

Chapter 17 – Fatty Acid Catabolism

17.1 Digestion, Mobilization, and Transport of Fats

The following sub-sections are important:

- The Introduction
- Dietary Fats are Absorbed in the Small Intestine
- Hormones Trigger Mobilization of Stored Triacylglycerols
- Fatty Acids are Activated and Transported into Mitochondria

17.2 Oxidation of Fatty Acids

The following sub-sections are important:

- The Introduction
- The β -Oxidation of Saturated Fatty Acids Has Four Basic Steps
- The Four β -Oxidation Steps Are Repeated to Yield Acetyl-CoA and ATP
- Acetyl-CoA Can Be Further Oxidized in the Citric Acid Cycle
- Oxidation of Unsaturated Fatty Acids Requires Two Additional Reactions
- Complete Oxidation of Odd-Number Fatty Acids Requires Three Extra Reactions
- Fatty Acids are Tightly Regulated