

Water Hardness

Hard water is perfectly safe and there is lots of evidence that it can be good for our health

How hard is my water ([link to map](#))

What causes hard water?

Water that is hard contains calcium and magnesium compounds.

Rain water is naturally soft, it does not contain any minerals, but as it seeps through the ground it can pick up minerals, such as calcium and magnesium compounds, from the soil and rocks it passes through. If rain water passes through soft rocks like chalk or limestone, it picks up these minerals. If it passes through granite or through peaty soils, it does not pick up these minerals and so remains soft.

What are the problems with hard water?

Hard water causes pipes to fur up and scale to collect in kettles and in electric irons and washing machines. If the scale collects on heating elements it shortens their life and makes appliances less efficient. It is also more difficult to work up a lather from soap, washing up liquid and washing powders. It can also cause "tide marks" on basins, sinks, baths and toilets.

Tips to lessen the effects of hard water on a cup of tea

The limescale caused by hard water can react with tannins in tea to produce an oily film, the tips below help to minimise this.

1. Add milk to your cup first before the water
2. Don't let the tea stew
3. Try using a tea strainer
4. Make tea in a pot rather than a mug
5. Use a tea pot or kettle with a spout starting at the bottom rather than the top

Is there a standard for the hardness of drinking water? And why don't we soften it?

There is no standard for hardness as it is perfectly safe and has been linked with health benefits. Large scale softening is expensive and can lead to water that is corrosive, we therefore don't soften any of our supplies but customers can install softeners themselves if they decide they would prefer softer water.

Should I use a water softener?

This is a matter of personal choice. A softener will improve the efficiency and increase the life of appliances using hot water. It will make lathering easier and reduce tide marks on sanitary ware. But if you do install a water softener you should make sure that you have a supply of un-softened water for drinking and cooking.

This is because

- there is evidence of less heart disease in hard water areas than in soft water areas, although not all studies find this link. If something in hard water protects against heart disease, water softeners might remove this protection along with the hardness.
- Many water softeners work by replacing the hardness with sodium. Too much sodium can be a problem for premature babies because their kidneys are not good at filtering it out of the blood, and for people who are low on sodium (low salt diet).
- Soft water may release lead from any lead pipes downstream from the softener.

If you do decide to have a water softener we advise that you buy it from a reputable supplier, for example, one which is a member of British Water (information service 0181 878 8618), and have it installed by a qualified plumber who is a member of WaterSafe <https://www.watersafe.org.uk/>. We also advise that you maintain it in accordance with the supplier's instructions.

Magnetic and Electrical conditioning devices

Some of these devices have been shown to be effective in reducing the amount of fur or scale that actually sticks to pipes or heating elements. They do not soften water. However, not all products on the market give satisfactory performance. You are not advised not to buy one of these devices unless the supplier will agree to a sale or return, subject to satisfactory performance.