

What factors decide the trace element levels in wildlife ?

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To understand the background levels of trace elements (heavy metals) in the organs and tissues of wildlife is a one of the important parameter for evaluation of ecological risk assessment. It is well known that there is a species-specific accumulation and sensitivity of chemicals including artificial pollutants and unique species-specific hyper-accumulation in wildlife. When ecological risk assessments are done without understanding above species-specific aspects, it may be leded inaccurate results. This concern applies to the case of trace elements including heavy metals.

This presentation focus on the actual trace element concentrations in organs and tissues in wild animals, which parameters are affective to determine these levels using some cases. These were suggested that not only trace element levels in diet reflecting surrounding environment, but characteristics of animal grouping such as genus, family and order, and other factors of environment affecting to behavior and physiologic aspects including inter element relationships also.

The approaches using above perspectives for example, accurate understanding of trace element accumulation in wildlife pose the important clues to not only field of ecological risk assessment but field of chemical evolution of animals also. Therefore these attempts might provide to understand interaction between environment and organisms and advance on hints of chemical evolution of organisms too.

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