

Twin Models *

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The theoretical relationship between the distribution of a given trait in a population of twin pairs and several genetic parameters has been examined. In particular, a series of mathematical models has been worked out, that, when applied to a twin population, nonselected for the occurrence of a given trait and nondiagnosed as to zygosity, leads to an estimate of:

- 1) The MZ : DZ ratio in the population;
- 2) The frequency of the genotype responsible for a given trait;
- 3) The probability of manifestation of the trait;
- 4) The value of epistatic factors.

A further mathematical model affords the estimate of linkage in the hypothesis of simultaneous recording of more than one trait.

* The full paper is being prepared and will soon be published.

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