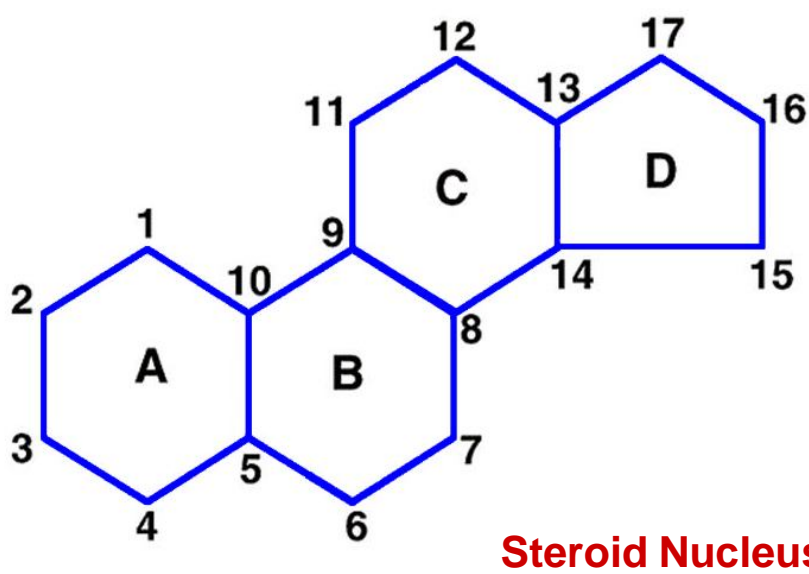
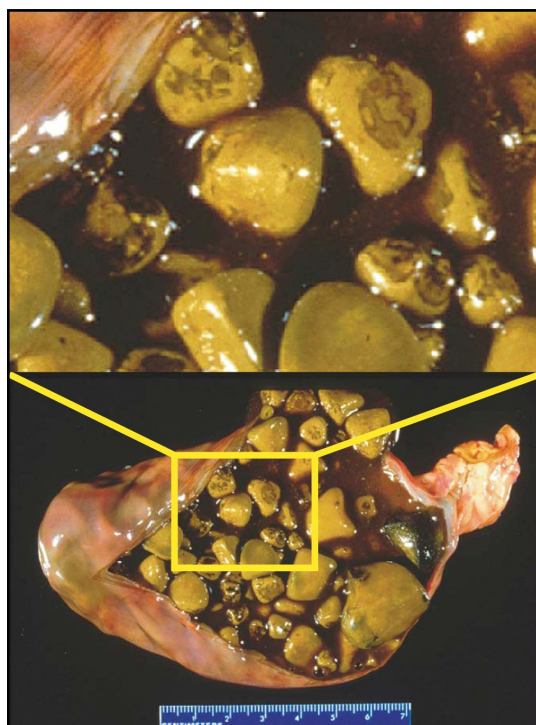
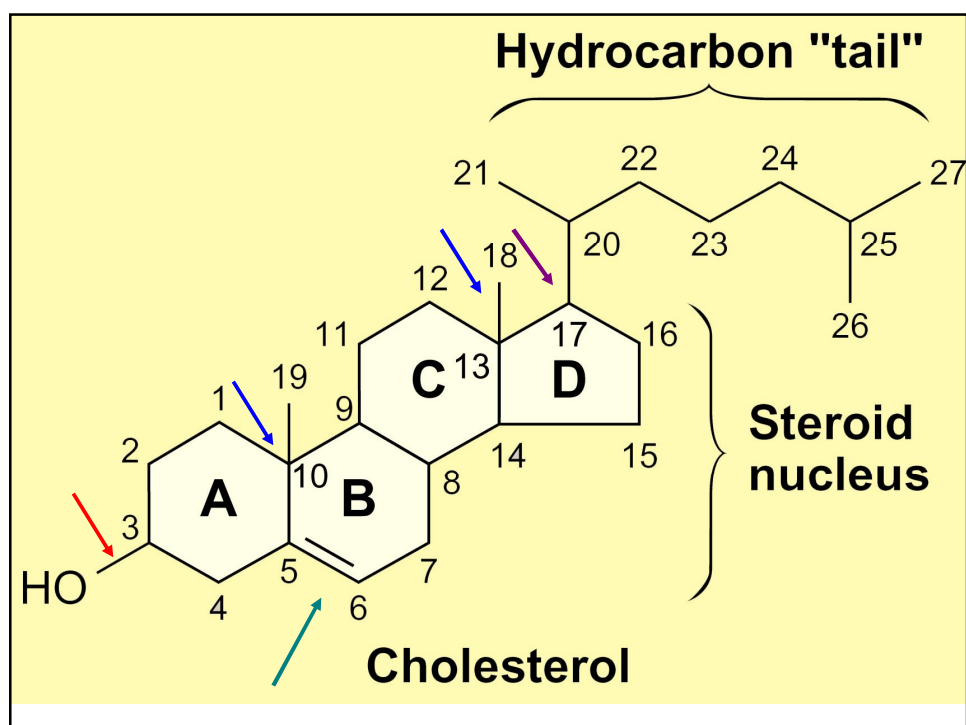


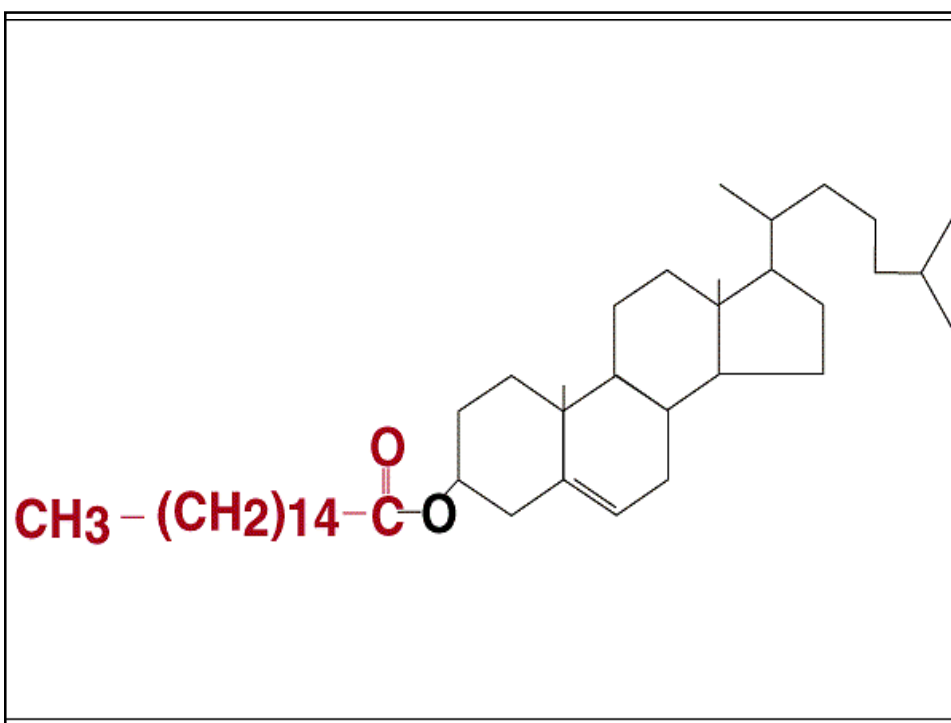
## Cholesterol Metabolism

Lippincott's Illustrated Review  
Chapter 18





Cholesterol was  
isolated from gall  
bladder stones  
in 1774



## Sources and Elimination of Cholesterol

Synthesis:  $\approx 1000$  mg

Liver, Small Intestine, Adrenal Cortex ...

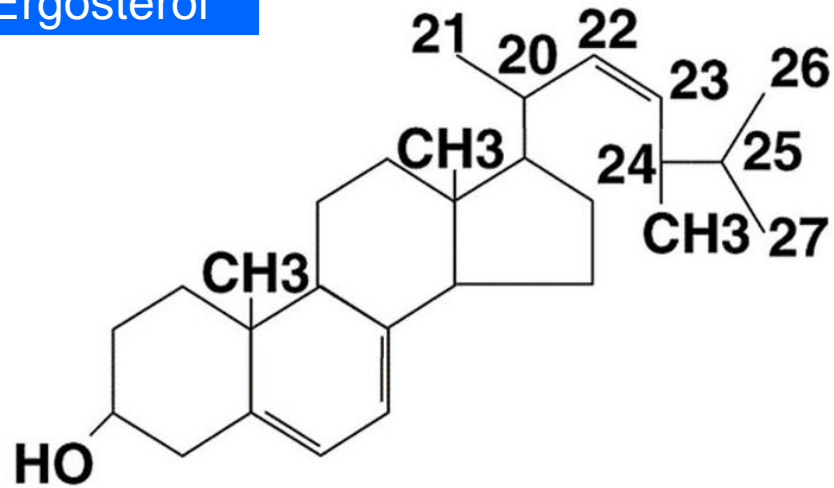
Dietary:  $\approx 300$  mg

( Low Cholesterol Diet)

**Elimination: Via the Bile**

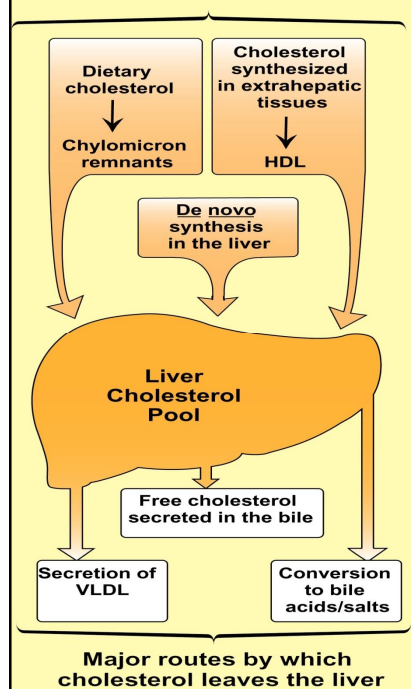
Cholesterol, Bile Salts

## Ergosterol



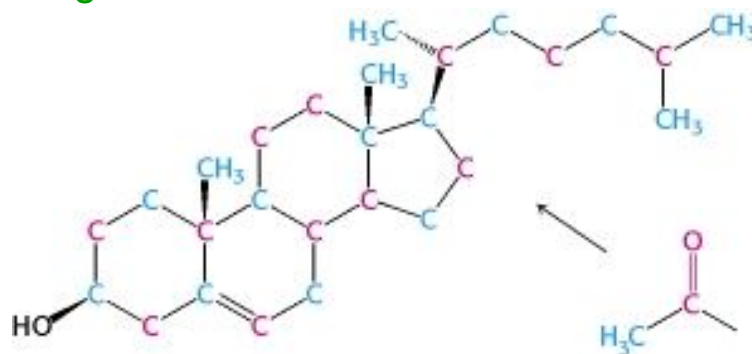
Plant Sterols are Poorly Absorbed by Human

## Major sources of liver cholesterol



## Cholesterol Synthesis Requires

- Carbon Source: Acetyl CoA
- Energy: ATP
- Reducing Power: NADPH
- $O_2$



## Stages in Cholesterol Synthesis

