food intake and consequent weight loss, after this period they are no longer effective as anorectics unless the user increases the dose, thus initiating a pattern of abuse.

And after use is discontinued, the average person quickly gains back

the weight he lost-or more.

In short, there seems to be few conditions which justify the prescribing of amphetamines; the exceptions are a very select group suffering from certain varieties of narcolepsy and a number of truly hyperkinetic children, and in these cases amphetamines should be prescribed only after a careful weighing of their potential dangers against their possible value.

Mr. Gordon. Doctor, as far as the needs of the people with nar-

colepsy, there are alternatives to amphetamines, are there not?

Dr. Grinspoon. That is correct.

But it is not an antiobesity drug. It is not used as an antiobesity drug. I would suspect that if it might, one could then conceive of a drug company taking and promoting its anorectic factor, and using

it in treatment of obesity.

That is what has happened with so many of these drugs with what were originally considered to have so-called side effects; let us say a patient in the 1930's was treated for depression with amphetamines, and then it was noted that the drug had an anorectic effect. It was considered a side effect, a bad effect, because indeed you did not want to have a patient with this kind of depression, especially where he was not eating, to have any of this side effect.

Mr. Gordon. When you referred to the amphetamines in your pres-

entation, you also included amphetamine-related drugs?

Dr. Grinspoon. Yes.

Mr. Gordon. Fenfluramine is a little different?

Dr. Grinspoon, Yes.

Mr. Gordon. As a matter of fact, in an article that appeared in Clinical Pharmacology & Therapeutics in 1975——

Dr. Grinspoon. Is that the John Griffith article?

Mr. Gordon. It is by Griffith and Jasinski.

Dr. Grinspoon, All right.

Mr. Gordon. Dr. Jasinski is going to testify tomorrow. He likens

fenfluramine to LSD rather than amphetamines.

Dr. Grinspoon. Yes. You see, one of the things I did not get into is that this simple molecule has an extraordinary way of being modified in the laboratory.

It is estimated there are potentially 2,000 amphetamine derivatives.

We have only begun to open the door to these drugs.

Now, one whole area of modifying this molecule is in the direction

of the so-called hallucinogenic amphetamines.

There are a number of drugs on the street now which are in fact, used by many people who are interested in psychedelic experiences, and some of these drugs are in fact amphetamine derivatives.

Fenfluramine seems to be a drug which is sort of midway, pharmacologically midway between the more established amphetamine drugs

and hallucinogens.

It seems to bridge those two general classes.

Mr. Gordon. Now, if it is so easy to concoct a lot of different types of drugs that are related to amplietamines, would it not be your opin-