



FIGURE 2.34. Allosteric interactions between the subunits of hemoglobin help it load and unload oxygen efficiently. When oxygen is bound to the iron atom at the center, the heme group is flat (red). When oxygen is released, the heme group pushes upward, displacing the attached histidine (arrow). This moves the protein chain (upper cylinder), and breaks the links between the salt bridges that link two halves of the molecule. This in turn distorts other heme groups, making it easier for them to unload oxygen.

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