The pH of drinking water

The pH is a measure of the acidity or alkalinity. The water quality regulations specify that the pH of tap water should be between 6.5 and 9.5.

What is pH and why do we test our water for it?
The pH is a numerical value used to indicate the degree to which water is acidic. pH measurements range between 0 (strong acid) and 14 (strong alkali), with 7 being neutral. The water quality regulations specify that the pH of water at your tap should be between 6.5 and 9.5. Water leaving our treatment works typically has a pH between 7 and 8, but this can change as it passes through the network of reservoirs and water mains.

We consume many different foods and beverages with a large range of pH. For example, citrus fruits like oranges, lemons and limes are quite acidic (pH = 2.0 - 4.0). Carbonated drinks such as cola have a pH 4.0 to 4.5. On the other hand, egg whites are slightly alkaline, with a pH of 8.0 and Milk of Magnesia can be as high as pH 10.

What happens if the pH of my water is too low or too high?
When the pH of the water becomes substantially lower than the standard it can cause corrosion products that have built-up on metal pipes to be released, and this could cause a health problem. In these circumstances the water may have a slightly bitter or metallic taste that may be objectionable. If the pH of your water is too high, it will have a taste similar to baking soda and have a slippery feel to it. It will also begin to leave scale deposits on plumbing and fixtures, which could decrease the efficiency of your plumbing systems.

We have produced a short domestic plumbing guide called ‘Caring for water in your home’ that may help you in identifying the source of the problem. You can download this from our website at unitedutilities.com/waterquality Alternatively, you can employ a plumber to carry out any necessary work. For a list of water industry-approved plumbers in your local area, visit watersafe.org.uk and enter your postcode.

Why has the pH of my water changed?
If the problem only affects your property, the source is most likely your internal pipework and plumbing. Possible sources include plumbed-in water filters or softeners, incorrectly installed washing machines or dishwashers, incorrect fittings and taps supplied from storage tanks. If you have had plumbing work done recently then excessive use of solder or flux could be the cause. In this case the problem may lessen as water is used. Alternatively you may wish to consider changing the pipework or joints.

Your water quality
If you’re interested in finding out more about the quality of your drinking water, please visit unitedutilities.com/waterquality and enter your postcode. We’ll tell you where your water comes from, together with other information such as its hardness.

For further information
unitedutilities.com/waterquality
0345 672 3723
8am-8pm Mon-Fri
8am-6pm Sat
8am-12pm Sun

The Drinking Water Inspectorate is responsible for ensuring the quality of public water supplies. Visit their website at: dwi.defra.gov.uk
About us
United Utilities is the North West’s water company. We keep the taps flowing and toilets flushing for seven million customers every day. From Crewe to Carlisle, we work hard behind the scenes to help your life flow smoothly.