

## **PIXE analysis of trace elements in daily food samples**

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### **Abstract**

The present study was designed to estimate the daily intake of trace elements in Japanese fisherman's diet using the 24-hour total food duplicate analysis. PIXE analysis covered 79 people's dietary samples (3 or 4 meals each). Concentrations of 14 trace elements, Na, Mg, Al, P, K, Ca, Cr, Mn, Fe, Ni, Cu, Zn, Se and Sr, were investigated. Individual differences on the dietary intake of many trace elements were observed. Intake of Na, Fe and Cu were larger in supper and that of Ca was larger in breakfast. Future investigations will compare differences in individual households of those trace elements.