

Of course, this is a curious thing. Technically speaking, in a sense, this is a deep sea fish and not likely to come directly into contact with spray residues. But, the assumption could be that the fish preys on other fish who do enter the fresh water streams, as a result of which they may get some of the run-off into their bodies, and because D.D.T. is fat soluble and because it is stable the small amounts that are taken from time to time accumulate in the body fat of the larger fish. This is possibly the way in which this high level could have been reached in a deep sea fish.

The CHAIRMAN: Are there any further question, gentlemen?

Mr. WHELAN: I thought we were given evidence to the effect that there is little opportunity of D.D.T. getting into fish; that there was little chance that the eggs would hatch, and that it was one of the safest things we could eat. This information was given by officials who appeared here from the Department of Fisheries. At least, that was the impression I took from what was said.

Mr. MORRELL: We have examined some fish in our laboratories and perhaps Dr. Chapman could give details of the findings.

Dr. CHAPMAN (*Assistant Director, Foods, Food and Drug Directorate, Department of National Health and Welfare*): Mr. Chairman, in my opinion, the case mentioned in respect of the tuna fish on the Pacific coast was an exceptional one. We have taken samples of fish on both the east and west coasts after hearing of this case and we did not find any repetition of this. We did find detectable amounts in a few of the fish we examined but it involved very, very small amounts. This was just detectable by the very sensitive methods and techniques which we now use.

I think possibly the statement from the Department of Fisheries related to the presence of D.D.T. in the water in the areas where the fish are spawning and hatching. Of course, under these circumstances small amounts would have a detrimental effect. But, as Dr. Morrell suggested, in respect of the case on the west coast, it must have been due to a build-up of D.D.T. through the biological chain in various species.

The CHAIRMAN: In respect of the fish on the west coast, is there a regular check kept, for instance, in the case of the salmon which are caught?

Mr. CHAPMAN: Well, of course, we do include fish in the samples of food that we take routinely to check the possibility of pesticide residues, so salmon are checked along with other food products.

We anticipate this year examining about 2,000 such samples from all foods across the country.

The CHAIRMAN: Have you a question, Dr. Rynard?

Mr. RYNARD: My questions have been partially answered, Mr. Chairman. If we do know that those deep sea fish are feeding on the little fish, which have a certain amount of D.D.T., how are we going to arrive at the level which D.D.T. is stored in the body of the fish?

The doctor said there was not any appreciable increase but, if amounts of D.D.T. are in the little fish and the deep sea fish are feeding on them it seems to me there would be some cause for alarm. Would there be a chance, as a result of the deep sea fish feeding on the little fish, of an increase in the poisonous substances or D.D.T. to the point where it is unfit for human consumption?

Mr. CHAPMAN: Again, I would like to emphasize this was an exceptional case. The food and drug administration of the United States, of course, became very interested in this and examined the particular oil from this particular fish. They did learn that it did contain approximately 200 parts per million of D.D.T. But, this was the only fish they were able to locate. However, they did make quite a complete investigation of this matter. As I said, this appeared to be an exceptional situation.