

Nitrate, Nitrite and Ammonia

If too high concentration of Nitrate or Ammonia are found in your water, it means your water is affected by infiltration of nitrogen compounds originating from high application of fertilizer or manure in garden or agriculture, or from run-off of wastewater, animal manure, manure heaps, or septic tanks or pit latrines. Drinking water should contain less than 50 mg/l nitrate, 0,5 mg/l nitrite and 0.5mg/ ammonia.



High concentrations of Nitrate and Nitrite in water can be dangerous for babies. Nitrate and nitrite can cause the so-called blue baby disease for babies up to 4 or 6 months. So be aware if the baby is fed with formula milk or drinks tea or water prepared with nitrate or nitrite polluted water. Boiling or freezing does not reduce the nitrate concentration in water!

But, even if no nitrate, nitrite and/or ammonia or low levels are found in your water, it does not mean that the water is safe for drinking!! Especially bacteria tests can give more information about the safety.

For more information contact Khamiskuri Water and Sanitation Resource Center:
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Ministry of Foreign Affairs of the
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Do not drink water that have high
concentration of Nitrates or Nitrites

Most important bacteria
and chemical
substances to
be analysed in
drinking water
in the region
of Khamiskuri
and Khobi

Bacterium: Escherichia Coli (E. coli)

If E. coli bacteria are present in your water, it means water is contaminated by bacteria originating from human excreta and the water is not safe for drinking. For all consumers water should be boiled before drinking especially for babies and children. In 100 ml drinking water no any E. coli should be detected.



Total Coliform Bacteria

If total Coliform bacteria are present in your water, it means the water is contaminated by human or animal excreta or by soil. May be the indicated bacteria causing no health risks, but there is no any guarantee that the water is safe for drinking.



Free chlorine and bound chlorine

Water supplied by a centralised water supply requires often a disinfection procedure. In particular in cases the water is abstracted from rivers or lakes, from poor protected water sources or in case badly maintained reservoirs and pipes distribute water.

Some countries obliged the water supplier to disinfect centralised piped water. The most common disinfection method is - adding chlorine to the water. For an effective disinfection to kill bacteria from the point the water is distributed up to the tap of the consumer, the (free) chlorine concentration should be 0,2 up to 0,5 mg/l.

Although during the storage and distribution of chlorinated water, the residue of chlorine may decrease, while chlorine is bound at certain organic substances in the water. The more water contains impurities, the more bound chlorine will appear and affect the taste of water.