

FEB 25 1976 *gfk*

Fish expert concerned over PCBs

Will a fisherman who started catching salmon in 1968 and has been eating them ever since curl up his toes in 1980 or 1985 because of polychlorinated biphenyls (PCBs) contamination?

"I don't know," said Dr. Harold Humphrey, of the Michigan Public Health Department's division of environmental epidemiology. "That will require additional study and time. No one now has alarming levels in their bodies."

"I'm not alarmed. But since the material is there, people are exposed to it. We need to study the matter. We can't reach a conclusion now. There is not enough data."

The first research project he mentioned cost about \$35,000. More research will take much more money.

"Hard, long-term answers are not available," Humphrey said. "We don't know if the human body can get rid of PCBs. However, in Japan, body levels did decline."

There is no question that PCBs can do terrible things to animals and people. In Japan, more than 1,000 people ate large doses of PCBs which had gotten into cooking oil. They suffered visual difficulties, stomach disorders, skin irritations and other problems. The problems appear to be long-lasting.

"We have no data on how PCBs affect human reproduction. This might be something that a follow-up study might do."

However, in animals, PCBs have shown drastic effects on reproduction. Mink and rhesus monkeys fed diets containing PCBs had a lower fertility rate, more miscarriages, and the young were born smaller.

John Hesse is an aquatic biologist for the Department of Natural Resources (DNR) in charge of toxic materials. He's concerned.

"PCBs accumulate slowly in the fats. The first thing they do is hurt reproduction."

Pike, for instance, are not fatty, compared with lake trout, salmon and brown trout. Pike are netted by the DNR in early spring in marshes along Lake Michigan, including Muskegon. The eggs and milt are taken to hatcheries.

"We found a very severe mortality in the hatcheries," Hesse said. "They seemed to hatch all right, but died off. Samples from all but one area had a 40 per cent to 100 per cent mortality in seven days."

A testing program was started. Adult fish were taken and tested for PCBs. They showed .10 parts per million to 1 ppm the edible meat. The eggs tested from 2.2 ppm to 4.3 ppm.

"That's high enough to have caused it," Hesse said. In fact, the biologists were almost ready to say that PCBs were the cause. Then they found that pike eggs taken from Gaiien, in extreme southwestern Michigan, had the normal 90 per cent survival rate. The fish and their eggs tested about the same as the others.

"There's no correlation," Hesse said. "I don't know if it's PCBs or not." — SAWYER