Biology and Life Sciences

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Many philosophers and religious scholars attempted to find out the beginning of life and finally they concluded that such questions cannot be answered due to the complexity of the question. Still, there are attempts to answer this question and in order to do that there should be some information first. In modern biology, it is a common belief that life is a continuous process in which living cells give rise to a new type of cells which results in new individuals. Therefore, the fundamental information that is required in this case is that to find out that when a new cell which is absolutely different from the sperm and egg comes to existence? When an egg and sperm fuse with each other they produce zygote which is a new cell type. This zygote contains all the main components of both egg and sperm and within this single cell there is a complete and vast plan for the development of a complete organism. Therefore, it is safe to say here that the zygote that is formed by the fusion of both sperm and egg is the beginning of a new life (“A Scientific View of When Life Begins | Charlotte Lozier Institute,” n.d.).

The reproductive system is vital in the human body in order to maintain the homeostasis. In case of the female body the reproductive system helps to maintain the homeostasis by regulating the pH of vagina while in case of the male, homeostasis is maintained by controlling and regulating the overall temperature of the testis (“The relationship between the reproduction system with homeostasis | Shanthini Dorairajoo - Academia.edu,” n.d.). There are various homeostatic mechanisms in the body that helps to keep the internal environment of the body within certain limits if these cells do not function correctly then homeostatic disruption happens. This homeostatic imbalance leads to a proper state of diseases and a well-known and most common example of homeostatic imbalance is diabetes. In case of diabetes, the endocrine system is unable to maintain the blood glucose level, therefore, this condition occurs when there is a certain homeostatic imbalance which depends on both genetics and also lifestyle of the individual.

There are four patterns of inheritance that include the autosomal dominant, autosomal recessive, X-linked dominant and X-linked recessive however it is also true that not all the genetic conditions follow these patterns, there are also some very less known pattern of inheritance as well which are called the mitochondrial inheritance. The pattern of inheritance plays a very significant role at the beginning of life because these genes that play a significant role in inheritance carry all the important information from parents to the newborn and that way the genetic information is inherited from the parents to the offspring and also the genes are helpful in determining sex of the offspring therefore at the beginning of life the pattern of inheritance that is determined by genes play a very important role (“INHERITANCE PATTERNS - Understanding Genetics - NCBI Bookshelf,” n.d.)

The source that I used for the inheritance pattern is taken from the NCBI website. I found this source credible and reliable because in this source the facts about the inheritance patterns are listed without comparing the information or facts with other sources and also most of the information that is present on this site are authentic and included only after the fact is supported with scientific evidence and research. Therefore, this source that is used in this paper is reliable and unbiased.

**Reference**

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