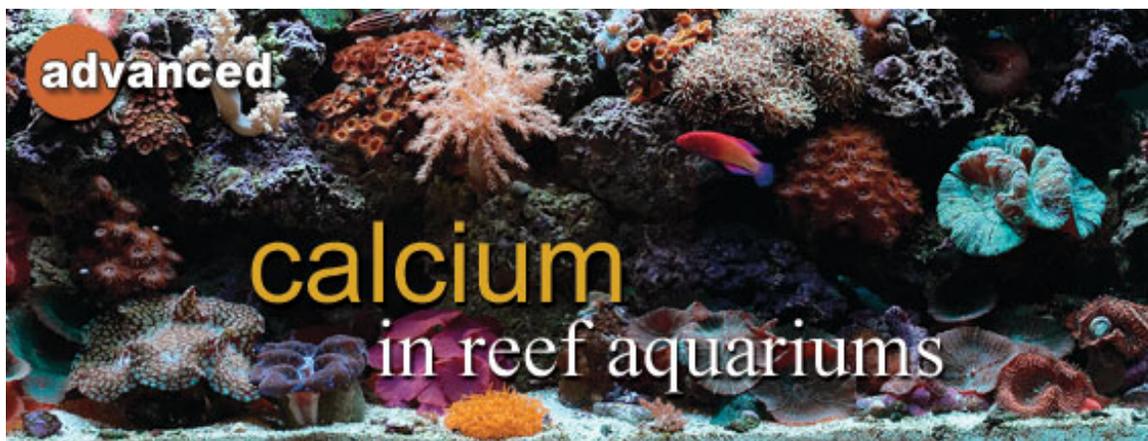


Simplify Calcium Supplementation

Drs. Foster & Smith Educational Staff



Calcium is vital for the health and growth of all corals. It also plays a crucial role in maintaining the pH needed in marine systems.

In nature, a steady supply of calcium is available to reef inhabitants from a variety of sources. These include live rock, aragonite substrate, and even saltwater in the form of dissolved calcium. However, in artificial environments, especially in heavily stocked reef aquariums, calcium is utilized rapidly and regular supplementation is required to maintain proper levels.

Providing enough calcium to meet the demands of a reef aquarium can be a real challenge. While there are many different ways of supplementing calcium, high tech equipment like calcium reactors can simplify and automate the process.

Calcium Reactors

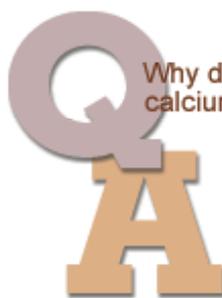
Most calcium reactors include a reactor chamber, circulation pump, and CO2 delivery system; however, calcium

ESSENTIALS: MAKE IT SIMPLE



■ [CO2 Calcium Reactor Components](#).
These components make your calcium reactor CO2 ready.

■ [Red Sea Calcium Pro Test Kit](#).
Affordable and accurate test kits, great for the beginning marine hobbyist as well as the experienced reef aquarist.



Why do you need to add calcium to a reef aquarium?

Of all the minerals and elements present in natural seawater, no mineral is used as quickly or in as large an amount as calcium.

Corals, especially hard corals, demand large amounts of calcium for proper health and growth.

media/CO2 Canister and a [pH controller](#) are necessary to make your system operational. Carbon dioxide, injected into the reactor chamber filled with the calcium media, creates an acidic environment that slowly dissolves the media. The dissolved calcium is mixed with saltwater and the resulting solution is slowly dripped into the main aquarium.

These systems are a precise means of maintaining calcium levels within reef systems with high calcium demands. The initial startup cost of these devices is higher than other calcium supplementation methods. However, once they are properly installed, only the media and CO2 require replenishing - making them a wise long-term investment for the serious reef enthusiast. As with all technology, the cost of these devices has gone down considerably from when they were first introduced and are now reasonably priced for most hobbyists.

Testing Calcium Levels

Keep in mind that calcium supplementation is part of a dynamic and organic process that requires regular testing and monitoring. Calcium requirements of an aquarium will change as coral colonies (both soft and stony), coralline algae, and other organisms actively use calcium to grow. [Test calcium and alkalinity](#) levels on a regular basis to monitor the rate at which corals are using calcium. Adjust calcium levels accordingly to maintain the ideal level of 350-450 ppm for a healthy beautiful coral garden. While testing calcium levels, remember to also test and monitor alkalinity since calcium and alkalinity levels influence one another.