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*Hence: It's Dense!*

The purpose of the study was to determine if using three different salts in five different liquids would change the raw egg's buoyancy and cause it to surface easier. When salt dissolves, its salt ions are attracted to the water molecules, causing them to bind together. As they bind together it makes the water denser. By comparing three types of salt in five different liquids I could determine which salt-liquid combinations would be denser. I hypothesized that if I used regular tap water with sea salt, then the egg would surface the most because of how the Dead Sea has natural sea salt and human bodies float easily in it. I dissolved one measured tablespoon of three kinds of salt (iodized, sea and rock) in one measured cup of five different liquids (tap water, artesian water, distilled water, filtered water and vinegar). I place a raw egg in each liquid concentration. I observed the egg's buoyancy in each of the concentrations and recorded data. My results showed that vinegar with any salt definitely makes the buoyancy of an egg change the most. My original hypothesis was incorrect. I learned that vinegar dissolves away the calcium carbonate in the egg shell. I also learned other things about different waters and how they relate to our health. The test data show that salt density in the ocean can affect the buoyancy of sea vessels.