



Figure 10.12 A histidine sidechain interacting with an aspartic acid sidechain in hemoglobin. The proximity of the negatively charged aspartic acid group will favor the protonated and positively charged histidine sidechain, because of the stronger ion pair that results. The aspartic acid sidechain increases the pK_a value of this histidine sidechain. The importance of this interaction for the function of hemoglobin is discussed in Chapter 14 (see Figure 14.25).