

What are the causes of type 1 diabetes?

In our body, there is an organ the size of an inch just behind our stomach called the pancreas. In this organ, which has many functions, there are 1 million structures called "islets", each of which containing 50,000-350,000 cells.

There are 3 types of cells in islets.

We are most concerned with beta cells, which secrete insulin, and alpha cells, which secrete glucagon, a hormone that raises blood sugar.

For an unknown reason, the soldiers, who provide the defense of our body, one day begin to react against these beta cells. Normally, the soldiers who provide the body's defense never react to their own cells. But a sudden confusion or an unexpected development causes these cells to gradually break down. When the number of disintegrating cells increases there may be no cells left to produce insulin. As a result, the body becomes unable to produce insulin and type 1 diabetes occurs.

In fact, as soon as this breakdown process begins, insulin deficiency does not occur immediately. The remaining cells begin to work as hard as possible to do the work of the destroyed cells. If the total amount of remaining cells falls below 20 percent, then type 1 diabetes occurs.