Te Kura **Taka Pini**

Nitrate Levels in Your Drinking Water:

What You Need to Know!

What is nitrate?

Nitrate is a nutrient that help plants grow. While they do occur naturally, the use of synthetic fertilisers has resulted in increased nitrate concentrations in the environment. Nitrate applied to land can leach into surface and groundwaters and, ultimately, your drinking water.

Why is high nitrate a concern?

Elevated nitrate concentrations in drinking water can pose health risks including:

- **Blue Baby Syndrome:** For babies under six months, elevated nitrate can reduce oxygen in the blood, which is life-threatening.
- **Possible Health Risks for Adults**: Some studies suggest that long-term exposure to elevated nitrate may increase the risk of a number of cancers or cause reproductive issues like low birth weight or preterm births. Research is ongoing.

What is a safe nitrate level?

- The World Health Organisation and United Nations have deemed **11.3 mg/L nitrate-nitrogen** to be considered safe for drinking water and this has been adopted by the Ministry of Health, NZ.
- However, increasingly international research suggests that this limit is too high to protect human health. TKTP supports drinking water concentrations closer to **1 mg/L nitrate-nitrogen**.

What should you do if you have elevated nitrates?

1. **Pregnant women and formula-fed babies:**
   - Avoid drinking water with elevated nitrate. Switch to a lower-nitrate water source for making formula.
2. **Testing and Treatment Options:**
   - Regularly test your water to monitor nitrate levels.
   - Filtration or boiling does not remove nitrate.
   - Treatment methods like reverse osmosis, distillation, or an ion exchange can reduce nitrate. However, these systems can be expensive and require maintenance.
3. **Consider an Alternative Source:**
   - If high-nitrate water is your primary supply, consider switching to bottled water or connecting to a safer source (such as rainwater).

Need more information?

www.greenpeace.org/aotearoa/freshwater/nitrate-contamination-in-drinking-water-what-you-need-to-know-and-some-frequently-asked-questions/

www.lawa.org.nz/learn/factsheets/groundwater/nitrate-nitrogen-in-groundwater