

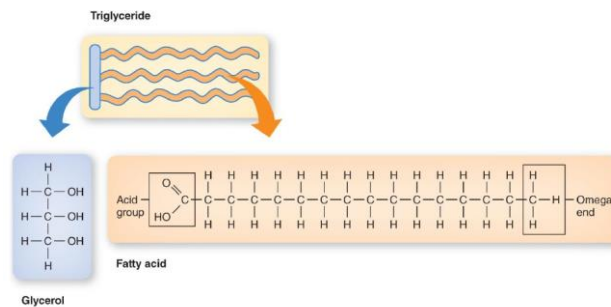
Read Chapter 5 Page 146-190

Define the following terms:

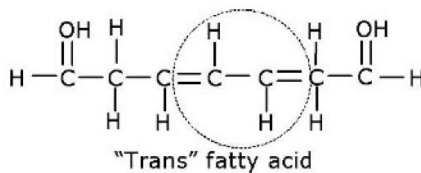
1. **Fats:** A lipid that is solid at room temperature
2. **Oils:** A lipid that is liquid at room temperature
3. **Saturated Fat:** A fatty acid that has no carbons joined together with a double bond, solid at room temp
4. **Monounsaturated Fat:** A fatty acid that has two carbons in the chain joined together with a double bond, liquid at room temp
5. **Polyunsaturated Fat:** A fatty acid that has more than one double bond in the chain, liquid at room temp
6. **Trans Fatty Acid:** They have the hydrogen atoms on opposite sides of the carbon chain.
7. **Hypertension:** High blood pressure.

Answer the following questions:

8. **Technically, what we commonly refer to as “fats” are actually scientifically called lipids. What is the difference between the two types of lipids (fats and oils)?** Fats – solid at room temp. Oils – liquid at room temp
9. **What does a triglyceride consist of?** Glycerol and 3 fatty acids
10. **Copy and paste an image of a simple triglyceride. Label the fatty acid and glycerol portions.**



11. **List 6 foods high in saturated fat.** Coconut oil, palm oil, butter, cream, whole milk, beef
12. **List 3 foods high in monounsaturated fat.** Olive oil, canola oil, cashew nuts
13. **List 4 examples of monosaccharides.** Glucose, fructose, galactose, ribose
14. **List 4 foods high in polyunsaturated fat.** Cotton seed, canola, corn, safflower
15. **Copy & paste an image of a Trans arrangement.**



16. **How does the majority of Trans Fatty acids get into our foods?** During food processing
17. **What is hydrogenation? Exactly why is it so harmful?** Under pressure, hydrogen molecules are added directly to unsaturated fats causing double bonds to be totally or partially removed. It's harmful because it creates Trans fats in the fatty acids that have their double bonds only partially removed.
18. **What is an omega-6 fatty acid?** A fatty acid that has its double bond 6 carbons from the end
19. **What is an omega-3 fatty acid?** A fatty acid that has its double bond 3 carbons from the end

20. **What foods are high in omega-6 fatty acid?** Sunflower, safflower, corn, soy, peanut oil
What foods are high in omega-3 fatty acid? Dark green leafy veggies, flax seed, soybeans, walnuts, canola.
21. **What is the daily recommended intake for omega-6 fatty acids?** Men – 14-17 g ; Women – 11-12 g
What is the daily recommended intake for omega-3 fatty acids? Men – 1.6 g ; Women – 1.1 g
22. **What are sterols and which is the most common in our diet?** A type of lipid found in foods and the body that has a ring structure. Cholesterol is the most common.
23. **Where is dietary cholesterol commonly found? Provide 5 examples.** Fatty part of animal products such as butter, egg yolks, whole milk, meats, poultry
24. **Why don't we need to consume cholesterol?** Our body synthesizes it
25. **List 4 reasons we need cholesterol.** Sex hormones, bile, adrenal hormones, vitamin D
26. **Fats provide energy. List 3 ways we use fat energy that we consume.** Energy source when at rest, fuel for physical activity, storing energy for later
27. **List 4 other reasons besides providing energy that we need fats.**
 Fats enable the transport of fat soluble vitamins
 Fats help maintain cell function
 Some stored body fat is essential (protects organs and insulates)
 Fats contribute to flavor, texture, and satiety (suh-tie-ity) of foods (make you feel full earlier and longer)
28. **What is the difference between visible and hidden fats?**
 Visible – easily seen because WE add it to our food
 Hidden – fats added to processed and prepared foods that we don't see
29. **What is the difference between the following?**
 Fat-free = less than 0.5 g fat
 Low-fat = 3 g or less fat
 Reduced fat = 25% less fat than standard product
 Light = 1/3 less cal or 50% less fat than standard product
30. **What is the recommended intake of saturated fats in terms of % of our calories?** 7-10% of our total cal
31. **List 3 specific "animal product" foods high in saturated fats.** Beef, pork, lamb
32. **List 6 specific "grain product" foods high in saturated fats.** Pastries, cookies, muffins, tortilla chips, popcorn, crackers, packaged rice and pasta mixes
33. **List three specific "vegetable product" foods high in saturated fats.** Veggies fried, breaded, or drenched in sauces
34. **List 6 controllable risk factors for cardiovascular disease.**
 Overweight
 Physical inactivity
 Smoking
 Type 2 diabetes
 Inflammation
 Abnormal blood lipids