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March 23rd, 1954

Dear Prof. Welander,

I suppose you may know the recent accident, through new papers, that the Japanese tuna fisherman operating the long line in the area near Bikini island in Marshall Islands were wounded by getting the ash of atomic bomb which has radio activity.

As the fishermen were ignorant about the matter, the fish brought back by that boat was landed and sold to various place, before they went to the hospital appealing ichu and found it was caused by the radio activity. The fish sold were examined ~~well~~ and found enough radio activity to be dangerous as food, and the government food examination system was mobilized to find out it already distributed through out the country. And, already almost of all the fishes, tunas and sharks, which brought in by that boat were found and under safety disposal. However, peoples were so frightened psychologically by rather exaggerated news, the government food examination system is still carrying on the examination about the fishes landed by the tuna fishing boats coming back from the South Pacific area from the stand point of food hygiene.

Being an ichthyologist who ever worked in that area I have been embarrassed by so frequent questions both from the government and people about the safety to eat the fish caught in that area, because I have very poor knowledge on the fish related with the radio activity. The only knowledge we have by the experience at Hiroshima and Nagasaki is seems to me unapplicable to this new type of bomb, about which scientific data we have no means to obtain.

While I was running about for this problem, as the most of fish markets were closed by the fear of people, I was visited by Dr. Bruce W. Halstead, College of Medical Evangelists, Loma Linda, California, who came over here with the job about the Pacific poisonous fishes, about which I worked some about ten years ago, and since he started his new investigation I am cooperating as far as I can. Then I asked the question about this matter as I thought the matter would be already worked out by American biologists. He said he know little about the matter, and you are only right scientist who worked on this field, and he suggested to write to you. This is why I have to ask so many things related this urgent problem to you.

I knew well that so many things related with atomic bomb or energy is considered as a sort of military secrets, and the precious results you obtained might not be printed. However, if you have anything already published about this matter, I am very earnest to get a copy of it, if it is possible.

Explosion happened in lat of March seems to me very different from that happened at Hiroshima and Nagasaki. The latter case the radiation is the cause to damage any sort of living including human being, but in the former the radio active ash is something as far as in the area pretty far from the spot. The ash itself was already analysed chemically by the chemists, and they told us calcium is the most and various kinds of bomb products are mixed in. The amount of ash the boat which located 15 sea miles East of prohibited area is merely few mm. thick on the deck. And, this is the only data we have for the calculation of the concentration of the radio activity in the sea water by that I have to enumerate the radio activity of various sort of fish which would be the food of tuna in that area about which the Japanese fishing industry has great concern, as well as the majority of the people in this country.

If you can answer me from your knowledge to the following question I will appreciate it very much.

- 1) Do you have any idea about the pattern of density distribution of this sort of ash both by wind and water current?
- 2) What concentration of radio activity of the sea water makes living fish in that water to have enough radio activity to let it be dangerous to eat?
- 3) What sort of circulation of the various radio active elements produced by the bomb can be expected in the food chain of the marine organisms in the area by the coral reef and in the area off at deep water, including tunas and sharks as the fish in the highest food rank?

We are hoping to make a miniature experiment in aquarium to solve a part of the question above mentioned, if it is allowed to do it, however we have no idea what concentration of the radio activity of the water should be prepared to put the fish in.

I am hoping your early reply about the matter, because I am earnest to blow out and take off some sort of anti-american feeling which probably originated by the communists who are utilizing the chance of this unfortunate accident and aiming to let people fear their common food and get in confusion.

Yours truly,

P.S. The matter would be serious, so if you want to know my status please ask it to Dr. McCleave. And, I am sure US Embassy here

