

13680 COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

regimens which include education and increase in physical activity. Now adjuncts include behavioral self-modification and protein-sparing starvation.

a) Withdrawal of Oral Agents and Intensive Weight Reduction.

An important result of the UGDP study was the decision of Dr. John Davidson in Atlanta to discontinue oral agents for 1500 patients at Grady Hospital in Atlanta, as reported on Sept. 18, 1974 to this Committee. I suggest that his recent paper (JAMA 232:853, '75) on his experience be incorporated in the record of this hearing. 60% of these patients have been controlled without drugs or insulin by an intensive regimen of dietary treatment and exercise, which includes 25 hours of instruction and the use of special manuals. 50-90 % have lost significant amounts of weight, and it has been possible to discontinue insulin therapy in all patients who were initially above ideal body weight. The short term costs for education of the patient are considerable, but so are the long-term costs to the patient of oral agents, which are also susceptible to secondary failure. Dr. Davidson's important experiment, a pilot study which still requires reporting in full detail, demonstrates not only that patients may do as well with no medication as with oral agents, but also that their overt diabetic state may be at least temporarily reversed.

b) Protein-Sparing Starvation. We are becoming more experienced in the use of brief and occasionally long periods of semi-starvation to initiate weight reduction without consuming essential body protein as well as fat stores. This can be accomplished not by providing carbohydrate to spare protein, which was the dictum in the past, but by providing optimal protein and minimal carbohydrate to minimize insulin stimulation. Such a temporary Spartan aid to acute weight loss is often surprisingly well tolerated by patients, who may report