

difference probably resides in the fact that diabetes is a more severe form of disorder than chemical diabetes, but is chemical diabetes insignificant? It is not.

Chemical diabetes is significant, and I will come to this point later on in my testimony.

Now, we made observations of these abnormal glucose tolerance curves other than those that I have reported here. We found reason to suppose that the impairment in glucose tolerance was equivalent to that which would be found in women if instead of taking oral contraceptive medication they were being cortizoned. We are all familiar with what cortizone is. We are all familiar with the fact that cortizone produces metabolic changes, and for reasons which are fairly elaborate need not be gone into, but let me say have never been contradicted.

For reasons which we think are sound we believe the impairment of glucose tolerance in these women was equivalent to the disorder produced by an excess of cortizone in the body, and therefore we were entitled to call this abnormality steroid diabetes.

I will return subsequently to further studies which we carried out in this field. But at the same time, because we felt that the blood fat pattern in the blood might be altered by these compounds, we examined the situation, and we found that in a large number of women, there were abnormalities in the fats circulating in the blood.

Now if you will turn to page 8 you will see a diagram in which there are dots on one side of the diagram over the heading "Controls" and the other side of the diagram you will see triangles over the heading "Mestranolethynodialdiacetate" commonly called Ovulex.

Now the dots are lower than the triangles. The triangles are higher than the dots. What this indicates is that this particular fat which we are measuring, which is called triglyceride, a long name and one need not bother too much about it, the triglyceride in the blood is higher in the women taking oral contraceptive medication than in those not taking it, and substantially higher. At least one-third of the users had triglyceroid values higher than the highest value we found in our control subjects.

Now again what is the significance of abnormal triglyceroid values? I cannot answer that question precisely, but that it does have significance, that I believe, and I will return to the subject later. It has been the subject of a tremendous amount of investigation and discussion amongst biologists of various sorts.

Now, we found not only that the triglyceroid was high. We found that the cholesterol was also higher in women taking the pill although the elevation was small. I am sure that there is no need for me to tell an American audience the significance of having your cholesterol levels elevated, since there is so much propaganda in the press, medical, and lay, indicating the importance of having your cholesterol lower, if you can possibly achieve it.

We also, by carrying out more sophisticated type of analysis, studied the actual nature of the circulating fats. Now there is a long name associated with these. The name is lipoproteins, and I do not wish to dwell on it because it is a chemical problem, a complicated one, but we studied the nature of the circulating life of protein, and we found