Mr. BARASH. (staff). May I interrupt a moment? On the subject of abuse, there are a lot of consumers in this country who are also not very well educated, who probably mishandle food products, including frozen food products. In a situation where you have a frozen turkey or a frozen chicken that is defrosted 30 degrees over a several-day period and is then subsequently sold into commercial channels and mishandled by a consumer, would that product be any more susceptible to bacteriological infestation because of the fact that at one point, from producer to consumer, it was handled at thirty degrees for several days as opposed to fifteen or zero, whatever the desirable temperature would be?

Dr. LEWIS. At 30 degrees, I have no indication that there would be any difference, though I have no specific data on the point either.

Mr. BARASH. You don't think it would be any more susceptible because it was held at 30 degrees?

Dr. LEWIS. No, if the temperature went up substantially higher, there could be problems. I can't prove to my own satisfaction there would be none, but from what I know about growth of micro-organisms, my judgment would be if the temperature never went above 30° F. substantial growth of any disease-producing organism would be unlikely to occur.

Mr. MYERS. Would it thaw out at 30 degrees?

Dr. LEWIS. Some foods would thaw, but I still say the temperatures of growth for most of these organisms are near our body temperature, which is substantially 98° F., so 30° F. is a long way below their normal range of growth.

The lowest temperature that anyone has found a disease-producing organism to multiply at is 38° F., as far as I know, within any reasonable period of time.

Mr. BARASH. Certainly it would be more desirable if before it was abused by the consumer it was handled at a temperature of 15 or zero.

Dr. LEWIS. Quality-wise, appearance-wise, certainly I would prefer it as a consumer. Are there other aspects of this subject that you want me to discuss?

Mr. ROSENTHAL. I wanted to get your view on this report we had from the Defense Supply Agency about these TV dinners and how you interpret those counts, and then we shall conclude. Just tell us what that means to you and what it might mean to us.

[Data sheet was handed to Dr. Lewis.]

Dr. LEWIS. In the deliberations of the AFDOUS committee that I mentioned, which was trying to develop recommended bacterial limits for frozen foods, we have done a collaborative study of pot pies in four different laboratories; specifically, the Food and Drug Administration's laboratory, U.S. Department of Agriculture laboratory, State of Maryland laboratory, and an industry laboratory.

We gathered the data on many different lots. I am not saying the committee has done this yet, but if it were to establish a level of 100,000 program, based on plate count, which is one of the items on the data sheet, and of 100 coliform organisms per gram, which is another test given here, these limits would be very easy for those industries to meet that supplied us samples. They include about a dozen of the big manufacturers who are under USDA inspections. We did not get samples from the small operator who may have less technical know-how.