

Additive model of polygenic inheritance

Polygenic inheritance refers to a single characteristic that is controlled by more than two genes (also known as multifactorial inheritance). Polygenic inheritance patterns normally follow bell-shaped distribution curve that describes its continuous variation. By increasing the number of genes controlling a trait, the number of phenotype combinations also increases.

For Example skin Color: The colour of human skin is determined by the amount of dark pigment (melanin) that it contains. At least four (possibly more) genes are involved in melanin production. For each gene one allele codes for melanin production (contributing), the other does not (non-contributing). The combination of melanin producing alleles determines the degree of pigmentation.

Another example referring to the human body would be height.

Links

- Polygenic inheritance