- Genotype - and Allele-frequencies give a description of the current status of a population with respect to a given locus.

- What happens from parents to offspring?

  Assume: $f(G_1) = p$; $f(G_2) = q = 1-p$

  Random mating: (Idealized population of infinite size)

Alleles	G_1	G_2
→ G_1	$f(G_1G_1) = p \cdot p = p^2$	$f(G_1G_2) = p \cdot q$
→ G_2	$f(G_2G_1) = q \cdot p$	$f(G_2G_2) = q \cdot q = q^2$

- Summary: $f(G_1G_1) = p^2$; $f(G_1G_2) = 2 \cdot p \cdot q$

  $f(G_2G_2) = q^2$