



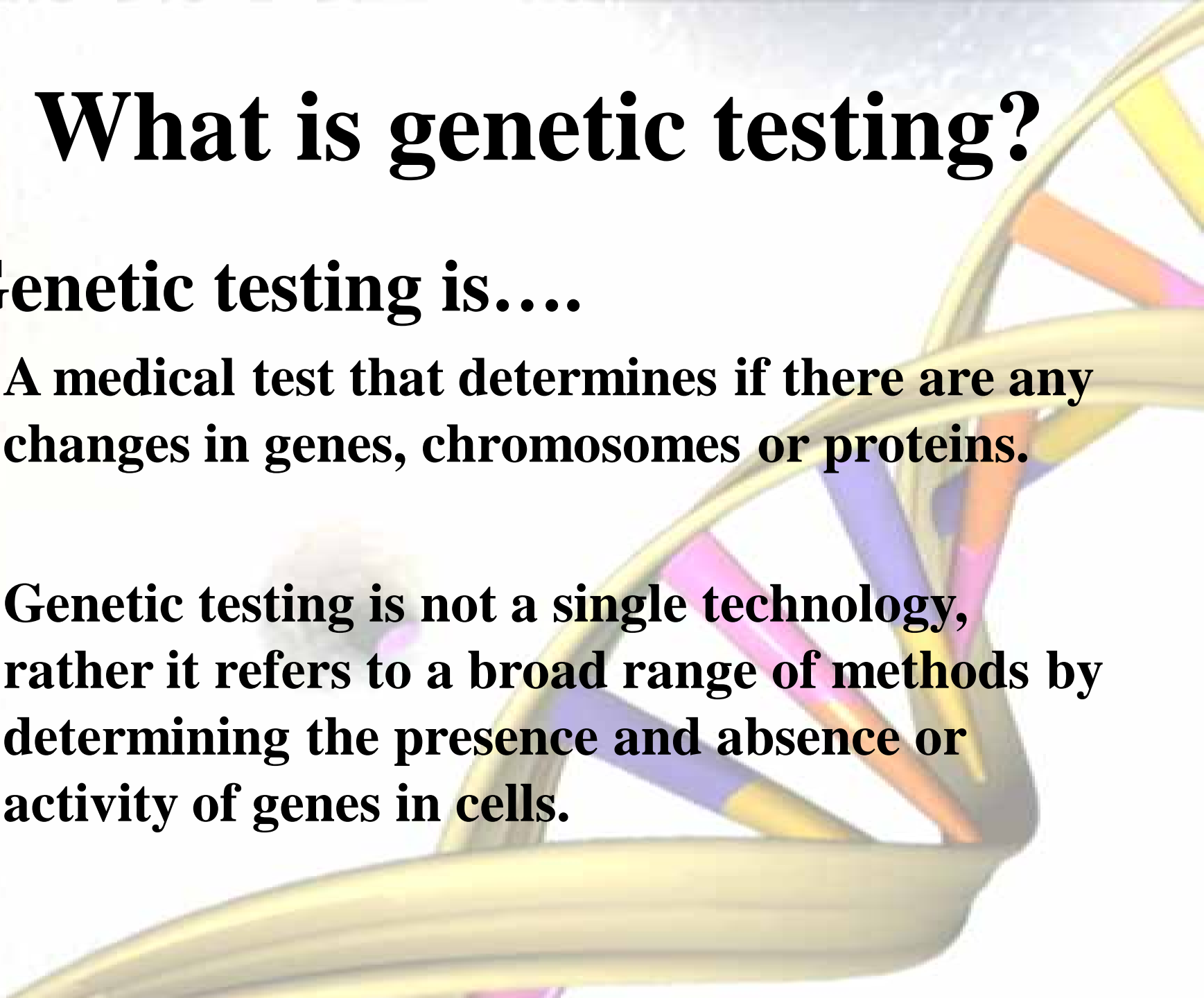
Genetic Testing

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What is genetic testing?

Genetic testing is....

- A medical test that determines if there are any changes in genes, chromosomes or proteins.**
- Genetic testing is not a single technology, rather it refers to a broad range of methods by determining the presence and absence or activity of genes in cells.**



Types of genetic tests



- **Gene tests**

- **Samples of a person's DNA is taken from their blood, body fluids or tissues to determine if there are any signs of disease or disorder.**
- **Examples: Newborn screening, prenatal, preimplantation, diagnostic, carrier, predictive, presymptomatic testing**

More types of genetic tests



- **Chromosomal tests**
 - These look at the structure, number, and arrangement of an individual's chromosomes.
 - Chromosomal tests identify any changes, such as chromosomes being switched or in a different location.
 - Examples: Diagnostic and preimplantation testing

More types of genetic tests

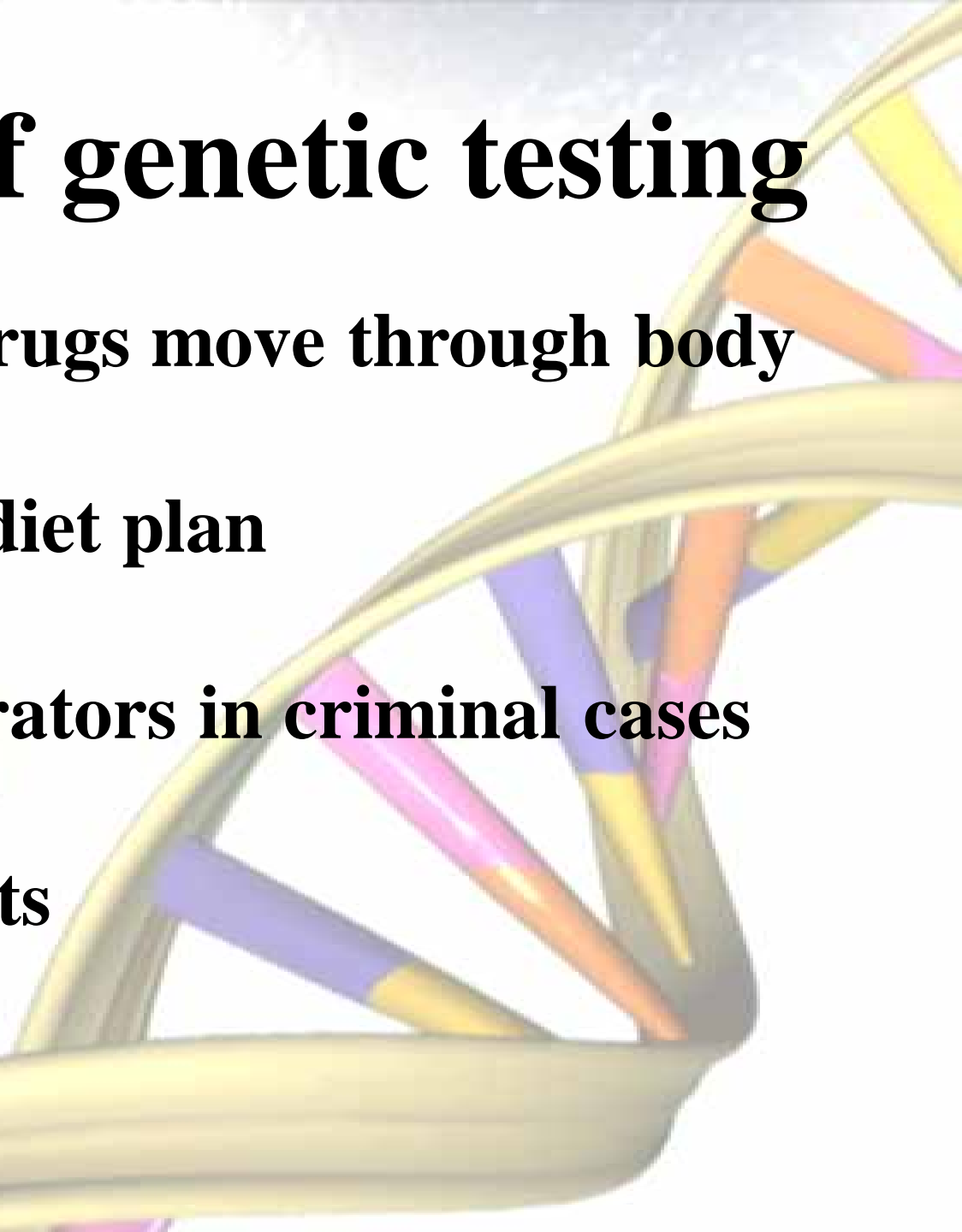


- **Biochemical Tests**

- **Tests that look at the level of key proteins.**
- **This level informs us of the genes that are not working properly.**
- **Examples: Newborn screening**

Benefits of genetic testing

- **Discover how drugs move through body**
- **Individualized diet plan**
- **Identify perpetrators in criminal cases**
- **Screening infants**



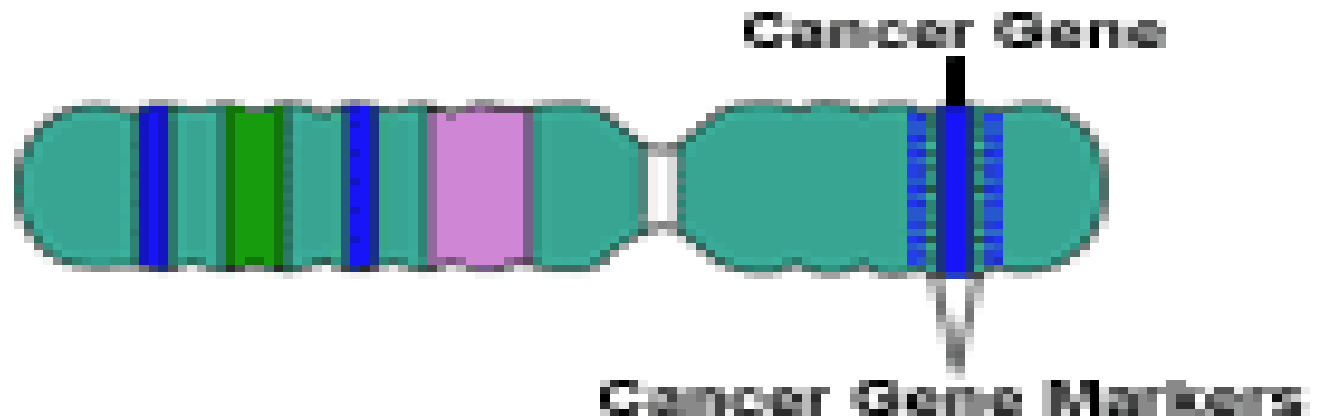
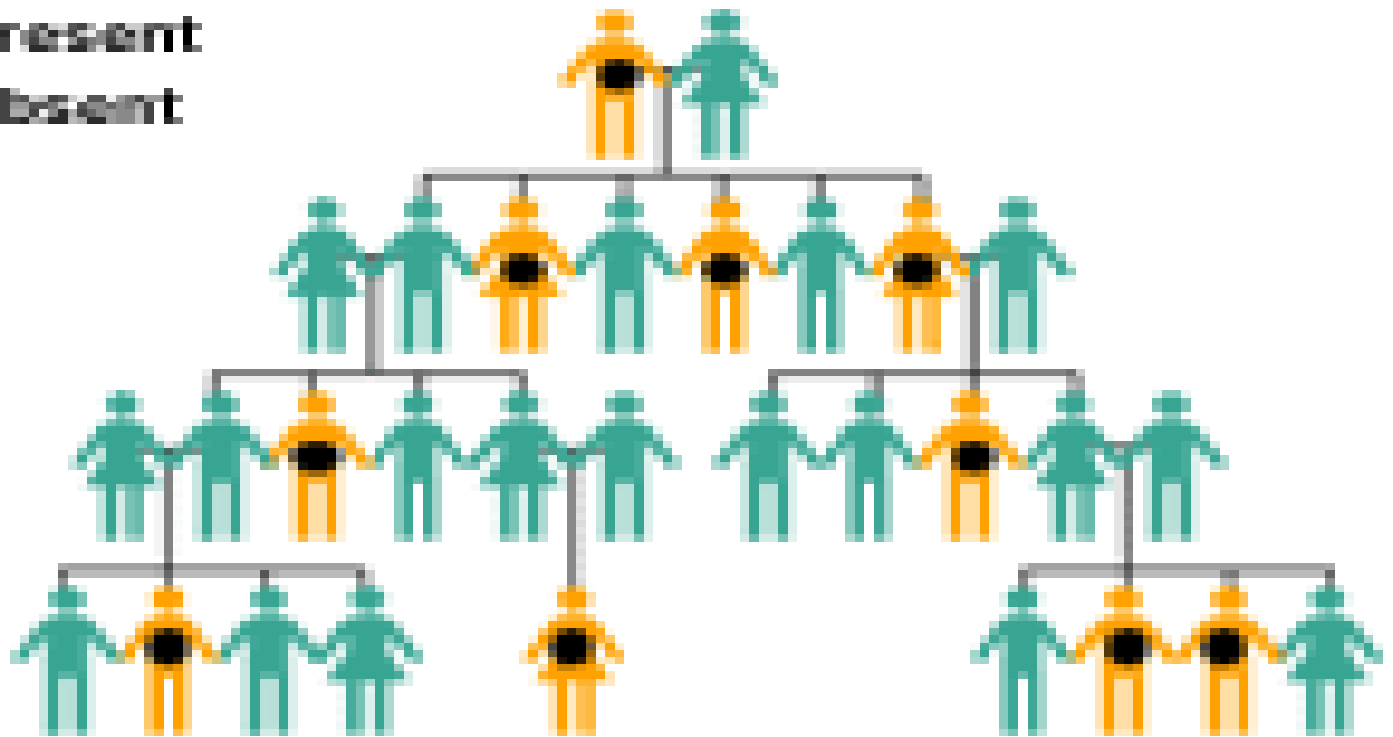
Benefits of genetic testing



- **You can confirm a diagnosis when a person has signs or symptoms of a genetic disease.**
- **Can show which people have a higher chance of getting disease before symptoms appear.**
- **Can show which family members are at risk for certain genetic conditions.**
- **Can tell individuals if they are carriers of a gene alteration for a type of inherited disorder.**
- **Can provide you with information about your ancestral roots.**

Disease Families

-  Disease Present
-  Disease Absent



Risks of genetic testing



- **Confidentiality**
- **Discrimination**
 - Employers**
 - Insurance companies**
- **Difficulty in interpreting results**
- **Negative feelings**



Genetic Testing Home Test Kits \$100