

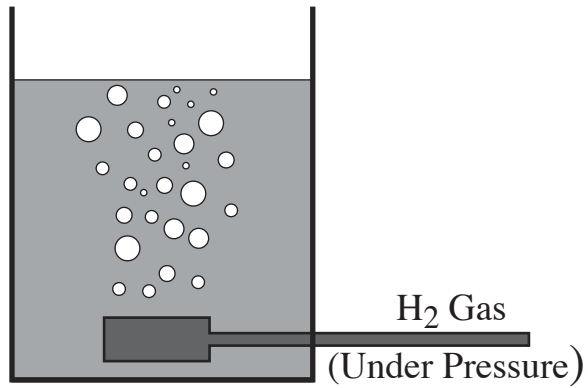
## Lipids

1. Introduction (Page 158 ff)
2. Characteristics of Lipids
  - A. Solubility
  - B. Energy - 9 kcal/gm
  - C. Structure
3. Triglyceride (Page 158 - 159, 161)
  - i. Glycerol
  - ii. Fatty Acids
    - a. Saturated
    - b. Monounsaturated
    - c. Polyunsaturated
  - iii. Saturation Effect: Fats and Oils (Page 161, see figure 6.5)
    - a. Fats
    - b. Oils
      - Effect on Cell Membranes
  - iv. Essential Fatty Acids (Page 159; also see HANDOUT)
  - v. Eskimos and Diet

## Nutrition - Lipids Outline

### 4. Trans Fats (Page 160 - 161)

#### A. Structural Differences



#### B. Hydrogenation Process

#### C. Purpose of Hydrogenation

#### D. Physiological Consequences

## Nutrition - Lipids Outline

### 5. Lipids and Emulsification (Page 160 - 161)

(Pull out handout on Emulsification)

- A. Phospholipid
  
  - B. Hydrophilic and Hydrophobic Characteristics
  
  - C. Emulsification
  
  - D. Emulsifiers
    - i. Lecithin
- 
- ### 6. Cholesterol (Page 164)
- A. Structural
  
  - B. Cholesterol Good or Bad
  
  - C. Foods High in Cholesterol
  
  - D. Cholesterol and Bile

## Nutrition - Lipids Outline

### 7. Lipid Transport in the Body (Page 165 - 168)

(Pull out handout on Lipid Transport)

### 8. Function of Fat (Adipose) Tissue (Page 168)

A. Importance of Fat Tissue

B. What Happens when Fat tissue is digested

### 9. Fat and Energy (Page 168)

A. Energy

B. Heart

C. Energy Needs