The modern human diet includes a wide variety of food materials from a wide variety of different sources. The active promotion of fruits and vegetables as an important part of a healthy diet has led to a significant increase in fresh produce consumption worldwide, being eaten all over the world. However, recent outbreaks of foodborne illness related to associated with consuming fresh produce consumption have indicated a role of heightened concerns that these foods may be an increasing source of illness. The minimal processing required for fresh and freshly cut produce which omits any effective microbial elimination step and results in food products naturally carrying microorganisms, some of which may be potentially hazardous to the human health.

Some of the certain foodborne pathogens such as Salmonella spp., Escherichia coli, Citrobacter spp., and Enterobacter spp., mainly members of Enterobacteriaceae, produce curli fibers which help in the initial steps of biofilm formation and enhance the resistance of biofilm cells in biofilms for to sanitizers and disinfectants. Curli are proteinaceous components of a complex extracellular matrix and are produced by many of these organisms, Enterobacteriaceae. They are thin, coiled fibers expressed as thin, coiled fibers at the cell surface and of cells that bind several matrix and plasma proteins, such as fibronectin, laminin, plasminogen, and azo dyes such as Congo red. Raw vegetables, fruits, and unpasteurized juices contain a number of curli-producing foodborne pathogens, which are associated with food-related diseases. These curli-producing pathogens form biofilms on fresh produce as well as on food contact surfaces, resulting in and result in cross-contamination of produce.

Curli-producing bacterial strains are characterized by their ability to bind Congo red, which provides a simple screening method for in vitro curli production. The Congo red binding technique has a qualitative as well as a quantitative approach. Curli-producing organisms were isolated from fresh produce and unpasteurized carrot juice using modified Luria-Bertani (LB) medium. Curli-producing organisms formed dry, red, rough colonies on modified LB medium, while nonproducers those not producing curli formed smooth, white colonies. The parameters that control curli production such as temperature and osmolarity that control curli production were evaluated using the Congo red...
binding technique. Results revealed that the resistance of biofilms formed by curli-producing organism was evaluated and found that curli production increases the resistance of biofilms to various commercially used sanitizers.

Commented [Crimson17]: Subject area: The syntax has been greatly improved for grammatical correctness and clarity.