Effect of buffer and pH on the protein extraction for chicken meat

Abstract

The study was undertaken to determine the extraction of proteins from chicken meat. The effect of buffer (phosphate, citrate and glycine) and four pH values (6.0, 7.0, 8.0 and 9.0) were investigated. The protein extractability of phosphate, citrate and glycine buffer with in the pH range (pH 6.0 to 9.0) was assessed to determine the best protein extractant for chicken meat. The maximum protein extractabilities at pH 8.0 for phosphate and citrate buffer, and at pH 9.0 for glycine buffer were observed. ANOVA analysis showed that there was no significant difference in protein extractabilities for citrate from phosphate and glycine buffer. Whereas, a significant difference was observed for phosphate buffer from glycine. However, no significant effects of pH were observed.

Keywords

Buffer; Chicken meat; Citrate; Glycine; Phosphate; Protein extractability