Senator Nelson. Did I understand you to say you have done more bio work than any other lab?

Dr. Jolly. I would say of all of the studies, that would be our

greatest number.

Senator Nelson. Were you involved in the studies on bioavailability

of chloramphenicol?

Dr. Jolly. No; I missed that one. Other antibiotics have been tested by us.

Senator NELSON. Antibiotics for bioavailability? Dr. Jolly. Yes; we still do a number of them.

Senator Nelson. Does this mean for the purpose of determining for a producer whether or not it is an antibiotic he wants to market, or that it achieves appropriate availability within certain time schedules?

Dr. Jolly. Sometimes.

We do some for some of the larger companies, where they already are accepted, but they want to recheck their product.

Senator Nelson. You are a clinical pharmacologist; do you have a

degree in that field?

Dr. Jolly. I have a degree in medicine from the University of Michigan. I have a degree in pharmacology from the University of Wisconsin.

Senator Nelson. You say you are not a practicing physician? Dr. Jolly. That is correct.

Senator Nelson. Do you have a license to practice?

Dr. Jolly. No: I never have.

Senator Nelson. You have been in the research field at all times?

Dr. Jolly. I had been with the Food and Drug Administration for a while, way back.

Senator Nelson. Go ahead. That was just so I could understand fairly well what it is you do.

Go ahead.

Dr. Jolly. The amphetamine-like drugs fall into the general category of sympathomimetic agents. That is, they mimic a part or all of the responses seen from activation of the sympathetic nervous sys-

tem, the so-called fight or flight mechanism of the body.

These responses include: An increase in bloodflow to the heart, lungs, skeletal muscle and brain; stimulation of the heart with an increase in cardiac output; dilatation of the bronchi and bronchioles of the lungs to allow more efficient oxygenation of the blood; and, central nervous system stimulation counteracting fatigue and increasing mental alertness.

Metabolic effects include elevation in blood glucose and fatty acids and an increase in metabolism mainly through breakdown of fatty

It is important to recognize that there are numerous drugs in this category which produce sympathomimetic actions in various degrees. Therefore were amphetamine products, for example, to be removed from the market, other commercially available drugs could be substituted for them.

This question will be considered in our discussion as will the possibility of imposing further restrictions on the distribution of some or all of these products.