



FIGURE 18.29. Alternative explanations for inbreeding depression. With overdominance, outbred individuals are fitter because they are more likely to be heterozygous for different alleles at overdominant loci (different alleles indicated by *circles*, *crosses* on *left*). If deleterious recessives are responsible, then outbred individuals tend to be fitter because their two genomes carry different combinations of recessive deleterious mutations (*upper right*). In contrast, inbred individuals are more homozygous, so that the harmful effects of the recessive alleles are expressed.