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Elevated Circulating Erythrocyte Micronuclei in Fishes from Contaminated Sites off Southern California

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ABSTRACT

Frequencies of circulating erythrocyte micronuclei in two marine fish species from contaminated areas off southern California were elevated relative to fishes from less contaminated sites. Micronuclei frequencies from contaminated sites were four times higher in white croaker (*Genoyonemus lineatus*) and eleven times higher in kelp bass (*Paralabrax clathratus*). The increased micronuclei frequency was related to previously determined concentrations of chlorinated hydrocarbons (DDTs and PCBs) and polycyclic aromatic hydrocarbon metabolites. However, micronuclei frequency was only weakly correlated to individual body burdens of chlorinated hydrocarbon in white croaker as determined in this study. Applications and limitations of pscine micronucleus measurements are discussed.