Abstract

The pH of liquids is an important thing to study to help the environment, determine things in a scientific lab, and measure how fast milk sours. The purpose of this experiment is to determine if the pH of souring milk decreases at a linear rate. When this experiment was conducted 9 bins full of milk, Distilled water, and milk with added antibacterial soap. The pH was measured of each one with a pH meter and recorded on a sheet of paper. The results showed that the pH of the Distilled water was just chaotically jumping around (expected), skim milk and the spiked skim milk both had an incubation period of several days and then decreased at an almost linear rate but afterward dropped to a low pH. The data of the Distilled water stabilized at around 6.6, the skim milk around 6, and the spiked skim milk at around 6.1. Some of the pH measures in areas came close to becoming linear but stayed nonlinear. None of the pH measures were linear so the experimenters hypothesis was supported.