Abstract

Now a day Diabetic is the most important metabolical disease.That a large number of Worlds population are involved with it.The health system of various parts of the world spends a lot about this issue directly or indirectly. Being exposed to suger,in addition to different effects on different organs such as kidney and liver ,it causes some changes either in protein or nuclec Acid.Glycation has a very prominent ole in various disease,it has alsocauses Genetic instability .According to structural feature of keton body Acetoacetate and producation of free radicals.This keton body can be impressive in the proccess of tie among Glucose to DNA and protein.The Current study attempts to study the effect of Keton body Acetoacetate on the proccess of connection of Glucose to DNA in quas physiological condition for four weeks by using various methods such as fluorscence spectroscopy, UV-Visible Spectroscopy, Circular Dichorism and Gel electrophores.The result of Fluorescence Spectroscopy and UV-Visible Spectroscopy indication that the amount of Glycation DNA which is produced in the presence of Acetoacetate had increased.Moreover, the result of UV-Visible Spectroscopy, Circular Dichorism,Fluorescence spectroscopy and Gel electrophores has shown increase in structural changes of DNA in the presence of Acetoacetate.Generally, the result of this study indicates that Glycation of DNA in the presense of Keton Body Acetoacetate causes the incrise in physical and chemical changes in DNA structure and it makes DNA ready for a mutation in the condition of situation of Cytosine.

Keyword:DNA, glycation, Acetoacetate

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