Source: KBhBIO101MutationsAllealsInheritance

0.1 | Genetic Inheritance

As seen on "Blood Types!"

RBCs have various carb styles. The presence/absence of two carb modifications cause the difference of A&B blood types.

One gene controlls the outcome: A&B genes create attachment to two different carbohydrates, A, B respectviely; O gene encodes a lack of enzyme function, which means no carb modification. A person, of course, has two alleals. If a person that has one A alleal and one B alleal, both A&B are expressed.

- A => AO, AA
- B => BO, BB
- AB => AB
- O => OO

(psst… this :point_up: is a pundett square, just not in the square form because that's apparently "too easy" and "does the work for you").

O is the "recessive" trait: that anything like A or B will overtake the O enzyme

- AB+O => A, B, 50% split
- (AO|BO) + AB => A (50% => AO, 25% => BO), AB (25%), B (25% => AO, 50% => BO)

These probabiltiy are not considered as a process by which these probabilities are independently assorted into children (1/6 recision probablity does not mean that the recessive gene will express in one out of six children.) Instead, it means that EACH child has 1/6 chance of the abnormality.

For more, see KBhBIO101GeneticInheritance