

When to add fish to the system

Many people new to aquaponics are new to fish and expect fish to do well in a new, clean tank. However, this is not the case. The fresh water eating fish are actually not as hardy as people might think.[§] Preparing a tank for fish is a vital part of the process of setting up a system. There are many stories out there about dead fish in new systems.

Preparing a new tank for fish is called 'seeding' and there are four basic ways to do it:

1. Add bacteria starter liquid to the system

This will kick start the bacteria and nitrogen cycle in the system. Using this method can mean it can take as little as 24 hours for the system to be ready for fish. However, the water also needs to also be at the correct chemical levels. This quick and easy start is not often the most ideal and can still result in higher fatalities.

2. Add a fish straight away when it dies

This solution is good if you already have fish. What happens is the fish decomposes in the water and it kick starts the nitrogen cycle. However, this solution is slow 'wait and see' as it takes about 4- 6 weeks for the bacteria to develop.[#]

3. Add small amounts of fish food every two days

Adding fish food also helps kick start the nitrogen cycle. Fish food provides nutrients for the bacteria to start growing. But, as with the solution above, it still takes a long time for the tank to be ready for fish. Approximately 4-6 weeks.

4. Add media and/or water from another aquaponics system

This is the fastest and safest way to get a new system up and running. In reality, a fish tank can be stocked with fish when ammonia and nitrite is at zero after adding a starter culture. The starter culture can be the liquid, dead fish or fish food. Check the water every two days with an aquarium test kit to see if the numbers are right. As soon as they are, add fish!

How to add fish to the system

When introducing new fish into a tank, place the fish still in their transport bag, into the tank unopened. This is to allow the temperature of the water in the bag to adjust to the water of the tank. After about 15 to 30min add some water from the tank into the bag; which helps the fish to get adjusted to the water conditions of the tank. Repeat this process every 5 minutes at least another two times and then release the fish.

[§] Goldfish and Koi are a little more hardy, but it is still possible to endure fatalities if the water is not prepared.

[#] Although it seems like a long time to wait to get a system at optimal before stocking it with fish, it is worth the wait. Small, non-flowering plants, such as lettuce can be grown in a system without fish in the meantime.