



Additional Information on Water Safety Issues of Public Interest

In addition to independent testing, Nestlé Waters monitors product safety issues, including those related to water contaminants and packaging for finished products.

Water Quality Issues

For our spring water brands, we use groundwater sources that are less vulnerable to contaminants than surface sources commonly used by some municipal suppliers. In those cases where we use municipal water sources for our purified water brands, we perform specialized filtration processes to remove any contaminants that may be present.

The following explains how Nestlé Waters addresses some common stakeholder concerns regarding contaminants in water. For all of these constituents, Nestlé Waters meets all EPA and FDA guidelines.

Lead

Issue: Lead is a toxic substance at certain levels, which can cause a wide range of adverse health effects, such as increased blood pressure, fertility problems and nerve disorders. Lead may originate through the erosion of natural deposits or leach into water from corroding lead pipes.

Our approach: We carefully select spring sources with levels below EPA and FDA limits. The preponderance of lead in municipal water comes from the distribution pipes, and since no lead is used in any of our pipework systems, this is not a factor for our natural spring brands. In the case of our purified waters, which can start as municipal water, reverse osmosis or distillation processes remove lead and ensure water meets our internal standard of less than 0.0005 milligrams/liter (mg/L).

Copper

Issue: Copper is a toxic, heavy metal that at certain levels may create gastrointestinal distress in the short-term and liver or kidney damage through long-term exposure. Copper may leach into water through corrosion of domestic plumbing systems or erosion of natural copper deposits.

Our approach: Our spring waters use carefully selected sources to ensure levels are below EPA and FDA limits, as well as more stringent company standards of less than 0.05 mg/L. Copper is not used in the pipes for any Nestlé Waters' bottling processes. Any remaining copper from municipal supplies used for our purified waters is removed through reverse osmosis or distillation.



Nitrate

Issue: Nitrate is a naturally occurring chemical at low levels in groundwater. However, higher levels may occur in water exposed to fertilizer, leaching from septic tanks and erosion of natural nitrate deposits. Infants below the age of six months who drink water with nitrate levels that exceed regulatory limits could contract methemoglobinemia, a condition in which nitrate converts to nitrite and reacts with blood, preventing it from carrying oxygen.

Our approach: We select low-nitrate spring sources and filter and purify our non-spring sources to ensure nitrate levels are less than 5 mg/L and in most cases less than 1 mg/L, one-tenth of the level allowed by EPA and FDA regulations.

Trihalomethanes (THMs)

Issue: Chlorine is frequently added to municipal water supplies as a disinfection agent. THMs are produced when chlorine or other disinfectants react with naturally occurring organic matter in municipal water supplies. THMs, which include trichloromethane, tribromomethane, dibromochloromethane and bromodichloromethane, are carcinogenic at certain levels.

Our approach: Nestlé Waters does not use chlorine for its spring waters, except in the case of Texas, where a state law requires the addition of chlorine for transporting any water ultimately intended for human consumption, regardless of the initial quality of that water. However, for these sources in Texas, as well as for all municipal water we use, we employ carbon filtration before bottling to remove both chlorine and THMs, and ensure levels are less than 0.0005 mg/L compared to EPA and FDA regulations, which allow up to 0.08 mg/L.

Bromate

Issue: Bromate, which has been deemed carcinogenic at high levels in laboratory animals, is a chemical formed when ozone, used to disinfect drinking water, reacts with naturally occurring bromide found in water.

Our approach: For our purified waters that rely upon municipal water sources, we filter out bromide and bromate. For our spring waters, we search for low-bromide sources. We also have special low-ozone injection systems, which apply the minimum amount of ozone to disinfect the water, while preventing the formation of excess ozone that could subsequently react with any bromide present. In the event that our spring sources have higher levels of bromide, we use microfiltration and ultraviolet disinfection rather than ozonation, thus avoiding the creation of bromate to ensure levels are less than 0.002 mg/L compared to EPA and FDA regulations, which allow up to 0.01 mg/L.



Arsenic

Issue: Arsenic is a toxic chemical element found in natural deposits or in runoff from manufacturing wastes. Long-term exposure at high concentrations can cause skin damage, circulatory system issues and increased risk of cancer.

Our approach: We strive to select spring sources that do not have arsenic and arsenic is not common in the vast majority of our sources. Any source with measurable levels of arsenic would be evaluated for available special treatment techniques based on the overall quality of the source. Special approved techniques for treatment of low levels of arsenic include green sand filtration, activated alumina and specialized ion exchange resins, which are all designed to remove and ensure arsenic levels well below the regulatory limit. For non-spring sources, we use distillation or reverse osmosis to remove arsenic, if present.

Microorganisms

Issue: Microorganisms naturally occur in foods, including fruits, vegetables, yogurt and spring water. Some microorganisms are harmless or even good for you, while others can be harmful. High levels of harmful microorganisms, including E. coli, fecal coliform, cryptosporidium, giardia and certain viruses, can lead to a number of issues, such as diarrhea, cramps, nausea, headaches and other symptoms.

Two tests we rely upon to monitor for the presence of contamination include:

- *Heterotrophic Plate Count (HPC):* In spring water, the presence of naturally occurring microorganisms called HPC is expected; indeed, the absence of these microorganisms would be a concern, because it could indicate the presence of chemical contamination. However, high levels of HPC may indicate bacterial contamination.
- *Total coliform:* Though not necessarily a health concern itself, total coliform is an indicator of potential water contamination by fecal coliform and E. coli.

Our approach: We strive to select spring sources to protect against harmful microbiological contamination. For both our spring waters and for non-spring sources, we employ rigorous plant cleaning programs, microfiltration, ultraviolet light and, where appropriate, ozonation to filter out and prevent contamination from harmful microorganisms.

Specific to total coliform, we monitor our sources as frequently as municipal sources. We also follow FDA regulations that require both our sources and finished products to be free of coliform and E. coli. To meet this requirement, we closely monitor for the presence of total coliform in our sources, our processes and our finished products. Together, these measures are used to prevent contamination from E. coli, fecal coliform, cryptosporidium, giardia and certain viruses.



Perchlorate

Issue: Perchlorate is the salt derived from perchloric acid, which may occur in natural deposits or as an outcome of manufacturing processes. According to the EPA, low levels of perchlorate have been detected in both drinking water and groundwater in 35 states in the U.S. Perchlorate may impact human health by interfering with the uptake of iodide, a chemical necessary for regulating the thyroid gland. In adults, the thyroid gland helps regulate metabolism by releasing hormones, while in children, the thyroid helps in proper development. In 2005, the EPA issued a recommended (not mandatory) Drinking Water Equivalent Level (DWEL) for perchlorate of 0.0245 mg/L.

Our approach: Our spring waters use carefully selected sources to ensure levels are below EPA and FDA limits, as well as more stringent internal standards of less than 0.0005 mg/L. Any source with higher levels of perchlorate would be evaluated for available special treatment techniques based on the overall quality of the source. Special approved techniques for treatment of low levels of perchlorate include specialized ion-exchange resins, which are designed to ensure perchlorate levels well below the regulatory limit. For non-spring sources, we use reverse osmosis or steam distillation processes to remove perchlorate if present to meet our internal standards.

Pesticides and Herbicides

Issue: Pesticides and herbicides are substances (or mixtures of substances) intended to prevent, destroy, repel or mitigate insect or plant pests. In high doses, pesticides and herbicides can cause harm to humans, animals or the environment because they are designed to kill or otherwise adversely affect living organisms.

Our approach: We test for pesticides and herbicides either quarterly or annually, as required by state laws. Over the last 10 years, we have never detected pesticides or herbicides in our spring sources or finished product.

Pharmaceuticals

Issue: Recent studies have found trace amounts of pharmaceuticals, including antibiotics, anticonvulsants, mood stabilizers and sex hormones in some municipal water supplies. The impact of long-term exposure to trace amounts of pharmaceuticals is still being studied.

Our approach: We strive to select spring sources to protect against the potential for chemical contamination, including by pharmaceuticals. For non-spring waters, we employ two additional filtering steps, carbon filtration and, where appropriate, reverse osmosis, to remove pharmaceutical contaminants.

Based on these processes and testing, our finished products have tested negative for pharmaceutical contamination. We will continue to monitor this issue and test our products for specific classes of pharmaceutical compounds.