Scientists warn of toxins in Duwamish fish

Two Seattle marine scientists have decided they would not eat starry flounder or English sole caught in the Duwamish River because the flesh of the fish contains polychlorinated biphenyls, a toxic chemical.

Dr. Bruce McCain and Dr. Bruce Miller said that "circumstantial evidence" indicates the chemical, commonly known as PCB, may be causing liver cancer in the bottom fish.

McCain, who works here for the University of California and the federal Northwest Fisheries Center, said there is no "hard evidence" that PCBs are causing the cancers. Flounder and sole caught in PCB-free waters in other parts of Puget Sound do not have the liver tumors, he said.

Miller, of the University of Washington's Fisheries Research Institute, said he would recommend against eating the fish simply because not enough is known about the effect of PCBs on humans.

"It is circumstantial evidence," Miller said. "There is no cause and affect between the diseases and the PCB level. But there are more diseases in starry flounder and English sole in the Duwamish than in other areas."

McCAIN AND MILLER reached their conclusions after doing research work for Metro and the Environmental Protection Agency.

McCain said the muscle tissue of the starry flounder tested in laboratories contained .5 part of PCB for each million parts of flesh. The livers contained up to 20 parts per million of PCB, he added.

The federal Food and Drug Administration says fish containing 5 parts per million or more of PCB cannot be sold in interstate commerce for human consumption. Duwamish bottom fish are caught and eaten by sports fishermen.

People don't eat livers from bottom fish and there is no chance that the cancers can be transferred to humans who eat the fish, they said.

"We're just talking about the transfer of PCBs to humans," Miller said.

Miller said sole and flounder in the Duwamish River and its estuary are sick, showing more diseases than do similar fish in other areas. He said he and McCain hope to obtain federal funding for additional research that will attempt to identify the causes of the illness.

Other pollutants, viruses or bacteria could cause the illness, Miller said.

He said tests for E.P.A. failed to show PCBs in other harbors, including industrial waterways such as Bellingham Bay and Grays Harbor.

The PCB found in sole and flounder is not from a major spill of the chemical on the Duwamish waterway about two years ago, the scientists said.

The PCB in the fish is chemically different, they said, adding that PCB levels in the river were high before the spill.

Metro tests have identified two types of PCBs in runnoff flowing to the Duwamish through storm sewers. Metro considers the amount significant, but does not know the source of the chemicals.

"THE DUWAMISH is the only estuary in the state where the E.P.A. has found measurable PCB," McCain said. "That's enough to make me not want to eat the fish, although the numbers (the amount of the chemical) are below federal standards."

Dr. Michael Watson, an E.P.A. toxicologist here, said that eating sole and flounder occasionally will not harm people.

He added, however, that he agrees with McCain and Miller and would not eat bottom fish from the Duwamish "because I look on the whole area as being polluted . . ."

Watson said acute PCB poisoning in Japan caused a variety of health conditions, including headaches, abdominal pain, bursitis, problems with teeth and gums, retarded growth, skin lesions and discoloration and unusually small babies.

MONS 050782