

1 **Fats and Lipids**2 **Questions**

- What should be the normal intake for fatty foods?
- What is the difference between lipids and fats?
- Aside from fattening, is ice cream really bad for you if you have low cholesterol?
- What are bad fats, lipids?
- How much total fat is considered healthy in a given food amount?
- How often can I eat fats?

3 **Types of Lipids**

- Triglycerides

Phospholipids

Sterols

All are found in the body and in foods

4 **Lipids Functions in the Body**

- Energy Stores
- Insulates vital organs
- Protection against temperature extremes
- Provide essential fatty acids
- Carry fat soluble nutrients

5 **Triglycerides**

- Organic compound
- Structure:

Classification:

6 **Triglyceride Structure**7 8 **Saturated Fatty Acids**

Definition

Composition

Food examples

9 **Monounsaturated Fats**

Definition

Composition

Food sources include:

- 10 **Polyunsaturated Fatty Acids**
 Definition

 Composition

 Food sources include
- 11 **Essential Fatty Acids**
 Definition
 Composition

 Functions of Essential Fatty Acids

 Fatty acid composition of US diets
- 12 **Omega 3 Fatty Acids**
 Functions
 Food sources
- 13 **Omega 6 Fatty Acids**
 Functions

 Dietary Recommendations

 Food sources include:
- 14 **Phospholipids**
 Definition

 Composition

 Solubility

 Functions
- 15 **Sterols**
 Definition

 Function

 Sources
- 16 **Digestion and Absorption of Lipids**
 Dietary Sources:
- 17
- 18 **Digestion and Absorption of Lipids**
 Non-Dietary Sources:
 -
- 19 **Lipids in Foods**
 Fatty Acids and Triglycerides
 Phospholipids:
 Cholesterol:

20 **Health Effects of Lipids**

Heart Disease

Obesity

21 **Dietary Fat and Serum Cholesterol Levels**

Saturated Fat and Trans Fats

Polyunsaturated Fat

Monounsaturated Fat

22 **Lowering Cholesterol and LDL with Diet**

Reduce Saturated Fat

Try to eliminate all trans fats

Limit dietary cholesterol intake

Substitute mono and polyunsaturated fats in place of saturated and trans fats

Increase dietary fiber and plants sterols/stanols

23 **Reducing Saturated Fats**

Avoid butter, lard, solid shortening, stick margarine, cream cheese, sour cream

Use lean cuts of meat; limit to 4-6 oz/day

Consume nonfat or lowfat dairy products

Reduce intake of cakes, cookies, pastries, ice cream

Limit oils, margarines, mayonnaise, salad dressings

Try to avoid tropical oils (coconut, palm)

24 25 **Increase Mono and Polyunsaturated Fats**

Monounsaturated

●

Polyunsaturated

Remember portion size is key!!!

26

Increase Omega 3 Fatty Acids

27

Reduce Dietary Cholesterol

- Limit dietary cholesterol to <200 mg/day
-

28

Increase Dietary Fiber

- Insoluble fiber:
- Soluble fiber:
-
-
- Goal:
-

29

Increase Plant Sterols/Stanoles

- Definition
- Function
- Recommended Intake
- Food sources