Tap Water, Nothing to be Afraid Of

For quite a while there has been an ongoing public debate as to whether it's better to drink tap water or water that comes in plastic bottles and is purchased in shops. It's impossible to give a general answer because the quality of water varies from town to town. Due to this we conducted research into the situation in Prague.

Most people take for granted that what comes from Prague's taps is drinking water. In spite of that, recycling containers are full of plastic bottles that are not only old lemonade bottles but also various types of spring, mineral and other type of waters. Advertising has certainly played its part – the majority of people consider purchased water healthier, cleaner, simply of better quality.

South Prague drinks water from Želivka, North from Káraný

Some Praguers wrongly think that the water pouring from their taps is in fact cleaned and processed water form the Vltava River, which passes through Prague. Of course, this urban myth is far from true. Although it must be said, even the quality of the Vltava River water has rapidly improved in Prague in the course of recent years - this is proven by the welcome increase in mussels and other water animals that are sensitive to any kind of water pollution.

Prague's water-supply network is fed from two water treatment plants. The first one is called Želivka and supplies Prague with up to 75 % of its drinking water requirements. The plant is located 65 kilometres south of the city and treats water from the water-supply reservoir Švihov, the biggest reservoir not only in the Czech Republic but also in the whole of Central Europe. It is located above the junction of the Želivka and Sázava rivers, in a designated zone with strict environmental protection rules. Water quality is checked by the state enterprise Povodí Vltavy and by Pražské vodovody a kanalizace (Prague Water Supply and Sewage Collection). In principle, the process involves drawing the water up from very deep parts and in particular from the place with the best current water quality.

The remaining 25 % is supplied from the Káraný source. The local water treatment plant supplies households with underground water taken from artesian wells and water filtered by the Jizera River's sand. Due to the geology of the area, this water is harder than the one from Želivka, however, this is more of a concern for your washing-machine than for you.

Broadly speaking, the south part of Prague is supplied by the water from Želivka and the North, e.g. around Ládví and Horní Počernice, by the water from Káraný. However, a substantial part of the city gets a mixture from both sources.

Two hundred and twenty daily tests monitor the quality

Detailed research shows that considerable attention is paid to maintaining the water quality in Prague. In the case of tap water, we monitor about 100 separate quality indicators; some of them go even beyond the scope of compulsory indicators set by current regulations. Quality checks are carried out in accredited laboratories, which are located adjacent to the Želivka and Kárané water treatment plants and also in Prague, Dykova Street. Some water tests take place directly in consumer's homes, and then there is the Prague Hygiene Station that plays the part of a sort of supervision. All this activity results in about 80,000 tests carried out on 9,000 samples of water! No wonder it is said that tap water is among the most monitored types of nourishment.

Experts are of the opinion that due to on-going monitoring of drinking water quality, Prague's water quality fully complies with European standards in all respects – physical, chemical, microbiological as well as biological.

Every consumer has the right to be informed about tap water quality. They are entitled to access information on all aspects set by the current legislation. Water analyses can be found at www.pvk.cz/pitna-voda/, in the customer centre in Dykova Street n. 3 in Prague 10, and in PVK's information documentation.

What about bottled water?

According to MUDr. František Kožíšek from the National Institute of Public Health, the requirements for bottled water are the same as for tap water. In the case of infants, and spring or natural mineral water, stricter limits apply for some parameters, such as the nitrate content and some other organic substances. On the other hand, bottled natural mineral and spring water have less strict microbiological requirements.

Have you made up your mind yet? If not, here are a few more facts speaking in favour of tap water. Tap water is environmentally friendly as it doesn't need bottles, ware-houses, or lorries for transportation. It is always fresh and well 'stored' in the cool and dark environment of water pipelines. Oh, and additionally, it's about hundred times cheaper than battled water.

Frequently asked questions

So is drinking water better in some parts of Prague than others?

It can't be said that there are certain parts of Prague where the drinking water is cleaner or better. However, because Prague is currently supplied from two sources, consumers may notice a slight difference in taste in individual areas. Prague is supplied mainly from the water treatment plants Želivka and Káraný. In some instances, an area has to change its source, which is when consumers may notice a change in taste. Drinking water from the Káraný water treatment plant which supplies Prague North appears to have the most favoured taste. In the Želivka treatment plant, the water is treated by adding ozone, which improves the taste and appearance of drinking water.

Changes in water quality are also influenced by the quality of the inner lining of the water piping system and its susceptibility to failure and related repairs. Water treatment plants also monitor how home water pipes influence the quality of supplied water. If an influence is detected, in the majority of cases it concerns iron, which is not harmful. Following break-downs and repairs, the water-supply network has to be sufficiently flushed. Only drinking water that complies with the regulation of the Ministry of Health no 252/2004 Coll. is allowed into the water-supply network.

What can influence how water tastes?

A funny taste to the water can be caused by the quality of water pipelines in individual households. Sometimes the water is kept in pipes too long and other times the material suffers from corrosion or when the cold and hot water pipes are right next too each other (which they shouldn't be), the taste can be negatively influenced by temperature. It is therefore advisable to let water run for a bit and wait for cold water, especially in the morning and after holidays. Sensitive individuals may smell chlorine, which has to be added to ensure that water is safe and doesn't contain any germs. The milky colour is caused by dissolved oxygen and it's harmless.

What about lead in tap water?

Lead used to be use for the inner linings of water pipes and connectors more than 20 years ago. These days the pipes have either been already replaced by other materials or they are coated by layers of lime, and water doesn't come into direct contact with lead. The long-term average lead parameters in Prague are as low as 0.0005 mg for one litre, with the accepted health limit being 0.025 mg/l. All in all, lead is not something residents need worry about.

How is it with other substances in tap water?

Additional water analyses are carried out should there be any test indicators suggesting that some kind of harmful substance could be present in the water. For example, there has been some analysis detecting the presence of vinyl chloride; however, the detected amount didn't even reach the point when it could be defined and expressed in numbers.

Regarding the risk of residues of hormones and pharmaceuticals in water, there is currently no legal obligation to monitor these substances in either the tap water or bottled water. The World Health Organisation hasn't initiated compulsory monitoring of this group of substances in drinking water because their presence in water is not currently regarded by them as a health risk factor.