burst of new information that they cannot understand and profit from current medical literature. They are thus poorly prepared to accept new research data which are clinically applicable. As a result, they are not equipped to be critical of some of the claims by drug companies of the effectiveness of various forms of therapy.

It is difficult for me to envision major corrective measures for this group. Obviously they should be urged to attend postgraduate courses in which efforts would be made to bring them abreast of current understanding of disease and therapy. The Academy of General Practice has made efforts to promote such courses. Medical schools, medical societies at local and national levels must share in this educational process.

Thank you.

Mr. GORDON. Thank you very much, Dr. Chester.

There is one more question I would like to ask you, but I think I shall save it for later because I think that the four of you may wish to discuss it. The next question is: Have you read the proposed labeling and what are your comments on it?

But I shall wait, and maybe we can talk about it as a group.

Dr. Felig, would you please give your statement?

STATEMENT OF PHILIP FELIG, M.D., PROFESSOR AND VICE CHAIRMAN, DEPARTMENT OF INTERNAL MEDICINE, YALE UNIVERSITY SCHOOL OF MEDICINE

Dr. FELIG. I am pleased to have this opportunity to participate in these hearings on the oral hypoglycemic drugs. Over 5 years have now elapsed since the initial presentation of the findings of the University Group Diabetes Program indicating an increased risk of death from cardiovascular disease in patients treated with tolbutamide or phenformin. Since that time, there has been considerable debate and controversy in the medical profession as to the validity of these findings and their implications with respect to the treatment of diabetic patients.

My discussion will focus on the following areas: One, those aspects of the pharmacology and clinical applications of the oral hypoglycemic agents in which there is fairly uniform agreement among proponents as well as opponents of the UGDP study; two, the impact which the findings of the UGDP study have had on medical practice; and three, the mechanisms by which the prescribing habits of physicians may be altered.

Virtually all experts in the field of diabetes agree that the oral hypoglycemic agents are drugs of convenience. They are convenient because they may be taken orally as opposed to the injections of insulin. More importantly, they are convenient because they do not require the self-discipline and compliance inherent in a weight-reducing dietary regimen. In contrast to the effects of insulin in the patient with diabetic coma, the oral hypoglycemic agents are not lifesaving drugs. Furthermore, no convincing evidence is available which indicates that regulation of blood sugar by oral agents retards or prevents the long-term degenerative complications of diabetes which may affect the eyes, kidney, or nervous system.