

### **3-13: Acidified Low Acid Foods**

An acidified food is a low acid food to which acid or acid food is added to produce a final pH of 4.6 or less. proper acidification prevents growth of *C. botulinum*. Final product pH must be 4.6 or less to prevent *C. botulinum* growth. pH is the term used to designate degree of acidity or basicity. The more hydrogen ions equals more acidic. The pH scale ranges from 0 to 14. Pure water is neutral at a pH of 7.0. Above a pH of 7.0 there are more OH ions. Below a pH of 7.0 there are more H ions. Buffering capacity refers to the ability of a food to resist change in pH. This varies from food to food. To determine pH of a product there are two methods, colorimetric method and electronic method.

There are several acidification procedures in establishment can use (1) acid Blanche food, (2) immerse blanched foods in acid solution, (3) direct batch acidification, (4) add acid foods to low acid foods, (5) direct acidification of food in container. Each certification method requires proper control. An establishment may utilize more than one procedure. An establishment must monitor the acidification by pH measurement as reference in regulation 431.5(e).

Failure to properly acidify a product to less than 4.6 pH, one of the following must occur, fully reprocess product, process as low acid food, hold for evaluation, or destroy. Establishment must maintain records showing adherence to process schedules and retain records of all processed deviations.