Ebtehal Abdulaziz AlTamim, J Nutr Food Sci 2014, 4:5
http://dx.doi.org/10.4172/2155-9600.S1.014

OMICS Group Conferences
Accelerating Scientific Discovery

3rd International Conference and Exhibition on
Nutrition & Food Sciences
September 23-25, 2014 Valencia Convention Centre, Spain

Effect of storage period on microbiological quality of whole and low-fat pasteurized cow milk

Ebtehal Abdulaziz AlTamim
Princess Noura Bint Abdulrahman University, Saudi Arabia

This study was conducted to determine the effect of storage period on whole and low-fat pasteurized cow milk. Milk samples packaged in plastic containers were collected from four factories and stored in temperature 4°C for 1, 3 and 8 days of production. The samples were analyzed chemically for Acidity as lactic acid% & pH, and microbiologically for bacterial counts, yeasts & mold counts, coliform counts, Staphylococcus aureus and salmonella. The significant difference was conducted at ($p \leq 0.05$).The results showed that acidity of milk increased in all whole-fat milk samples during 3rd & 8th day of storage comparing to 1st day. Sample (2-A) was the highest value of acidity with mean and standard deviation (0.14±0.035), the lowest value for pH (6.70±0.012), and the highest value for bacterial counts (6.0×104). Also, the results showed that the acidity increase in all low-fat milk samples during 3rd & 8th day of storage comparing to 1st day. Sample (3-B) was the highest (0.14±0.035) in acidity, lowest pH (6.68±0.017), and more bacterial counts (7.0×107). Yeast & mold counts in some milk samples was less than < 10 and Zero in others. Coliform counts, Staphylococcus aureus and salmonella were Zero in all samples. This study suggests that storage period has a strong influence on the quality of whole and low-fat pasteurized milk, and it is recommended to consume milk on the 1st day of storage.

itamim@hotmail.com