

Create your own Sea Monkey hatchery



Sea monkeys (Artemia) or Brine Shrimp as they are commonly known, are tiny crustaceans, meaning they are related to marine animals such as barnacles, lobsters, shrimps and crabs. Sea monkeys are used as a food source around the world in aquaculture (fish farming).

Presented here is one method of setting up a system and feeding Artemia.

Setting Up

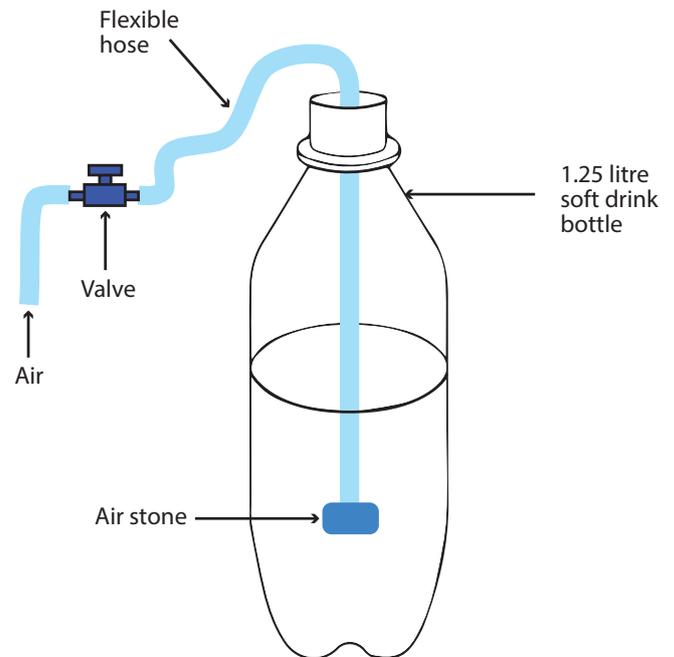
Artemia cysts can be bought from most aquarium suppliers. Many methods can be used to set up a hatchery. A quick Google of “brine shrimp hatchery” will reveal many more, which may be better suited to your equipment availability.

You will need the following equipment:

- **1.25 Litre Cool Drink Bottle** – Washed out well and must have NO soap residue.
- **Rock salt** – which can be purchased here as pool salt (about \$6 a 25Kg bag).
- **Small air pump** – Set Up with tubing, air stone and valve.
- **Brine Shrimp Net** – Old stocking and a coat hanger bent to shape work well.
- **Water** – dechlorinated by leaving to sit for 24-48 hours.
- **Bakers yeast** – dry is OK but fresh works well from most bakers.
- **Aquarium grade silicon** – available from good aquarium shops and some hardware stores.



Make your own Brine Shrimp Hatchery



Instructions

- Dissolve salt in dechlorinated water.
Work on one to two heaped tablespoons (10-20grams) per litre.
Allow this to dissolve well. If you have a hydrometer you could measure this as it should have a specific density of 1.0030 or salinity at 5 ppt (although opinions on this number differ).
- The temperature works best at about 25°C, and in a lit (but not continuously) area.
- Set up the cool drink bottles as shown over the page.
- Seal the air tubing in to the drink bottle lid with clear aquarium grade silicon.
- Place an airstone on the inside of the drink bottle.
- ½ to ¾ fill drink bottle with your salt water. Turn on air pump and adjust so that it is providing a good amount of circulation for the water.
- Place in ¼ to ½ teaspoon full or less if you are rationing, but certainly no more of brine shrimp cysts/eggs (or drops if they are in liquid form) into the water.

- After about 24 hours you will see that the cysts have an orange cast. This means they have hatched.

Congratulations, you are a parent!!!

Extras you may try:

- Add a pinch of baking soda.
- Adjusting the airflow to get best results.

After Hatching: Collecting and growing

- The nauplii larvae will sit above the cyst cases which have fallen off. Turn off the air for ten minutes and allow the larva and cases to settle. This can be done by turning off at a tap in the air line, or by turning off the pump. If you do the latter make sure the pump is above the liquid or it will drain into the pump!
- These now need to be separated. This can be done by either shining a torch light into the middle of the container, attracting the larva and carefully scooping them out with a small net made out of stocking. Alternatively, you may carefully take the base of the cool drink container off and letting the casings only out.
- Replace the water in the container, and at the same time remove and dispose of the older casings.
- Place the netted larva into the fresh saltwater and turn air back on.



Feeding

- The larva, from now on need to be fed. As there is not a filtration system, amounts of food are important and it is often at this point that losses occur.
- Brine shrimp are non-selective filter feeders, so a wide variety of foods can be tried. Aquarium shops will often sell food for *Artemia*.
- You can also use the following : Bakers yeast (both fresh and dried), wheat flour, fish meal, egg yolk, homogenised liver. Dissolve food with salt water to make a solution.
- Feed by adding a few drops of the food a few times a day.



Extras

- Brine shrimp will moult 15 times before becoming adulthood. This will leave the water cloudy. This may also be too much food. Do water changes of 20 per cent every couple of days. Clean the bottom every other couple of days.
- Slow growth will occur if any of the following occur - water temperature is too low, pH is out, salinity is out, food is inadequate or not correct.
- *Artemia* may die in large numbers if the water quality is allowed to spoil.
- You may make your brine shrimp last by putting them in the fridge. You can freeze them if you want to feed them to fish later on. Use an old ice cube tray for this.
- When you have finished with them, feed them to your goldfish, they will thank you, especially if they are rich and looked after.