A normal lipid

Archael glycerolipids

Phytanylglycerol diether

$$\begin{array}{c} \mathsf{HO}-\mathsf{CH}_2\\ \mathsf{CH}_2-\mathsf{O} \\ \mathsf{CH}-\mathsf{O} \\ \mathsf{CH}_2-\mathsf{OH} \end{array}$$

Dibiphytanyldiglycerol tetraether

$$\begin{array}{c} \mathsf{CH_2} - \mathsf{O} \\ \mathsf{CH} \\ \mathsf{CH} \\ \mathsf{O} \\ \mathsf{CH_2} \\ \mathsf{OH} \end{array}$$

Tetraether with bipentacyclic C40 biphytanyl chains

Figure 20.3 Archaeal Membrane Lipids. An illustration of the difference between archaeal lipids and those of bacteria. Archaeal lipids are derivatives of isopranyl glycerol ethers rather than the usual glycerol fatty acid esters. Three examples of common archaeal glycerolipids are given.