

(a)

(b)

FIGURE 5.2 Fatty Acid Synthesis. (a) In the preliminary reaction (catalyzed by acetyl CoA carboxylase), carbon dioxide provides a carbon to acetyl CoA, resulting in malonyl CoA. (b) The next reaction is the attachment of acetyl CoA and malonyl CoA to the condensing enzyme and acyl carrier protein (ACP) of the fatty acid synthase (FAS) complex. (c) The next reaction occurs when a second acetyl group, associated with an ACP, is utilized and attached to malonyl CoA.

