

Understanding Water Hardness

Some companies sell water softeners to reduce the hardness of the water. The softener's purpose is to improve the aesthetics or feel of the water. Using a water softener is a matter of personal preference but, using a water softener may not improve the safety or quality of water as it relates to health. As water travels over or through the ground, it dissolves naturally occurring minerals such as calcium or magnesium. The 'hardness' of water refers to the amount of these minerals in the water. Because calcium or magnesium can prevent soaps from lathering or creating suds, cleaning with water containing high amounts of these minerals is considered 'hard' or difficult. Water containing very little calcium or magnesium is called 'soft' water. In general, water from wells contains more minerals because groundwater is exposed to the minerals longer.

The hardness of Tampa's drinking water, primarily taken from the Hillsborough River, fluctuates throughout the year -- lower during the wet season and higher in the dry season -- between about 140 to 300 parts per million or 8 to 17 grains per gallon (one grain per gallon equals 17.2 parts per million). Water is considered 'hard' water at concentrations above 120 parts per million (Source: [USGS](#)).

Hard water is fine to use and drink without a softener. Some people like the way their hair and skin feels when using soft water. Others don't like soft water because they feel the soap won't rinse off. People with hard water may notice white deposits on dishes, cooking pots or coffee makers. Some detergents now contain the softening ingredients to reduce and remove these deposits. The calcium in the water can deposit on faucets and shower curtains as a white residue (which is most easily cleaned with a vinegar-soaked cloth).

Many water softeners exchange sodium for existing calcium and magnesium in the water and therefore, increase the sodium content of the water. The sodium increase in softened water may be a concern to you. If you are on a sodium-restricted diet, you may want to consult your physician to determine what is best for you. The softened water may be more corrosive and may harm your water pipes in your house. The resin beads in the water softener slowly break down and these break-down materials sometimes settle as deposits in the toilet tanks and in the water heater indicating your softened water may contain these materials. An unused softener can grow bacteria and maybe a source of potential water contamination in your home.

The cost of softening water is a factor that must be taken into consideration. Some water softeners have features to reduce water use. On-demand water softening equipment measures the demand and softens water only when needed. These units can save water by eliminating unnecessary regeneration cycles and making the most efficient use of water, salt and energy.

If you are considering installing a water softener, the not-for-profit National Sanitation Foundation (NSF) independently tests home water treatment devices and has a guide to selecting the right household water treatment system to meet your needs online at www.nsf.org.

Source: <https://www.tampa.gov/water/faq>