

NITRATE AND HEALTH

PROTECT THE HEALTH OF YOU AND YOUR LOVED ONES BY KNOWING WHAT IS IN YOUR DRINKING WATER!



WHERE AND WHAT IS NITRATE?

Nitrate is a form of nitrogen that can sometimes be found in our drinking water. Nitrogen fertilizers used for growing crops are the largest contributor to nitrate in our drinking water. Therefore, if you live in an area where there is a lot of agricultural production, you are at risk of drinking nitrate-contaminated water.

WHAT CAN I DO TO PROTECT MYSELF AND MY FAMILY?

If you drink water from a private well, it is up to you to ensure you are drinking safe water. There are no requirements for private well owners to test or treat their water. Nitrate is colorless, odorless and tasteless. **The only way to know if you have nitrate in your drinking water is to test for it.**

Private well users should test their drinking water annually. You can order a test kit from a certified laboratory or do-it-yourself test kits are available as well. The do-it-yourself kits should be used as a screening tool only. An analysis by an approved lab is recommended for the most accurate, reliable and precise measurement.

If you find nitrate above the safe drinking water level (10 ppm) in your water, the quickest and easiest solution is to install a reverse osmosis water filtration system in your house. For more information, go to <https://water.unl.edu/>

HOW CAN CONSUMING NITRATE IMPACT HUMAN HEALTH?

Children and Infants

- A result in infants consuming nitrate-contaminated water is methemoglobinemia (blue-baby syndrome); bottle-fed babies under six months old are at the highest risk. This illness can cause the skin to turn a bluish color and result in serious illness or death.
- There are studies suggesting potential linkages between nitrate consumption and pediatric cancers. Nebraska has the highest rate of pediatric cancer in the Midwest and 7th highest in the entire United States. More research needs to be conducted before we can draw sure conclusions.

Pregnant Women

- During pregnancy, it is common for a woman's methemoglobin levels to increase from normal. Therefore, pregnant women are particularly susceptible to methemoglobinemia as well.
- Pregnant women exposed to too much nitrate are at greater risk of giving birth prematurely
- Maternal exposure to nitrate through drinking water has been linked to birth defects. Nebraska has double the national average rate of birth defects.

Other Adults

- The University of Nebraska Medical Center, along with researchers across the globe, continue to study linkages between consuming nitrate and human health impacts
- A growing body of studies indicate potential associations between nitrate and...

increased heart rate, nausea, headaches, thyroid disease, and other cancers such as colorectal, bladder, ovarian and kidney

*Please consult your doctor if you are experiencing any of these symptoms

