

## **ROLA FIMBRII SPIRALNYCH (FS) W CHOROBOTWÓRCZOŚCI *ESCHERICHIA COLI***

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1. Wstęp 2. Fimbrie spiralne FS. 3. Genetyczna regulacja syntezy FS. 4. Cechy biologiczne FS. 5. Wpływ ekspresji fimbrii FS na chorobotwórczość *E. coli*. 6. Podsumowanie

### **The role of curli fimbria in the pathogenesis of *Escherichia coli* infections**

*Abstract:* Curli fimbria are thin surface fibers that shows unusual property of several human plasmatic and cell matrix proteins binding e.g. laminin, fibronectin, plasminogen, fibrinogen MHC class I molecules. Fibrinogen plays an important role in homeostasis and activation of the coagulation cascade at the bacteria surface may contribute to the pathogenesis of *E. coli* sepsis. Curli are expressed by many pathogenic as well as wild and laboratory *E. coli* strains. Their expression is controlled by environmental and genetic factors. Most of *E. coli* strains are producing these structures at low temperatures during starvation making them responsible for biofilm formation on abiotic surfaces. Although the role of curli in sepsis development has been proven on animals, there are a lot of aspects of clinical importance of curli for further investigation.

1. Introduction. 2. Curli fimbria. 3. Genetic regulation of curli production. 4. Biological properties of curli. 5. The influence of curli expression on pathogenicity of *E. coli*. 6. Summary

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**Słowa kluczowe:** biofilm, fimbrie spiralne FS, *E. coli*, fimbrie, posocznica  
**Key words:** biofilm, curli, *E. coli*, fimbria, sepsis