

and I published several papers which are listed in my curriculum vitae dealing with this medication and its harmful and dangerous effects.

Now these anabolic steroids were in fact the forerunner of the oral contraceptives, and it would be true to say that the chemical modifications which the steroid chemists had discovered were useful in producing anabolic steroids were the same modifications which were discovered to be useful in producing the orally active fertility controlling drugs which, of course, are all synthetic chemicals.

Fortunately perhaps for those manufacturing these compounds, when the anabolic steroids had lost their favor, the oral contraceptives were there ready to take their place.

By 1961 and 1962 my interest in anabolic steroids had virtually evaporated. The oral contraceptive was introduced into Great Britain in roughly 1961 and became reasonably widely used in 1962 and 1963.

I was very concerned about this development, and I wrote to the Scientific Section of the Family Planning Association in Great Britain, and I warned them that compounds of this type were bound to have wide-ranging metabolic effects in the body, and they invited me to appear before them, and to discuss this aspect, which I did, and that was the last I heard of the matter.

I waited for a year or so. I waited for others to look into this matter, because oral contraceptives were of no interest to me, not the slightest. I was not a gynecologist. I looked on the scene, at the scene. I realized that fertility control was of vital importance, and I was rather horrified at the prospect of it being engineered in this totally artificial way.

It was only because I could find no one interested in this subject that I decided to investigate it myself, and I had the good fortune to have working with me Dr. Doar, and together we explored the potential of these compounds for bringing about metabolic or chemical changes in the body of the user, and we published our first two papers in 1966.

Now, if you would turn to page 6, on page 6 you will see a diagram which is a conventional glucose tolerance test diagram. We had already realized the basic probability that compounds of the type used to control fertility would impair glucose tolerance, that is to say they would make the body less able to metabolize glucose than normal, and if you study the curve on page 7 you will see the glucose values in the blood during the course of the glucose tolerance curve in a normal group of women and a group of women taking oral fertility controlling drugs.

The curves are different. The curve at the top is abnormal. The glucose tolerance of the women taking the pill was impaired. And using criteria which are generally acceptable, using the criteria of the British Diabetic Association and the criteria of the American Diabetic Association, we came to the conclusion that in about 15 to 18 percent of women using this medication, the degree of impairment was such as to justify the term "chemical diabetes."

Now, what do we mean by chemical diabetes? Do we mean diabetes? The answer is "No, we do not." Chemical diabetes is defined as an abnormal glucose tolerance, and nothing else. Diabetes implies that there is also a clinical manifestation of this abnormality in the terms of, let us say, weight loss, or thirst, or passing a lot of urine, and so forth. The