

POLLUTANTS BIOTRANSFORMATION

G. COMAN^{*}, C.DRĂGHICI^{**}, M. SICA^{**},
D. PERNIU^{**}, S. UNGUREAN^{***}, L. RADU^{****}

Abstract: *The presence of some pollutants in the human body may alter cell function and may induce various diseases. Lipid-soluble pollutants usually accumulate in depots or undergo enzyme-mediated biotransformation in various organs and tissues. The pollutants metabolites resulting from the biotransformation could enter the blood and could be eliminated. Biotransformation (metabolic alteration) of pollutant molecules occurs mainly in the liver, but to some extent also in skin, kidney, placenta, plasma, intestine or brain. The biotransformation is the sum of the processes by which a pollutant is subject to chemical change in living organisms. Biotransformation is not strictly related to detoxication, because in a number of cases the metabolites are more toxic than the parent pollutants, and in that case, the term of bioactivation or toxication is used.*

Key words: *pollutant, toxication-detoxication, biotransformation, bioactivation, pesticide*

* Medicine Faculty, Transilvania University of Brasov

** Chemistry Dept., Transilvania University of Braşov

*** Dept. of Sociology, Transilvania University of Braşov

**** Dept. of Foreign Languages, Transilvania University of Braşov