

## Mineral analysis of hair for the meal intervention in young females

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### **Abstract**

Prenatal exposure to POPs has been shown to cause the delays and defects of child growth and development. Several previous birth cohort studies suggest the actual risk of POPs exposure. Thus, it is not only important to perform the risk analysis of POPs exposure and to decide its tolerable level, but also we must consider the way how to excreting the body burden of POPs in young females before pregnancy.

We measured the metal contents in young females before pregnancy for the meal intervention with hydrogen supplement. This study investigated the association between the hydrogen supplement and long-term mineral concentrations of aluminum (Al), nickel (Ni), mercury (Hg), and lead (Pb) in scalp hair among females. These outcomes were reached by linking the results of heavy metal level in hair. Intake of a Hydrogen supplement may excrete against the body burden of POPs exposure.