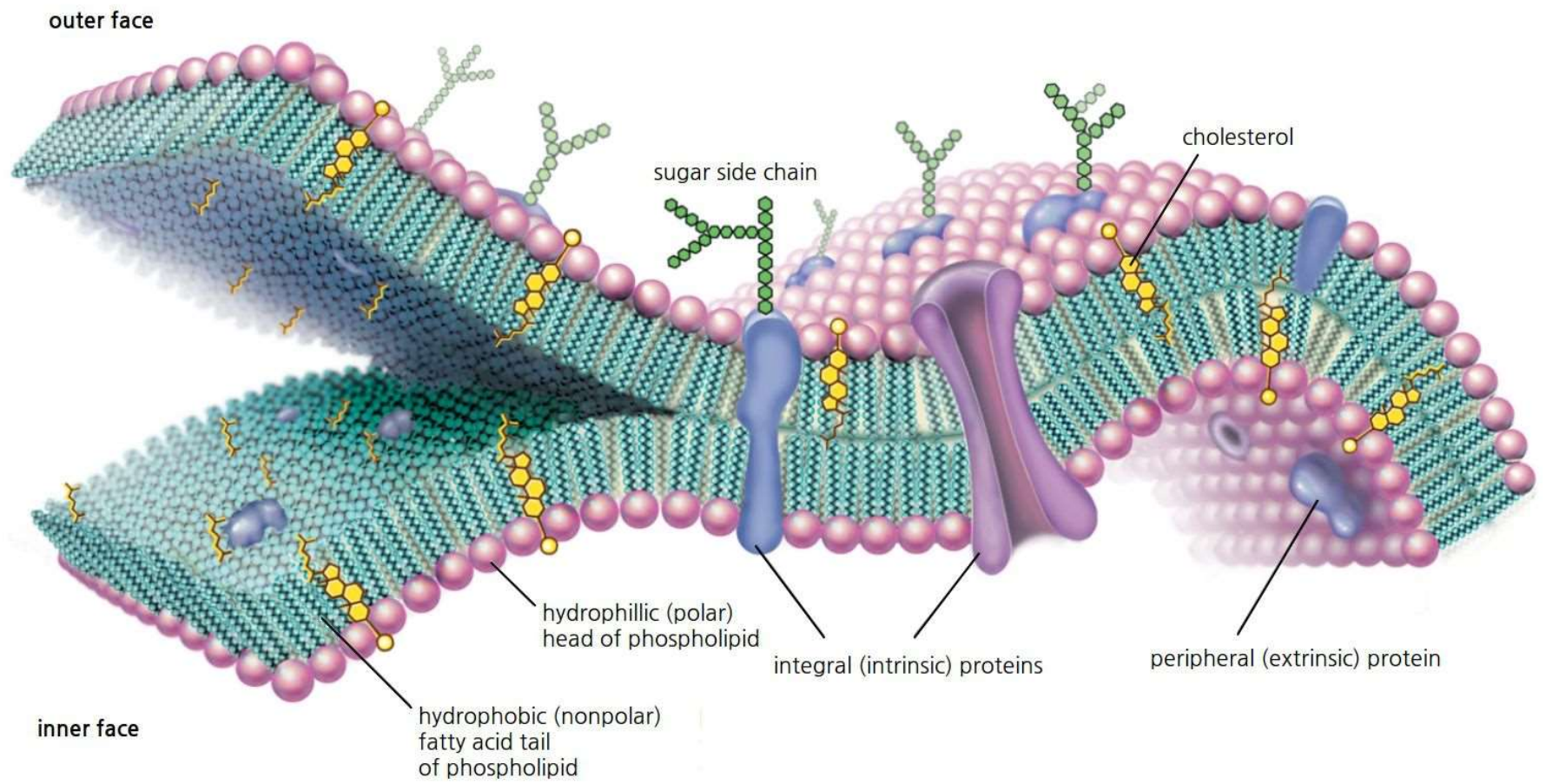
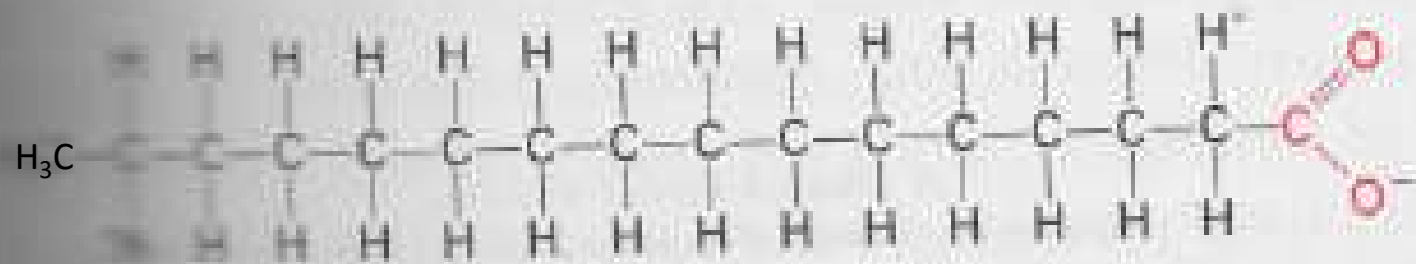


Table 1-3

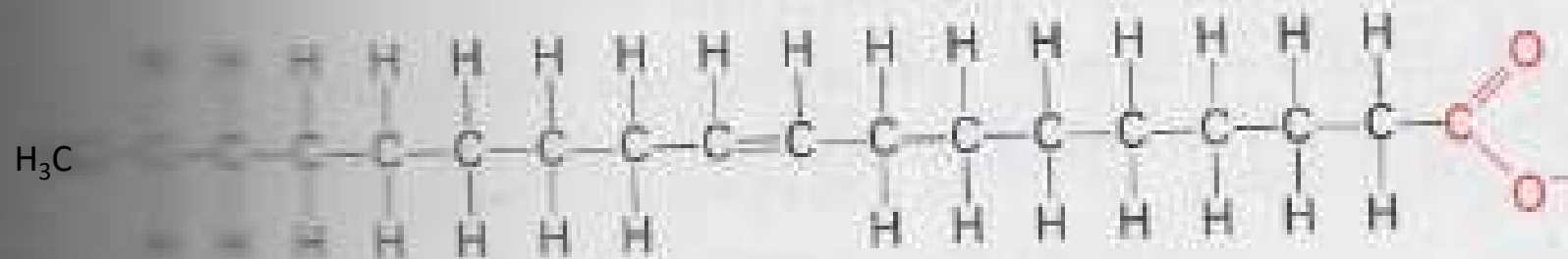
Dielectric constants of some solvents
at 20°C

<i>Substance</i>	<i>Dielectric constant</i>
Hexane	1.9
Benzene	2.3
Diethyl ether	4.3
Chloroform	5.1
Acetone	21.4
Ethanol	24
Methanol	33
Water	80
Hydrogen cyanide	116





Palmitate
(ionized form of palmitic acid)



Oleate
(ionized form of oleic acid)

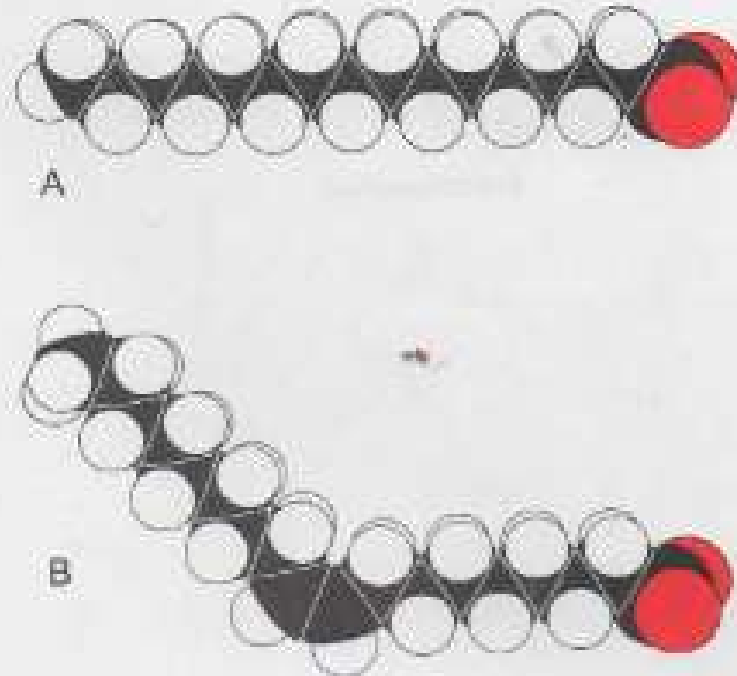
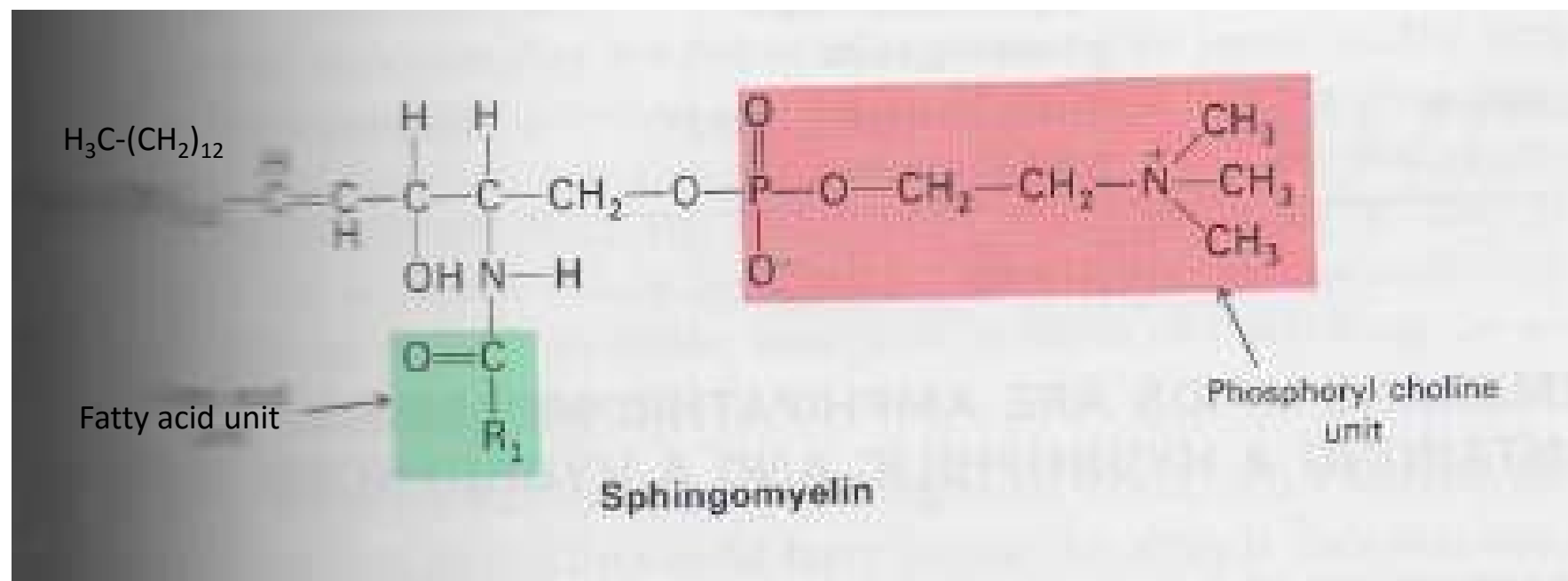


Figure 11-3

Space-filling models of (A) palmitate (C_{16} , saturated) and (B) oleate (C_{18} , unsaturated). The cis double bond in oleate produces a bend in the hydrocarbon chain.



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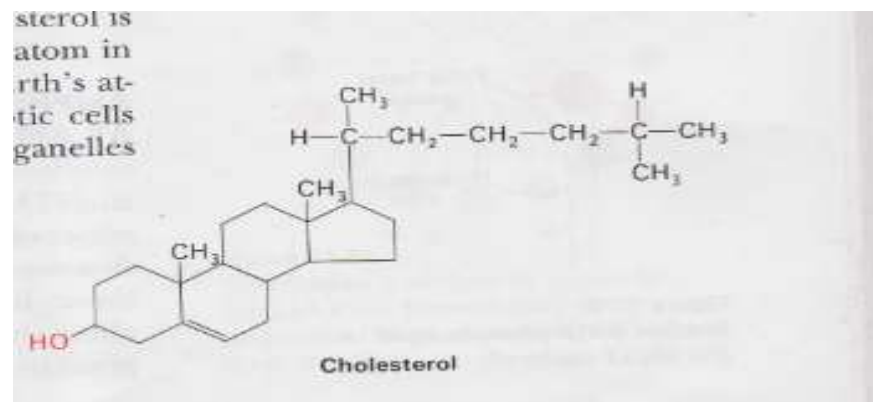


Table 11-1

Hydrophobic and hydrophilic units of membrane lipids

<i>Membrane lipid</i>	<i>Hydrophobic unit</i>	<i>Hydrophilic unit</i>
Phosphoglycerides	Fatty acid chains	Phosphorylated alcohol
Sphingomyelin	Fatty acid chain and hydrocarbon chain of sphingosine	Phosphoryl choline
Glycolipid	Fatty acid chain and hydrocarbon chain of sphingosine	One or more sugar residues
Cholesterol	Entire molecule except for OH group	OH group at C-3

Time in dropping

On the surface - The effect was striking:

The oil, though no more than a tea spoonful, produced an instant calm over a space several yards square, which spread amazingly, and extended itself gradually till it reached the lee side, making all that quarter of the pond, Perhaps half an acre, as smooth as a looking-glass.

Franklin, a fine experimenter and keen observer, further remarked that

One circumstance struck me with particular surprise. This was the sudden, wide, and forcible spreading of a drop of oil on the face of the water. . . . If a drop of oil is put on a highly polished marble table, or on a looking-glass that lies horizontally, the drop remains in place, spreading very little. But when put on water, it spreads instantly, many feet round, becoming so thin as to produce the prismatic colors, for a considerable space, and beyond them so much thinner as to be invisible, except in its effect of smoothing the waves at a much greater distance.

... a most delightful book Ben Franklin Stilled