

UBA AMALACHUKWU

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PHARMACOLOGY

Discuss in details the aspects of medical biotechnology

is the use of living cells and cell materials to research and produce pharmaceutical and diagnostic products that help treat and prevent human diseases. There are numerous methods applied to biotechnology such as gene treatment, recombinant DNA technology. A more targeted approach is called polymerase establishment revenge which uses genetics along with DNA particles to make a projected illness and put in replace them with healthy genes in the physical body in place of the harmed cells.

Medical biotechnology has improved tremendously in the recent decades, which lead to the multiple innovative techniques that aim to prevent, diagnose and treat diseases. More advanced and innovative methodologies include genomics, pharmaceuticals, DNA sequencing, cell culture, interference RNA, and genome editing have effectively improved the growth and understanding of health science, through gene sequencing, stem cells for regenerative medicine, tissue engineering, and antibiotics. Modern biotechnology plays a crucial role both in the elucidation of the molecular causes of disease and in the development of new diagnostic methods and better targeted drugs. Biotechnology is commonly used to improve medicines due to the advantages and pieces of knowledge it provides such as understanding the genetic composition of the human species, foundational structure of hereditary diseases manipulation and repairing of damaged genes to cure diseases. Medical biotechnology helps scientists and health professionals treat patients better and also aids in successful genetic engineering.

It is widely accepted that any medicine created with or extracted from living cells is recognized as a biotech therapy, or biologic. For many years, the produced biologics medicines are used as insulin and certain vaccines. Biologics were created after the introduction of genetic engineering.