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Phenotype

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Synonyms

[Trait](#)

Definition

Phenotype refers to the observable characteristics of an organism. Simply put, the phenotype results from the expression of the genotype within the

environment. For example, preference for alcohol in inbred strains of mice is a measurable and quantifiable phenotype. In Mendel's experiments with the pea plant (*Pisum sativum*), the phenotypes of the stem length of the plant and the shape of ripe seeds within the pods were observable and quantifiable. Behavioral and neurological phenotypes may be more challenging to quantify, but the principles remain the same. The challenge for the student of behavioral phenotypes is to understand the nature of the processes by which the phenotype results from the expression of the genotype within the environment.

Cross-References

► [Genotype](#)