

ABSTRACT

Sausage is one of the most popular meat based product in the world. It is having high nutrition value as well as high biological value. Amino acid composition of meat is very similar to human physiological requirement.

So it create suitable environment to microorganism for growth and development; results favorable and unfavorable changers. Spoilage and intoxication affects illness for microorganism. Preservation method creates unfavorable environment for microorganism, as a results of that food spoilage can be retarded and shelf life can be extended. Preservation of meat and meat-based products, low temperature treatment such as freezing and chilling, are more common preservation techniques.

The study was carried out to identify microbial behavior on sausages during cold chain in Keels food products Ltd. Twenty eight packets were taken as samples and bundled those in to 7 groups for further sampling. From difference stages in cold chain, 6 samples were taken and subjected to microbial tests and temperature measurements (internal temperature and external temperature).

Salmonella and *Escherichia coli* were not found in any stage and *Staphylococcus* also bellow the 100 organisms per gram. Number of colony forming microorganism was also bellow 10^4 and those results ensure consumer safety.

The results were analyzed by statistical analyzing system (S.A.S). There is no significant microbial growth during in cold chain. Also there is no significant difference in between 2 sampling stage.