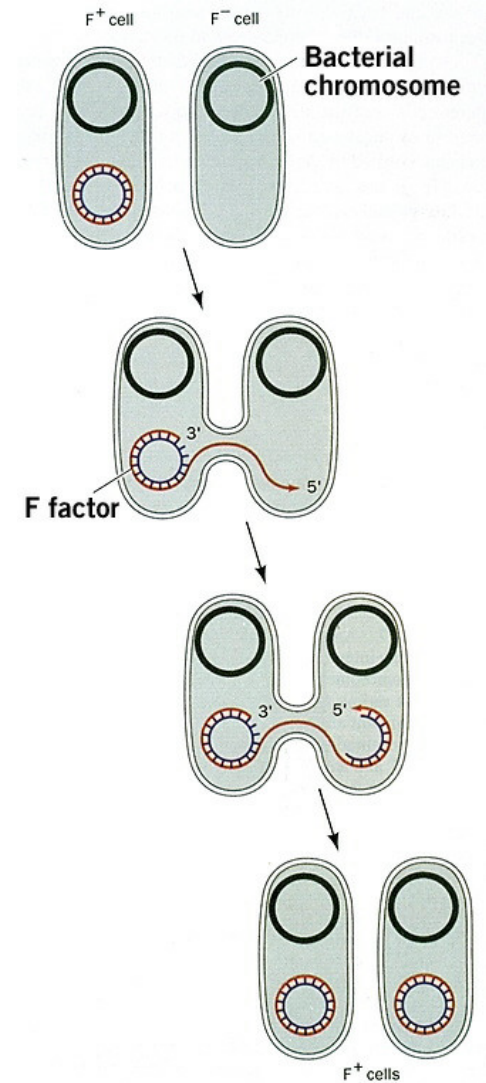
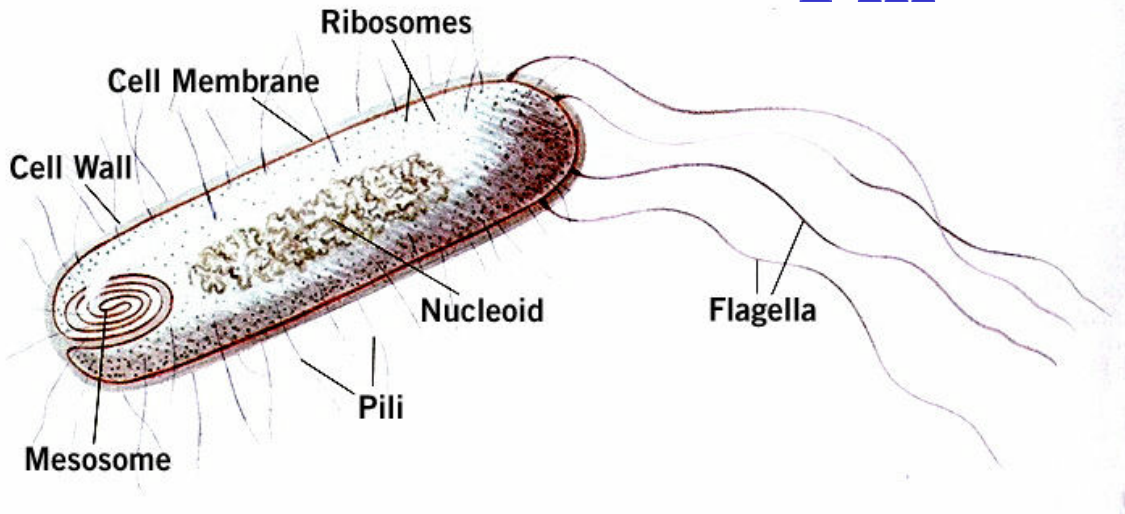


# Glycoproteins

# Pili



# Adhesins



Bacterial proteins called adhesins

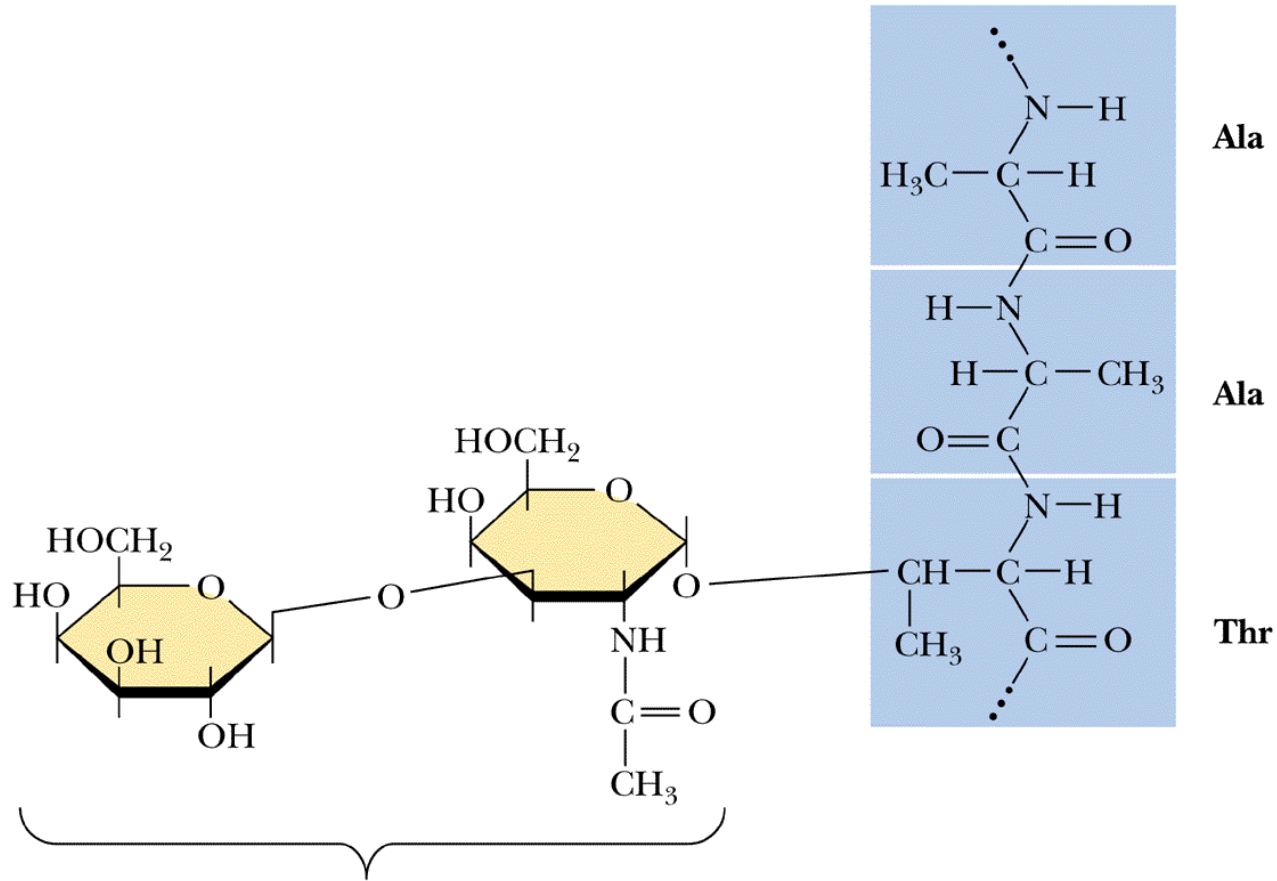
E.coli have adhesins at tip of pili

Urinary tract infections:

E.coli attach using PapG adhesin on tip of P pili that binds to a galactose disaccharide on the surface of epithelial cells in the urinary tract.

Cheek cells:

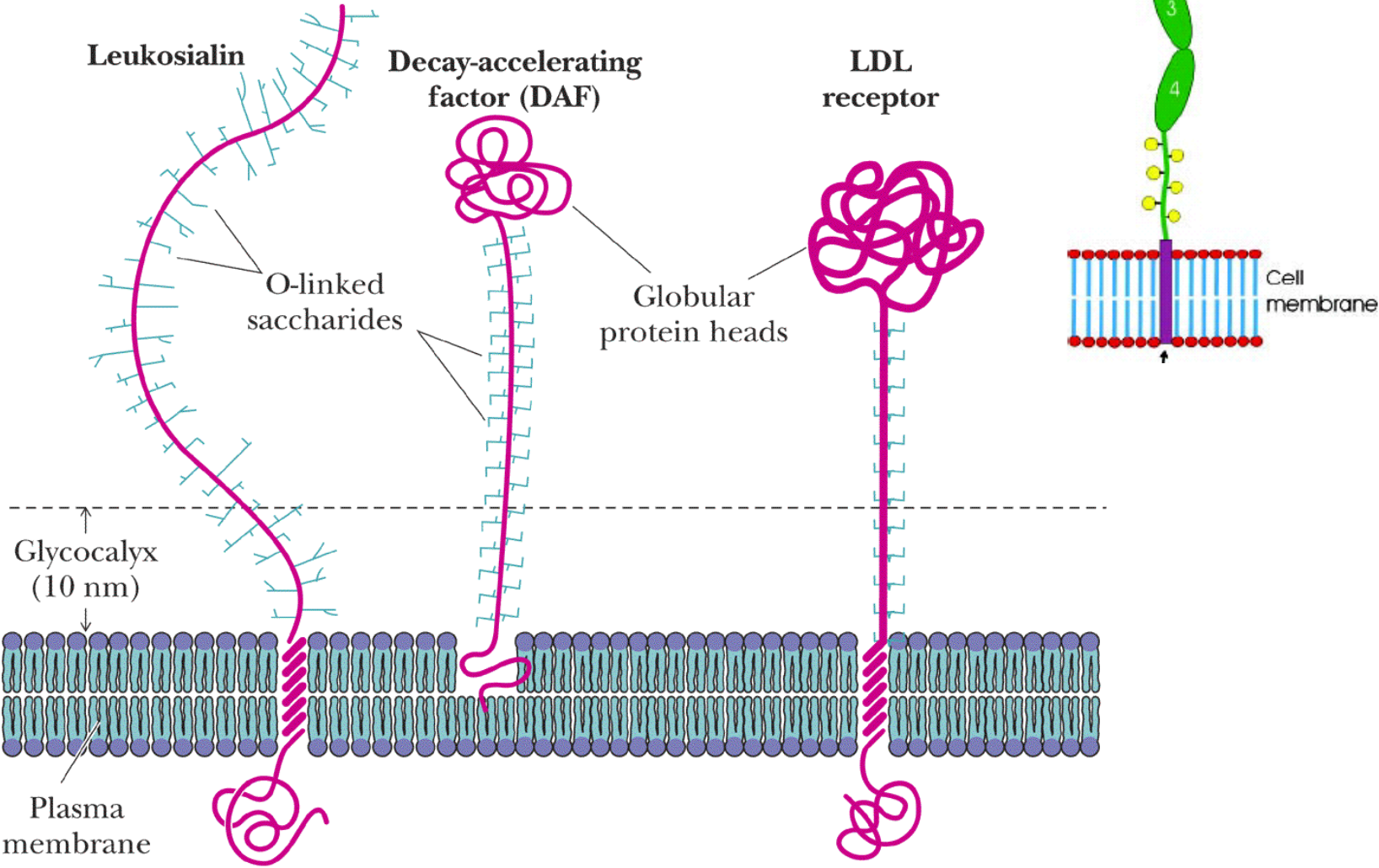
bacteria bind to mannose residues  
Incorporated in the cell membrane of cheek cells



$\beta$ -Galactosyl-1,3- $\alpha$ -N-acetylgalactosamine

Repeating unit of antifreeze glycoproteins

Figure 7.34



Garrett/Grisham, Biochemistry with a Human Focus  
Unnumbered Figure Page 230

