

## Abstract:

The processed cheese used during the present study was made from white Sudanese cheese with different ripening time (15 and 30 days) from milk with different fat present (2.2 and 4.4%). At time of processing the processed cheese was packed into two types of packaging (glass and plastic) and stored at 4°C for 3 months. The different fat level of milk showed significant differences ( $p < 0.05$ ) on total bacterial counts and coliform count. However the psychrophilic counts and yeast and molds counts showed non significant differences ( $p > 0.05$ ) with the different fat percent of the milk from which the processed cheese was made. The psychrophilic counts, total bacterial counts, coliform counts and yeast and molds counts showed significant differences ( $p < 0.05$ ) with different ripening time (15 and 30 days). Also the storage periods showed significant differences ( $p < 0.05$ ) with psychrophilic counts, total bacterial counts, coliform counts and yeast and molds counts. Similarly the different types of packaging (plastic and glass) showed significant differences ( $p < 0.05$ ) with psychrophilic counts, coliform counts and yeast and molds counts. However total bacterial counts showed non significant differences ( $p < 0.05$ ) with the different types of packaging of the processed cheese. Hence, the present study concluded that if the Sudanese white cheese could be further reprocessed the hygienic quality and the shelf life would improve.