



FIGURE 14.27. Multiple sites interact to determine the concentration of protein produced by the *Adh* gene. (A) Eight different constructs were made by combining regions (A, B, and C) from either a *fast* (F) or *slow* (S) allele. These alleles are distinguished by a nucleotide change at position 1490, which causes the amino acid change shown in the table (B). (C) For each of these eight constructs, accurate measurements were made of the *Adh* protein concentration in adults. Thus, when region A is derived from the F allele, concentration is consistently increased by 32%. In region B, sequence derived from F *decreases* concentration by 10% (*middle* histogram), whereas in region C, F-derived sequence increases concentration only when region A is also derived from F (*right* histogram). *Bars* show standard errors.

14.27A,B, redrawn from Stam L.F. et al., *Genetics* **144**: 1559–1564, © 1996 Genetics Society of America