water

Frequent questions about water ionizers

Reverse osmosis water

Patricia G.:

For many years we were convinced of reverse osmosis water and spent a lot of money for such an installation. Meanwhile we realized our mistake, which is in fact logical. But would it be possible to use the existing device as a pre-filter for a water ionizer in order to ionize particularly pure water?

This is ultimately a question of cost effectiveness. Filters of reverse osmosis installations are usually not cheaper than those for water ionizers. But of course they filter out more substances, i.e. besides the harmful substances also the precious minerals, which afterwards would have to be substituted by means of additional filter cartridges. I tested most of this subsequent mineralization cartridges. The result is not practicable, because already after a short time these cartridges turn out to be useless, as the minerals dissolve in varying quantities so that each time there are different results and the ionizer has to be readjusted constantly. Please simply calculate the costs. It's not worth it.

Before ionization you can add salt to the reverse osmosis water, so it can be easily ionized. For example liquid salt solution (electrolysis enhancer) is added to the Enagic Levlu SD 501®. A similar effect is achieved with crystal salt in water ionizers with salt guide shafts and pot ionizers. But as this creates an unpleasant alkaline taste, the procedure is used only for the production of hygiene technology base and acid activated water. And it would not be admitted as drinking water according to the drinking water ordinance. Therefore it only makes sense for laboratories and not for households.

In principle, reverse osmosis water is just as little a natural matter as alkaline activated water because both do not naturally exist in this world. Both are functional waters and have been invented by engineers. There are indeed separately alkaline, antioxidant and highly mineralized waters, but nowhere else, except from a water ionizer, in this intelligent combination. In contrast, reverse osmosis water has been invented for batteries and then further developed for astronauts in order to turn urine into potable water. This water does not even exist in parts in the natural world. Just ask an astronaut if he gladly drank this water made from the urine of his own crew!

When buying a reverse osmosis installation you probably fell into the usual marketing trap of the guide value with the argument that the higher the guide value, the more pollutants are in the water. This trick is based on mixing up quantity with quality.

In the field of reverse osmosis there are so many abstruse arguments that they might justify an own book full of them. Even the objections of the mineral water and active water fans appear weird: Reverse osmosis water is acid and therefore dangerous! This is nonsense! Reverse osmosis water is absolutely pH neutral. But, as it does not contain ions, it becomes acid through the acid air gas carbon dioxide, because it does not have any alkaline resistance at all and consequently it acidifies as does the acidic rain, which passes through the air. A negative lime/carbonic acid equilibrium is created in the reverse osmosis water at the expense of lime which might be virtually extracted from the bone of the over-acidic water drinkers!

In our book "Drink to become alkaline 2011 (page 24) Dr. med Walter Irlacher matchlessly and perfectly described the effect of reverse osmosis water as follows: "Demineralised water sucks vital minerals such as calcium and magnesium like a sponge out of the cell. In contrast, by using alkaline activated water we can eliminate acids from the body and thus create a strong cleaning and protection effect for the diseased cell!

In the West, especially in the USA, Canada and Australia, many took advantage and turned this lifestyle of mineral robbery, supported by base predators such as coke, into a lucrative business and are still successfully propagating the "astronauts' drinking water". In countries where over decades water research has been conducted, as for example in Russia, water ionizers are available in good supermarkets and opinions on reverse osmosis water are based on animal and not on human experiments. This water should not be consumed permanently!

Two of the leading water researchers (Prilutzky/ Bakhir, electro-activated Water, Moscow, 1997) wrote: "Long-term drinking of de-ionized water, reverse osmosis water or melt water, and very soft water may involve malfunctions of the adrenal cortex, resulting in heart diseases, high blood pressure, joint pains, tendency to arthritis and arthrosis. In the bovine sector it leads to cramping syndrome while in laboratory rats it caused arrhythmia.

The supposed medical soundness of reverse osmosis is based on a French hydraulic engineer, Louis-Claude Vincent, who died in 1988, and who said to have determined from statistics a higher mortality risk for areas with hard water in France. This can, however, not be verified, as these statistics are obviously no longer available. But it might be interesting, because all statistics and studies which have been checked by a high-ranking WHO commission, say the absolute contrary for the rest of the world. The name Vincent is not even cited and none of his supposedly so important books, which are cited by the reverse osmosis salesmen, are available in bookshops and not even as an antiquarian edition.

Often the American physician Dr. Norman Walker (1886 – 1985) is cited, who lived to 100 years, although he drank distilled water over several decades. What is concealed, however, is that he drank it during the course of the day alternating or mixing it with fruit and vegetable juices. It is obvious that he thus more than successfully compensated the mineral deficit of the water.

Due to the lack of water, Israel is forced to raise 72% of the urban water supply until 2020 by means of de-ionized water from sea water desalination and reverse osmosis plants. As this would drastically reduce the mineral supply of the population, the Israeli legislator disposed that at least 50 mg/l of calcium carbonate have to be added, which is delivered through limestone. (Source: Brenner, A. Mineral Balance of mineral quality standards for desalinated water: The Israeli experience; in Bhattacharya, P. u.a., Metals and related substances in drinking water, London 2012, S. 114). I also highly recommend an after-mineralization of reverse osmosis water.

Of course the lack of minerals in the water can be compensated by abundant food, similar as Dr. Norman Walker did with his juices. Weight gain free of charge is guaranteed. As regards its use in a mixing drink, the website www.whiskey.de writes: "Authentic only with Scottish still spring water. Also the still, "poor" French can be used. If both are not available, just take distilled water. Warning: Never drink large quantities of pure, distilled water. The lack of ions in distilled water may seriously disturb the mineral balance of your body and even become life-threatening. For this reason, always add a respective quantity of Single Malt Whisky to your distilled water. ;-)"

By courtesy of Karl Heinz Asenbaum

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