

Is Hard Water Bad For You?

“Hard” water is **not** bad for you. Calcium and magnesium, normally associated with “hardness” in drinking water, have no negative effects on our health. In fact there is much discussion within the scientific community as to the benefits associated with these products.

Research into the benefits of consuming “Hard” water is ongoing. Some studies have been carried out to compare cardiovascular mortality with “water hardness”. It has been suggested that there is a definite relationship between hard water and lower cardiovascular disease mortality. However other studies suggest that there is insufficient evidence to support this claim. There is however, no argument made against the statement that drinking “hard” water can partly satisfy ones daily calcium and magnesium needs.

Hard Water does have negative economic impacts on the home and industry. The mineral build-up on plumbing equipment and on heating elements of household products affects their performance and service life. People may feel the need to “soften” their water. They may have been advised to do this as a result of some “bad tastes” or “smells” given off by the water available for use. In some cases pipe work and shower heads, water faucets etc, become discolored and dull, even “blocked” with scale. Initially water may appear “RED” or “BROWN” if there is no regular flow of water through pipes.

Previously solutions proposed included the use of an “ion exchanger” or a “Reverse Osmosis system”. One (ion exchange) removes calcium from water but replaces it with sodium. Excessive sodium in ones diet can have negative effects on one’s health. In the case of the RO (reverse osmosis option) almost all minerals are stripped from the water to be used. If to be used for drinking, minerals have to be added back into the water, or an alternative method of water treatment (filtration or ion exchange) must be considered. In fact in most industrial RO applications an ion exchange system is used in front of the device to ensure that calcium carbonate does not build up on membranes which are a key component of the RO system.

In attempting to resolve one set of problems (corrosion, scale) the most commonly proposed “solutions” (ion- exchange and RO systems) create further problems for the user.

It is the view of Phoenix that in a lot of cases, if the economic disadvantages associated with “Scaling” and “corrosion” of water systems are removed, and the minerals present in drinking water are left in place, we all win. The user (household, hotel, industrial user etc.) receives water as the municipal authorities meant it to be received; with acceptable levels of calcium and magnesium present (otherwise the authorities would remove calcium and magnesium salts before providing the water and calling it “fit for consumption”).

Second there would be no need for the user to employ inefficient water treatment devices such as salt fed "ionic exchange" or "reverse osmosis" water softener systems, which remove beneficial minerals (calcium and magnesium), and add potentially unhealthy sodium to the water (ion exchange) as well as adding by-products of both processes to the water systems where they will require additional processing.

Sialex®Ring, a product of Phoenix Ring Manufaktur, does not remove the healthy calcium and or magnesium from drinking water, nor does it add any chemicals to the water.