

## “EVALUATION OF TOTAL MERCURY AND METHYLMERCURY CONTAMINATION OF INDIAN POPULATIONAL GROUPS LIVING IN THE XINGU PARK INDIAN RESERVATION BY MEANS OF HAIR ANALYSIS”

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In the present paper, the total mercury and methylmercury contamination of Indian populational groups living in the Xingu Park Indian reservation is being investigated by means of hair analysis in these populations.

Up to now, thirteen Indian groups have been analyzed for total mercury and methylmercury, using both instrumental neutron activation analysis (INAA) and cold vapour atomic absorption spectroscopy (CVAAS).

Although the Xingu Park is still considered a relatively clean area, high concentrations of mercury were found in all the groups analyzed, as compared to controls.

In most of the Indian groups, the arithmetic and geometric means, as well as the medians of the total mercury concentrations were above 10  $\mu\text{g/g}$  in the hair samples, rising in several cases to more than 20  $\mu\text{g/g}$ . The respective mean values for the controls were around 1  $\mu\text{g/g}$  and not higher than 3  $\mu\text{g/g}$ .

Methylmercury was determined by CVAAS in half of these groups and amounted to about 70 to 100% of the total mercury found.

The results obtained for total mercury and methylmercury in the hair of the populations studied suggest that contamination could be related to their frequent fish consumption. These results are compared to the ones found by other authors in hair of Amazonic populations.