

Stem Cells -Pearson

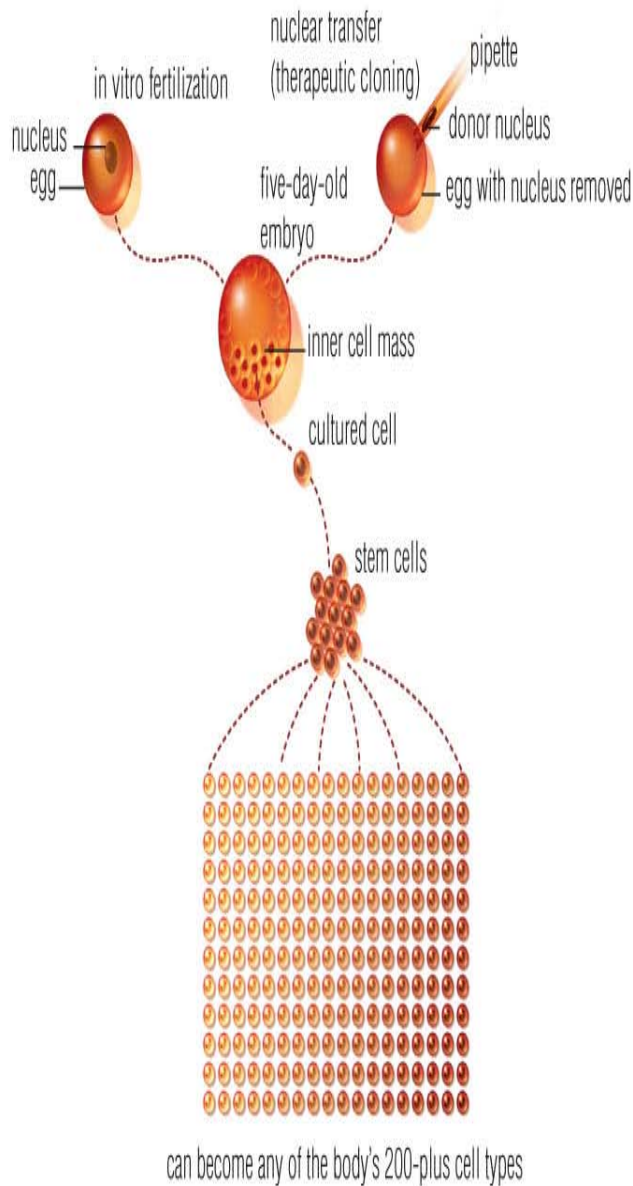


Figure 1.41 Most stem cells used for research are taken from embryos created by in vitro fertilization. The process occurs when the egg is fertilized under laboratory conditions. Scientists are also working on getting cells from embryos produced by therapeutic cloning, in which the nucleus of a skin cell, for example, is inserted into an egg whose nucleus has been removed. Either way, after five days scientists transfer the embryo's inner cell mass — with its 40 or so stem cells — to a lab dish where the cells can reproduce. After many months, the original stem cells have grown into millions of healthy cells without beginning to differentiate into specialized cells.