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Influence of sodium deoxycholate in biofilm production by *Salmonella enterica* serovar. Typhi

In this thesis, the conditions of *in vitro* biofilm production by *Salmonella enterica* serovar. Typhi and the process of broth medium gelification in presence of sodium deoxycholate were examined. The methods used for evaluation were incubation of bacteria in glass tubes containing medium and tested compounds (study of biofilm production and medium gelification), Bioscreen C method (determination of bacterial growth curves), SDS-PAGE and Immunoblotting (detection of protein expression levels). The results proved that the presence of sodium deoxycholate together with bacterial cells in medium is essential for biofilm production and gel stabilization. The exact mechanism of gel stabilization has not yet been solved.