



## ABSTRACT

The present study was conducted to isolate and characterized bacteria from fresh and canned orange juices from different markets of Lahore. Isolated bacterial strains were identified on the basis of morphological and biochemical tests. Identification was confirmed by growing bacteria on selective media. Antibiotic resistance test was also done to observe the resistance of bacteria against different antibiotics. Blood agar test was performed which resulted in identification of different pathogens. The result revealed that fresh orange juices which were collected from local markets highly contaminated with *Lactococcus* spp., *Staphylococcus* spp., *Bacillus* sp., *Micrococcus* spp., *Neiseria* spp., *Micrococcus* spp. *Shigella* spp. and *Enterococcus* sp. Presence of these bacteria in the fresh orange juices indicated that it is highly polluted and unhygienic and may cause spread of various diseases like Pneumonia (due to *Micrococcus* sp.), food poisoning (due to *Staphylococcus* sp.), Urinary tract infections (due to *Enterococcus* sp.), *Bacillus* sp. can cause Nausea and Vomiting, *Shigella* sp. presence in fresh orange juices indicates that it can cause digestive tract infections it was remaining untreated. Endocarditis has been related to *Lactococcus* in human beings. *Neiseria* spp., causes variety of infections. It is suggested that fresh juices are more nutritious than preserved orange juices but they are not much hygienic due to poor environmental conditions and during extraction process, packaging and handling, bacterial contaminants may enter which can deteriorate drink quality. On the other hand persevered juices are packed under hygienic a condition that's why there is low chances of contaminations.