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Brine Shrimp and the Power of pH

The purpose of this investigation is to determine how small changes in the environment can affect the organisms living there. By using this investigation I am persuading people to walk more and drive less. Cars put out exhaust, which pollutes the air. If the air is polluted, marine habitats become polluted, and that can drastically change the population of marine life.

Research showed that pH level effect the hatching of brine shrimp eggs. The hypothesis was, when brine shrimp eggs are put into water with a pH as low as 7.0-6.55 or as high as 10-7.65 eggs will hatch abnormally. When put into water with a pH that is 9.0-7.85, eggs will hatch normally because the pH level is closer to what actually occurs in nature.

For testing, I separated out fifteen brine shrimp eggs, and put them in a petri dish, 10 petri dishes for every pH level tested. I then let the eggs sit for 72 hours and the collected data.

Brine shrimp eggs put into water with a pH of 7.0-6.55 hatched 4.8 eggs on average. When put into water of 8.0-7.85, an average of 5.2 eggs hatched. Eggs put into water with a pH of 1.0-7.65 had an average of 2.9 eggs that hatched. People drive many places. They need to understand that the effects of exhaust toward marine environments, though small, can have huge implications.