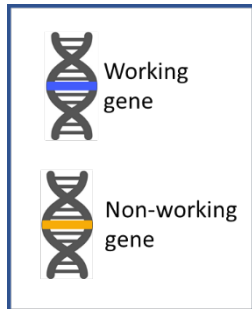
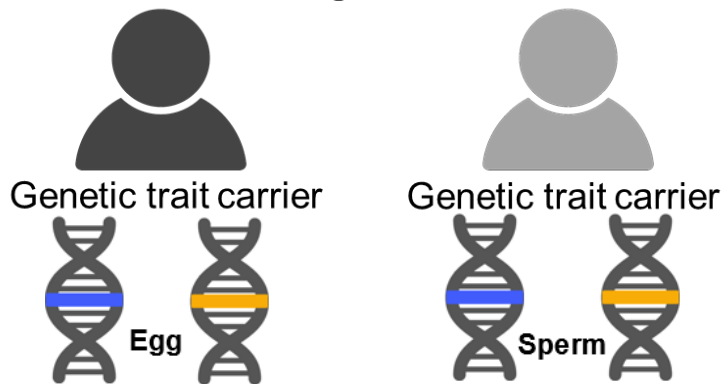


Autosomal Recessive Inheritance



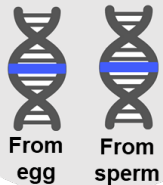
Two parents who are carriers for the same genetic condition



In any pregnancy there is a 1 in 4 chance for a child to have the genetic condition.

1 in 4 chance (25%)

No genetic condition
Not a carrier



2 in 4 chance (50%)

No genetic condition
Genetic trait carrier

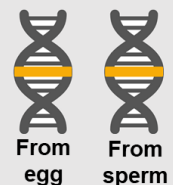


No genetic condition
Genetic trait carrier



1 in 4 chance (25%)

Genetic condition



Basic Facts About Autosomal Recessive (AR) Inheritance

- Both biological parents must be carriers for the same condition (same gene).
- When both parents are carriers, there is a 3 in 4 chance (75%) that a child will NOT inherit the genetic condition.
- The chance is the same in each pregnancy, no matter what happened in a past pregnancy.
- The sex of the child does not affect the chance to inherit the genetic condition.
- Genetic testing can be done on a baby.
 - Before getting pregnant (in vitro fertilization/embryo testing)
 - During pregnancy (prenatal diagnostic testing)
 - After birth (usually by a blood test)

Examples of Autosomal Recessive Conditions:

- Spinal muscular atrophy
- Cystic fibrosis
- Sickle cell disease
- Alpha thalassemia
- Beta thalassemia
- Tay Sachs disease