modalities that I have doubtlessly forgotten—and one begins to appreciate the magnitude and genius of man's conspiracy to bypass the conventional avenues for introducing new environmental factors to the physiology of man.

In the past we only had to cope with naive nature and unsubtle environment. And they were confined to the gastro-intestinal tract, lungs, and occasionally the abraided skin, as avenues of access for

alien materials to get at the core of man.

The implications of these ingenious tactics of assault, these strange manmade chemicals and emanations upon the beleagured human mechanism are fascinating to contemplate. One could speculate that this incredibly resilient physiologic engine of ours is sufficiently advanced in design to be able to cope with all environmental transgressors.

We have evolved defenses at all levels from the simplest reflex to the most complex immune reactions to meet the daily challenges of environment. And we have done very well in the matter of self-

preservation.

Yet it is quite evident that some of these unprecedented therapeutic intrusions overtax the ability of the body to accommodate—and it will react with displeasure, if not violent rejection. And, of course, this is the heart of our thesis—drug-induced diseases.

## CONCLUSIONS

Adverse Reaction Reporting

At this juncture I feel obliged to reiterate that these observations I am about to make are my own and do not necessarily reflect the opinion of the Army Medical Department or the AMA Council on

Drugs.

Drug-induced disorders will be with us forevermore. They cannot be swept under the rug either by clinician or drug producer. My own naivite in the world of commercial enterprise is revealed by my admission that I think a fine new drug will become known to the profession on the basis of its merit. I am embarrassed when this noble commodity is demeaned by merchandising techniques, however subtle or artful, better suited to less vital products of commerce.

I do not feel that drugs should be propagandized to the medical profession. The pressure of commercial competition is not conducive to objectivity in the presentation of drug detailmen or in published advertisements. I feel that these factors add to the confusion in the already difficult problems of evaluating the efficacy and/or adverse

effects of new drugs.

The requirement for an impartial agency that can provide current, reliable and objective data about the characteristics of new drugs, and alert the physician to their beneficial effects and toxic hazards

is abundantly evident.

Senator Nelson. We have had testimony similar to your statement about the advertising and promotion of drugs. On the other hand, we have had claims by some doctors and the industry that promotion by detailmen is the most effective way of informing the American medical profession that the drug does exist.

Are you satisfied—I take it you are, from your statement—that if