生物物理学Ⅰ Handout No. 1

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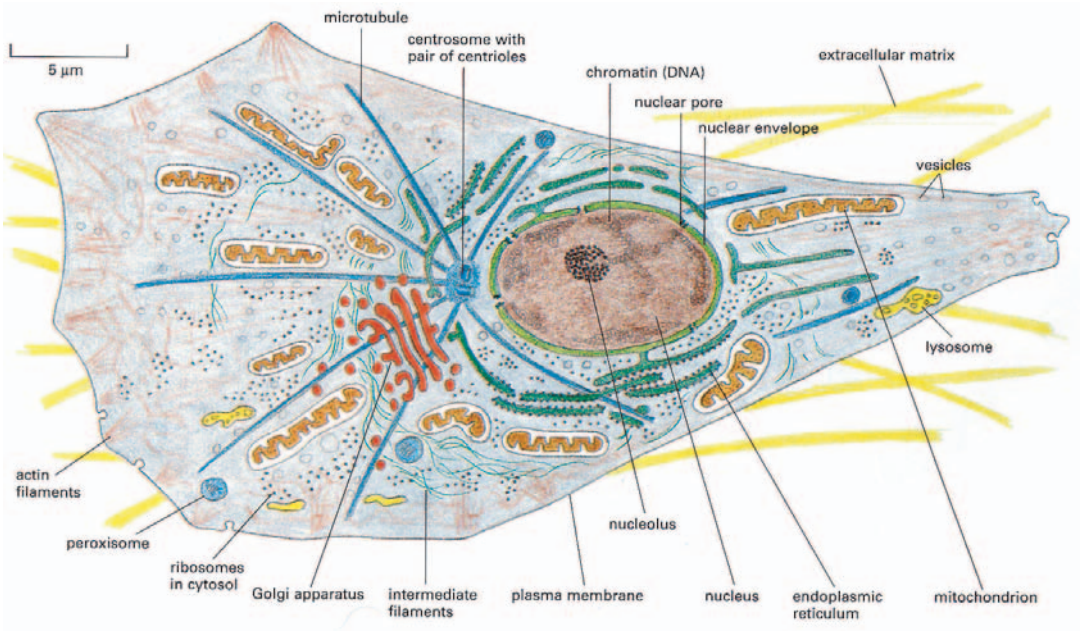

Figure 1-31 The major features of eucaryotic cells. The drawing depicts a typical animal cell, but almost all the same components are found in plants and fungi and in single-celled eucaryotes such as yeasts and protozoa. Plant cells contain chloroplasts in addition to the components shown here, and their plasma membrane is surrounded by a tough external wall formed of cellulose.

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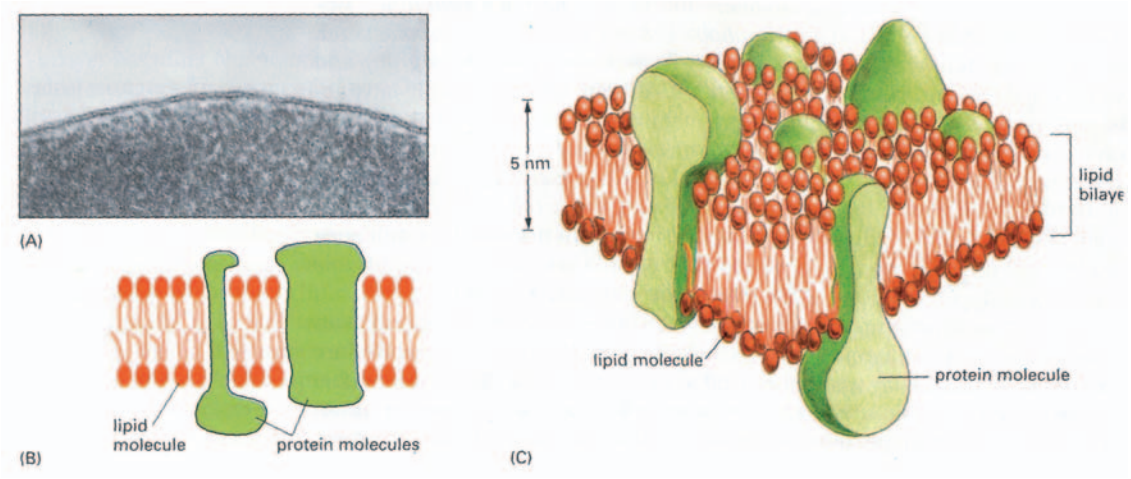

Figure 10-1 Three views of a cell membrane. (A) An electron micrograph of a plasma membrane (of a human red blood cell) seen in cross-section. (B and C) Schematic drawings showing two-dimensional and three-dimensional views of a cell membrane. (A, courtesy of Daniel S. Friend).

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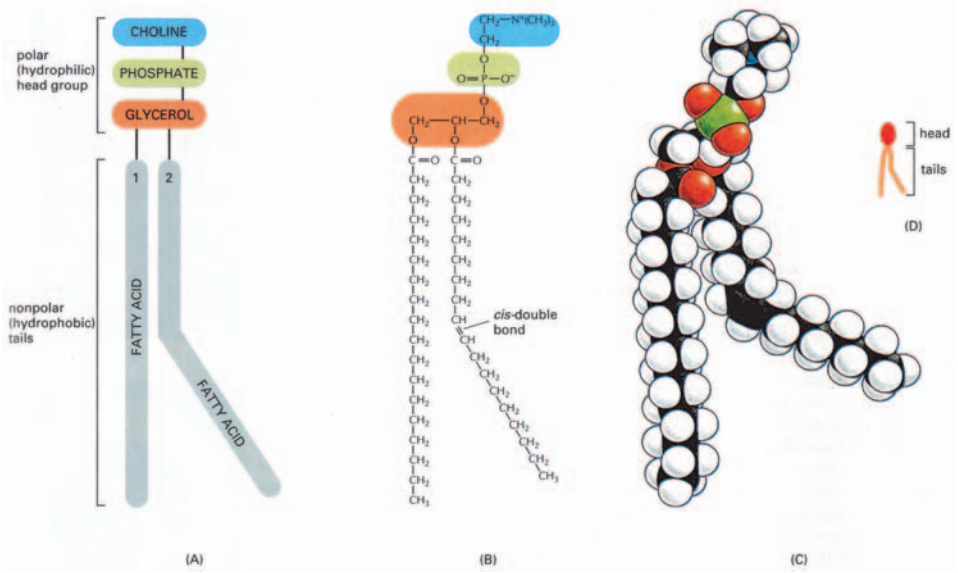

Figure 10-2 The parts of a phospholipid molecule. hosphatidylcholine, represented schematically (A), in formula (B), as a space filling model (C), and as a symbol (D). The kink due to the is-double bond is exaggerated in these drawings for emphasis.

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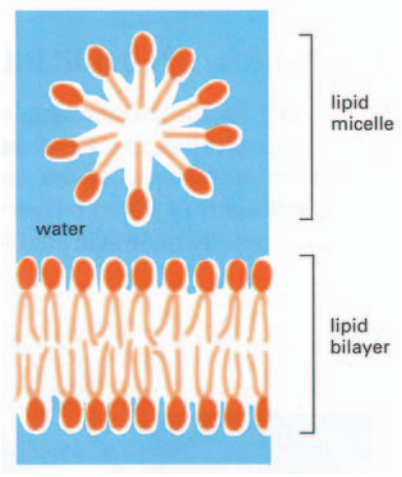

Figure 10-3 A lipid micelle and a lipid bilayer seen in ross-section. Lipid molecules form such structures spontaneously in water. The shape of the lipid molecule determines which of these structures is formed. Wedge-shaped lipid molecules (above) form micelles, whereas cylinder-shaped phospholipid molecules (below) form bilayers.