**What are Stem Cells?**

Human stem cells are unique cells with the capacity to differentiate into a wide variety of cell types. This can include everything from brain to muscle cells. They occasionally can also repair harmed tissues. Stem cell-based therapies may one day be used to cure severe ailments like paralysis and Alzheimer's disease, according to researchers.

**Types of stem cells**

Stem cells are divided into 2 main forms. They are embryonic stem cells and adult stem cells.

**Embryonic stem cells**. Today's research uses embryonic stem cells derived from unborn children. In vitro fertilization was used to create them. These are gifts to science. These stem cells are pluripotent embryonic stem cells. They can therefore differentiate into various cell types, according to this.

**Adult stem cells** can be of two different sorts. One type originates from tissues that are completely grown, like the bone marrow, skin, and brain. These tissues only contain a very modest amount of stem cells. They are more likely to produce only particular cell types. For instance, a stem cell from the liver will only produce further liver cells.Incremented pluripotent stem cells are the second kind. These are adult stem cells that have undergone laboratory modification to resemble embryonic stem cells more closely. In 2006, researchers made the initial disclosure that these changes to human stem cells were possible. Although induced pluripotent stem cells appear to be similar to embryonic stem cells, they have not yet been found to have the ability to develop every kind of cell and tissue.

**Stem cells in medicine**

Hematopoietic stem cells are the only type of stem cells now employed to treat illness. These adult stem cells, which can produce blood cells, are located in the bone marrow. In the bone marrow, stem cells are the precursors to every type of blood cell. Immature stem cells can develop into other blood cells that are mature and capable of performing the required functions.

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