

pH Requirements

The term pH designates the acidity or alkalinity of an aqueous solution. Scientifically, pH is the negative logarithm of the hydrogen ion concentration. The pH scale ranges from 0 to 14, with pH 7 being neutral. Numbers smaller than 7 indicate an increase in hydrogen ion (more acid) and numbers greater than 7 indicate a decrease in hydrogen ion concentration (more basic, or alkaline). All bacteria have an optimum (most favorable) pH range for growth (generally around neutral pH), as well as a minimum below which the organism will not grow (and where the organism may die) and a maximum above which it cannot grow. The pH of foods can be adjusted to help control microbial growth.