What do I do if my water has an objectionable smell or taste?

Drinking water in England and Wales is of a very high quality but you may be sensitive to the very low level of essential residual disinfectant that water companies use to maintain good hygiene in their pipe network. If you may sometimes notice a slight taste or smell of chlorine, follow the advice given here. However if you suddenly notice a particularly bad or strong smell or taste which makes the water unpalatable, you should contact your water company immediately. Enquiry and emergency numbers are listed under WATER in your telephone directory or on the back of your water bill.

If you do experience this type of problem check with your neighbours to see if they are having similar problems as this may point to whether the problem is just confined to the plumbing inside your home. This information is useful to the water company when responding to your report. Also try to record when the problem started and describe the nature of the smell or taste.

Remember that you should only be using cold water from the kitchen for drinking and cooking. Water from the hot tap is not recommended for drinking as it often contains elevated levels of metals such as copper which makes the water taste astringent. Cold water in bathrooms and wash rooms is not recommended for drinking as it may be from a tank that is not suitable for drinking water purposes. You can find advice on what to do if your drinking water comes from a tank here.

What causes problems of smell and taste?
Any one of the following could cause you to become aware of the taste or smell of your drinking water:

- the use of chlorine as a disinfectant;
- seasonal water quality effects;
- a change in where your water comes from or how it is treated;
- moving from one area to another;
- your plumbing.
What about seasonal changes?
About half of our drinking water comes from rivers and reservoirs. In summer, these waters sometimes develop a musty or earthy smell or taste due to natural processes in the environment. Water companies are required to treat the water to prevent earthy or musty tastes but occasionally, especially during exceptionally hot weather the treatment is not optimal. A common cause is the growth of algae in reservoirs. Further information can be found here.

What if my water supply changes or if I move house?
It is not always well understood that the natural properties of drinking water vary from area to area because of the local geology. Water picks up minerals from rocks as it flows across and through the ground. For example, hard water from a chalky area will have a very different taste from soft water from a reservoir in the hills. Most people prefer water that is similar in its composition to the water they drank when they were a child.

In some parts of the country, in order to ensure an adequate supply of water at all times, water companies may use different sources at different times of the year or they may supplement one source with another during the summer period. Some people with sensitive palates are capable of detecting these changes. Occasionally a water company will develop an entirely new water source or install a new process of water treatment. Usually there will be publicity when a major change is made and this will explain what the water company is doing and why.

In all these circumstances the slight change in water quality is no cause for concern regarding the safety of your drinking water supply. Your water supply is regularly tested to ensure it meets the drinking water standards which include taste and odour testing and you can ask you water company for a free water quality report of the results for your local water supply zone.

How can my plumbing cause problems?
Water may pick up traces of substances from your plumbing and water fittings or appliances and this situation is the most common cause of unusual or strange tastes. For example:

- metallic, or bitter tastes from copper, iron or galvanised pipes;
- plastic tastes from plastic pipes, kettles, tap inserts or antisplash devices;
- rubbery or earthy tastes from tap washers;
- TCP/disinfectant type taste from reaction of chlorine with chemicals in rubber hoses, kettles or tap washers (see below);
- Musty or earthy tastes from stagnant or warm water in little used sections of plumbing;
- Salty or chemical tastes due to incorrectly functioning or installed softeners or treatment devices and filters.

How can I find out if it is my plumbing?
Your water company will be able to help you find out if there is anything wrong with your household plumbing. They can carry out an inspection and testing. Alternatively you could get advice from a qualified plumber.
TCP tastes

Some detective work is often required to track down the cause of this type of taste. For instance, is the problem only present in boiled water and not in freshly drawn cold water from the kitchen tap? If so the trace of residual chlorine in the water may be reacting with an unsuitable material in your kettle such as a rubber seal or a plastic part which leaches traces of phenols. Although the taste is awful it is perfectly harmless and the cure is to change your kettle (and complain to the manufacturer or supplier as the kettle is not fit for purpose).

Chlorine can also react with other similar rubber and plastic materials such as unapproved tap washers and washing machine/dishwasher hoses. To try and eliminate these causes, you may like to try the following:

- If the taste is only noticed in hot drinks, try boiling water in a saucepan. If the taste is not apparent, it is likely that the cause is the kettle gasket that seals the elements to the side of the kettle. This problem is also common with new plastic kettles.

- To eliminate the inlet hose on a washing machine or dishwasher, you should isolate the hose using the valve that turns off the cold water to the appliance. If the cold tap water is then satisfactory you have found the cause. The solution is to fit a non-return valve so that water standing in the hoses does not get drawn back into your drinking water when you operate the tap.

- It is also possible that your tap washer or some part of the tap is the cause. If you have recently installed new taps you should suspect this as a possible cause. To rule this out for certain, you need to check if the washers conform to British standards by contacted the Water Regulations Advisory Scheme (WRAS) here.

Do not use water from a hot water system or your bathroom taps for drinking or cooking because it usually comes from a storage tank in the loft and is not as fresh or as safe as water directly from the mains.

If you notice a particularly bad or strong smell or taste which means you cannot drink the water, or you notice a smell or taste for the first time you should contact your water company immediately.

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