

Section 1: Cell Structure and Function

Cell wall

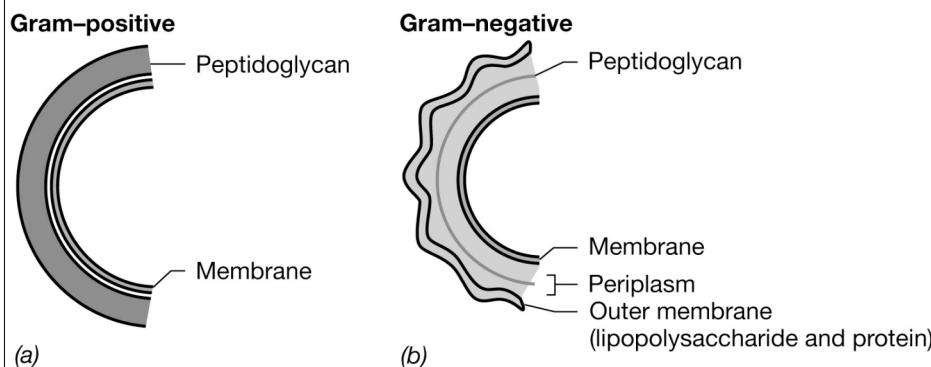
A. Functions

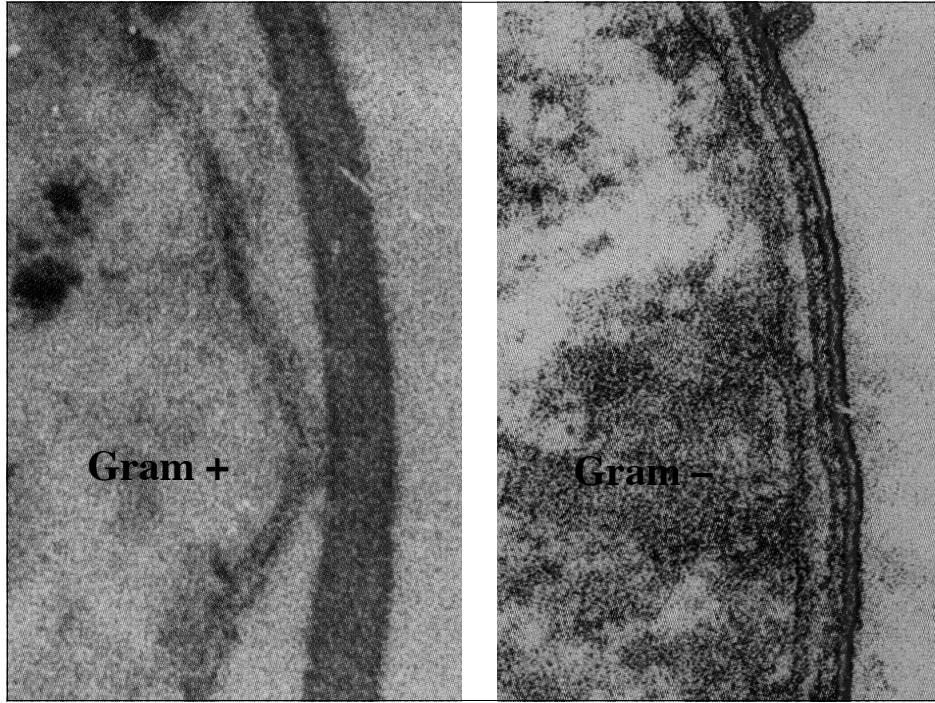


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B. Peptidoglycan - polysaccharide found only in Bacteria (aka murein)



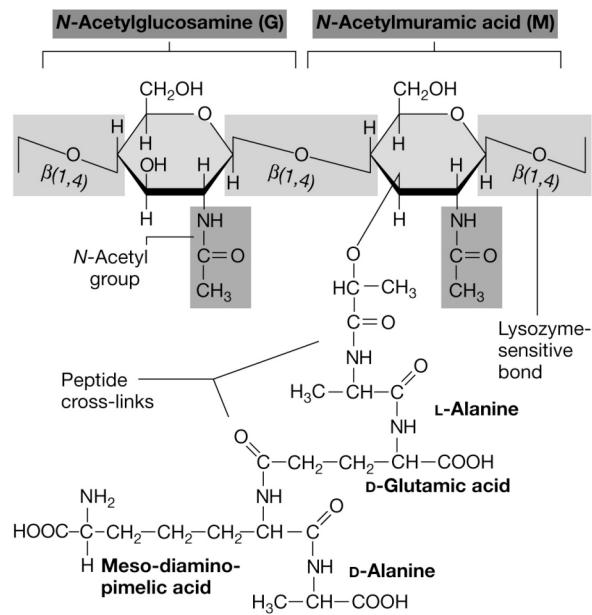


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B. Peptidoglycan

Chemistry



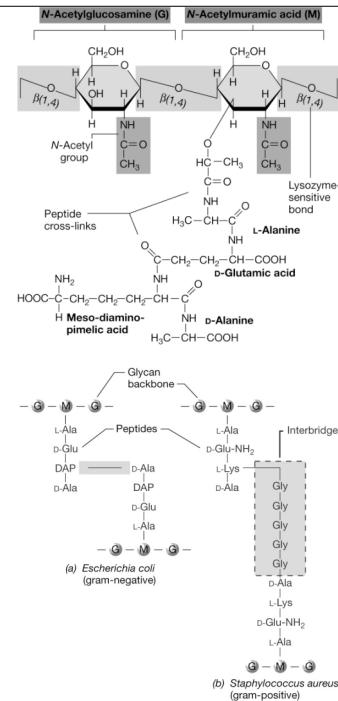
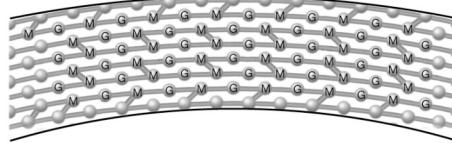
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B. Peptidoglycan

Arrangement

Notice the cross links are only on NAM



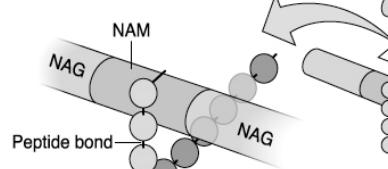
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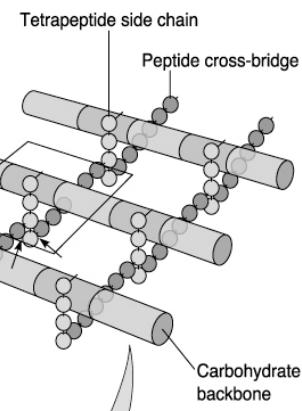
B. Peptidoglycan

Arrangement - another view

- N-acetylglucosamine (NAG)
- N-acetylmuramic acid (NAM)
- Side chain amino acid
- Cross-bridge amino acid



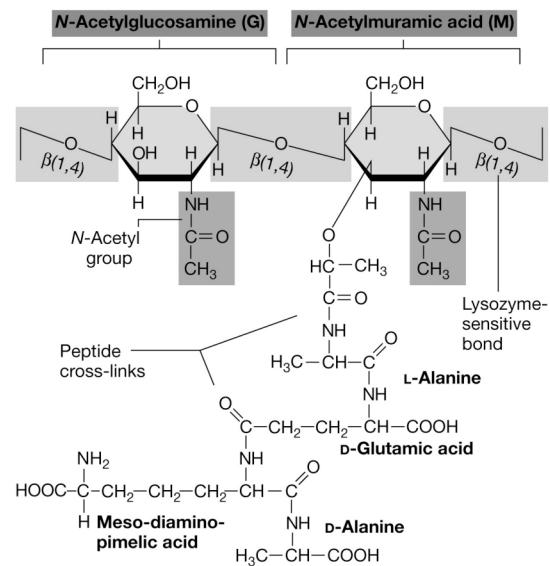
Note the upward chains



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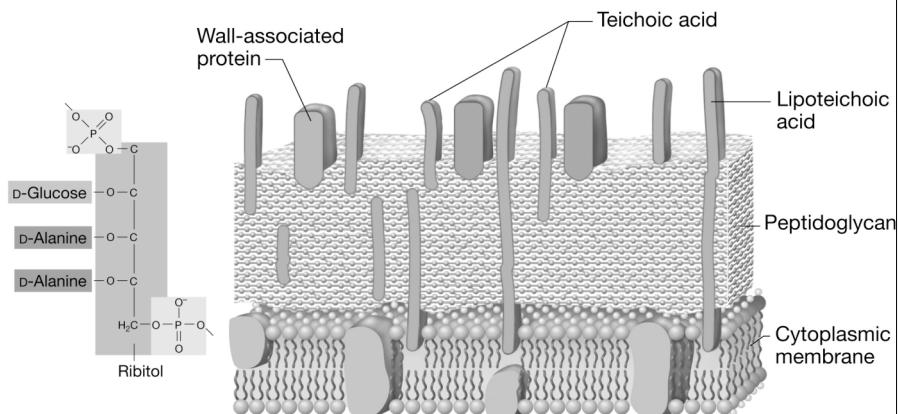
B. Peptidoglycan



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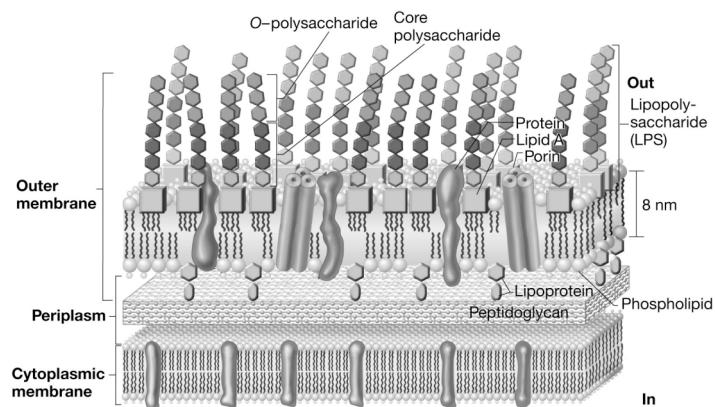
C. Gram +



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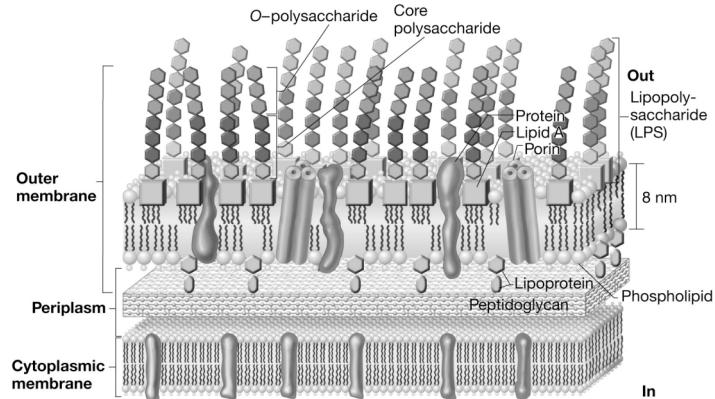
D. Gram – (General characteristics)



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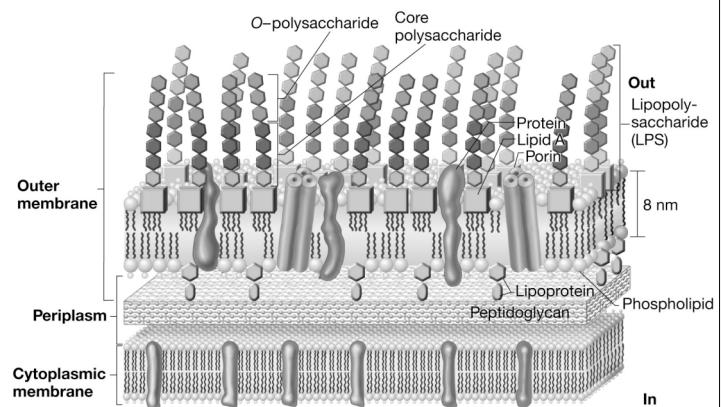
D. Gram – (Peptidoglycan)



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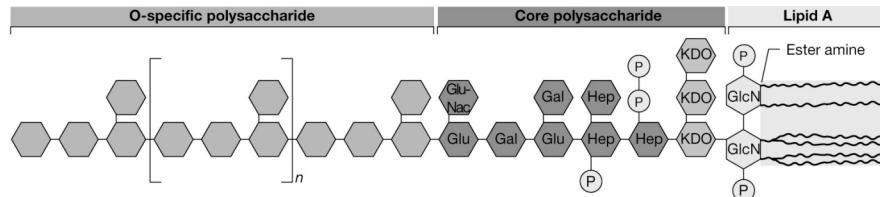
D. Gram – (Outer membrane)



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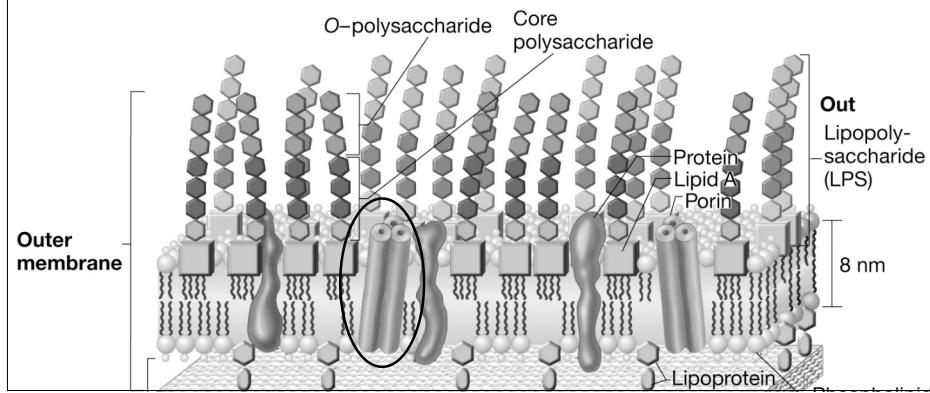
D. Gram – (Lipopolysaccharide)



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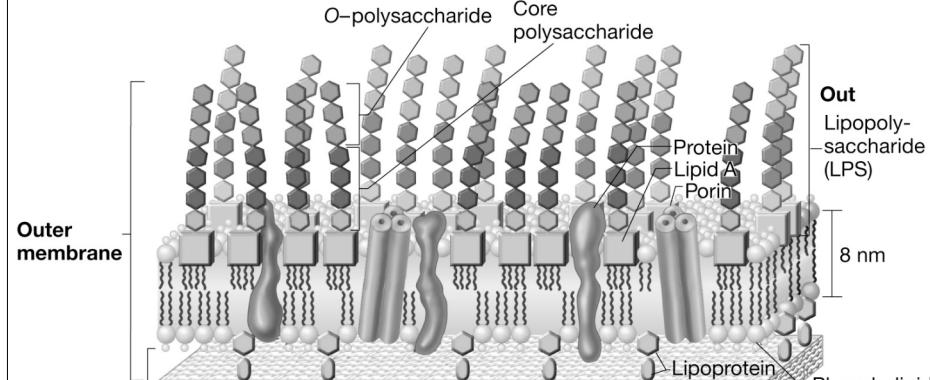
D. Gram – (Outer membrane proteins)



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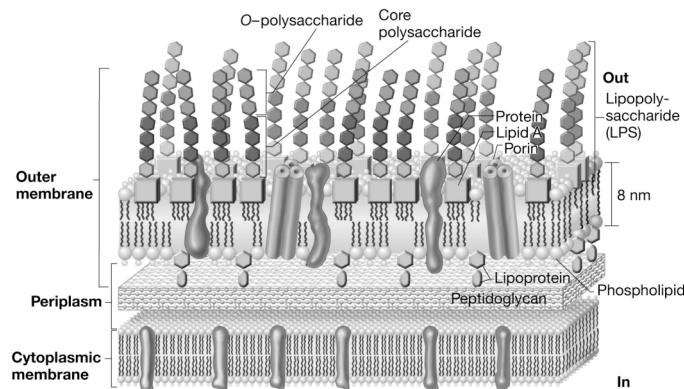
D. Gram – (Outer membrane properties)



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D. Gram – (Periplasm)



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E. Other

