



## **Is tap water contaminated with pesticides, hormones, drugs, and heavy metals?**

### **A. What is the importance of water for life?**

Water and air are the foundations of life on Earth. The human body is composed of 60-70% water, and the human brain consists of up to 95% water. All biochemical processes in the body occur in the presence of water. Our evolutionary connection to the sea is evident in the fact that the composition of interstitial fluid closely resembles that of seawater. While a healthy person can survive without food for about a month, without water, bodily functions typically begin to fail within just a few days. Pure water helps detoxify (cleanse) the body of harmful substances and is essential for maintaining a stable internal environment.

### **B. Do you have access to clean water?**

According to a 2017 UN study, more than a quarter of the global population—approximately 2 billion people—did not have access to reliable drinking water at home. An estimated 400,000 children under the age of 5 die each year from diarrheal diseases, often caused by the consumption of bacterially contaminated water. These tragic and alarming statistics are well-known. However, let us ask a different question: Is the water distributed from drinking water treatment plants through pipelines to end consumers truly clean and free from all potentially harmful substances?

Even in technologically advanced societies where the quality of tap water is very high, some contaminants can still slip through, despite the use of

sophisticated filtration systems at water treatment plants. These include heavy metals, drug residues (such as contraceptives and antibiotics), and pesticides, some of which have hormonal effects. Additionally, substances from the cosmetic and chemical industries, as well as microplastics, pose significant challenges—particularly in bottled water, where microplastic particles can be up to 30 times more abundant than in tap water.

There are also health concerns regarding the addition of chlorine, fluoride, and, in many countries, aluminum salts to drinking water. Moreover, elevated levels of lead or copper are often detected in the drinking water of homes with plumbing made from these materials.

### C. How can contaminated drinking water affect your health?

The effect of heavy metals in water on human health is extremely complex. Depending on the degree of exposure and the body's resistance, it can lead to damage in virtually every organ and contribute to the development of many diseases recognized by modern medicine today.

- **Chronic exposure to lead-contaminated water pipes** can lead to disorders of short-term memory and concentration, decreased intelligence, increased blood pressure, cardiovascular and adrenal diseases, and is associated with thyroid disorders, osteoporosis, and infertility.
- **Excessive fluoride intake** has a negative effect on intelligence and, when combined with aluminum, has been linked to autism and neurodegenerative diseases such as Alzheimer's. There is also evidence suggesting that fluoride negatively affects bone strength, thyroid function, and fertility.
- **Substances in drinking water that can interfere with the hormonal system**—such as residues from contraceptive pills, microplastics, cosmetic product residues, or pesticides—can impact fertility and contribute to the development of hormone-dependent cancers, such as breast, ovarian, prostate, and testicular cancers.
- **Traces of antibiotics** in water may contribute to antibiotic resistance in bacteria on a population level. They can also disrupt the delicate balance of symbiotic species in the gut, leading to inflammation and impairing immune system function.

Therefore, it is clear that there are many compelling reasons to test the water you drink and use daily, as well as the food you prepare with it, for harmful substances. If the water is found to exceed safe limits of contaminants, it is advisable to consult experts

#### **D. Are you interested in the following?**

- Which water is best for your health? Is it tap water, mineral water in PET bottles, glacier water, or filtered water?
- Which water filter can effectively remove drug residues, heavy metals, nitrates, or hormone-disrupting pesticides and herbicides from your water?
- Where can you have your water reliably tested to determine whether it is free from harmful substances?

Do you want to invest in your health? For answers to these and many other questions related to the topic of "water and health," we are happy to provide informed, comprehensive guidance and tips based on the latest scientific research through individual 1:1 coaching. Book your appointment now via the calendar or send an email to [info@phoenixhealth.ch](mailto:info@phoenixhealth.ch). We are looking forward to hearing from you!