Hydroxylated Polychlorinated Biphenyls (OH-PCBs): Recent Advances in Wildlife Contamination Study

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The exposure of wildlife and human population to environmental hazardous contaminants has been of global concern for over several decades. More recently, focus has been directed towards potential toxicological effects such as the endocrine disrupting function of xenobiotics. The hydroxylated metabolites of PCBs (OH-PCBs) should be pointed out as these compounds. OH-PCBs have emerged as important classes of environmental contaminants in wildlife and humans because of their ability to bind with the thyroxin transport protein, transthyretin (TTR), and their interaction with thyroid hormone receptors. However, data on their occurrence in wildlife and their behavior in the matrices of environment are limited. Topics include the formation of OH-PCBs, their physicochemical properties (octanol-water partition coefficient, Kow), analytical procedures and contamination status in wildlife. The guidance for improving the study of OH-PCB contamination is also briefly mentioned.

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