

## *A Brief History of Stem Cell Therapy*

The term stem cells has been around since the nineteenth century, when German scientist and biologist Ernst Haeckel coined the phrase for scientific literature.

In the 1950s, these life-giving cells were widely used in the treatment of leukemia. Since that time, much more has been learned about the various health issues that can benefit from the use of stem cells.

People tend to think that stem cells are a brand-new phenomenon that landed on Earth in the past few years; however, in reality, they've been around for a very long time. Let's take a minute for a historical perspective. As far back as the 1800s, scientists recognized that cells are the building blocks of the body and that a particular type of cell could duplicate itself. In the early 1900s, they discovered this duplicating cell in blood. And by the 1950s and early 1960s, they found the cell in bone marrow.

In the early 1960s, and possibly as late as 1968, the first successful bone marrow transplant took place, involving two siblings who had a condition called combined severe immunodeficiency. By 1978, scientists had discovered these duplicating cells in umbilical cord blood. It wasn't until 1988 that they were able to find these cells in adipose (fat) tissue. These duplicating cells are what we now know as stem cells.

Well, with the discovery of stem cells in adipose tissue in the 1980s, it was just a matter of a few years before stem cells were identified in every tissue in the body. This created an explosion of research and a lot of excitement and new therapies were associated with stem cells. Over the course of the next several years, scientists began to realize that stem cells from our own body have some limiting factors. These limiting factors, the quality and quantity of those cells, are based specifically on our age and our health.