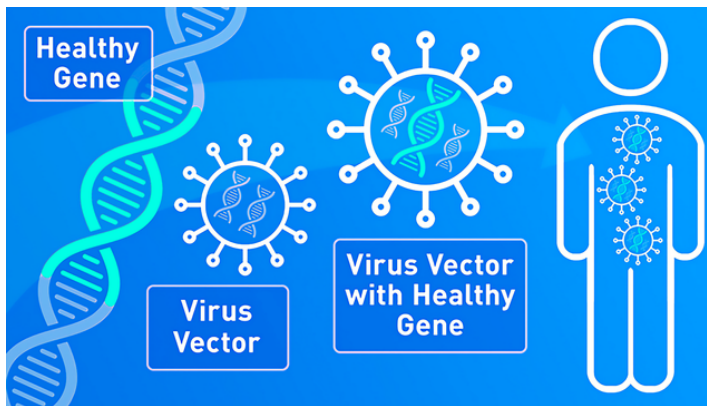




WHAT IS

GENE? THERAPY?

Gene therapy means any medical treatment that changes a person's DNA to fight disease. This can include replacing or inactivating a disease-causing gene, or introducing a new or modified gene to fight disease.

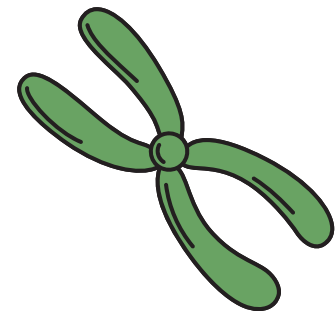


WHAT IS A GENE?

Like the software in a computer, genes are biological instructions written in the code of our DNA. They tell our bodies how to build themselves, make proteins, and keep us alive and healthy.

HOW IS GENE THERAPY PERFORMED?

To perform gene therapy, the new DNA doctors want to deliver to the patient must be packaged inside a harmless virus. This harmless viral vector can't multiply or cause disease - it can only "reprogram" the cell's DNA to fix the bad genes or add healthy genes.



WHAT DISEASES CAN GENE THERAPY FIGHT?

Gene therapies are especially promising in the fight against **cancer** and **rare diseases**. Against cancer, gene therapy can reprogram cells from a patient's own immune system to hunt down and destroy cancer cells in their body. Against rare diseases like Cystic Fibrosis or Huntington's Disease, gene therapy can inactivate a disease-causing gene or replace a defective gene copy with a functional one.



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