



FIGURE 19.3. (A) The F allele of *alcohol dehydrogenase* increases in frequency in three replicate laboratory populations of *Drosophila melanogaster* that are exposed to ethanol. The red lines show control populations and the blue lines show populations with 15% ethanol added to the food. (B) The F allele, defined by a substitution of threonine for lysine, increases in frequency northward along the east coast of the United States.

19.3A, modified from van Delden W. et al., *Genetics* **90**: 161–191, © 1978 Genetics Society of America; 19.3B, modified from Berry A. et al., *Genetics* **134**: 869–893, © 1993 Genetics Society of America