

The Importance of Testing Your Aquarium's Water

Drs. Foster & Smith Educational Staff



Water testing cues you to what's happening in your aquarium at any given time, helping you diagnose potential problems so you can take corrective measures immediately. Every fish hobbyist should own a reliable water testing kit. Besides water temperature, some of the basic parameters that require testing on a regular basis are:

- Ammonia
- Nitrite
- Nitrate
- pH



Why Maintain Proper Parameters?

Stress due to fluctuating water conditions is one of the main causes of fish illness and death. Maintaining proper range in each of these parameters is vital to the health and longevity of your fish. One of the simplest ways to spot trends and identify factors that may contribute to undesirable water parameters is to use a written log to chart your results whenever you test.

After testing your water parameters, identify any test results that fall outside the acceptable range. Many master test kits such as the [Freshwater Master Test Kit](#) include an instruction booklet detailing the appropriate measures to take to help remedy the condition. However, the following are some basic steps you can take to remedy some common problems.

- **High ammonia and nitrite level** - Partial [water changes](#) remove and dilute the concentration of ammonia present in the water. Bacterial additives such as [Stress Zyme](#) process ammonia into less toxic nitrite and then to nitrate. [Ammonia detoxifiers](#) such as [Amquel+](#) are invaluable tools in detoxifying ammonia before it climbs to dangerous levels.
- **High nitrate level** - Though the least toxic end product of the nitrogen cycle, high nitrate levels place chronic stress on aquarium fish. Regular partial water changes and proper feeding help keep nitrate levels low.
- **Improper pH** - [pH conditioners](#) and buffers help maintain pH at desired levels. In areas where the source water is high in minerals, consider using a [reverse osmosis unit](#) to ensure stable and effective use of pH conditioners.

