Introduction: The theories of evolution of life on Earth have been based on the principle of storing and transmitting information of organisms in the genes, which according to the sequence of nucleotides could form proteins [1]. This is so far the protocol of the evolutionary principle of life on Earth. This process since “not live” to “live” requires a neutral intermediary: the prion protein, or prion, is without cell and transferable skills these features make it to be an ideal candidate to be the first catalyst for life on our planet. More recent theories suggest that prions are proteins modified under certain circumstances such as changes in temperature, pressure or pH favored fall to a very stable energy level, allowing his return for three-dimensional conformation [2].

Discussion: The research aimed to describe the nature of prions and aggregates forming showed prion protein-organisms in their natural state, in a manner unrelated to illness [3]. Models in Fungi, particularly in *Saccharomyces cerevisiae*, have allowed observing the functions that could have prions in the life of normal cells. In these organisms, prions functions as the metabolic regulation of nitrogen. They also act as mechanisms of heredity phenotypes, in the role of evolutionary catalysts, and increasing genetic diversity by introducing new regions at the ends of the genome [4] (Weissmann, et al. 2004).

The ability to store information conformational of prions makes them eligible to take part in cellular processes that require stability for long periods and it is possible that they are primitive cellular mechanisms. It is likely that prions have been involved and participate in processes like the formation of the chemical long-term memory, immunological memory and evolution of the genome of many organisms [5]. Ultimately, prions are a means to update and transmit heritable characteristics confirmed that genes are not the only elements involved in inheritance and storage of information, so that while they do the genes in the genome, prions do so at of proteome for modifying an individual’s life and transmit these characters acquired vertically and horizontally allowing the evolution of life [6].