Determination of trace elements in organs of Zn-deficient mice by means of PIXE and INAA

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Abstract

Eight-week-old male mice of ICR strain were divided into two groups; one was fed with zinc deficient diet (<1 μg/g Zn), the other with control diet (30 μg/g Zn). After 1 week of treatment periods, their pancreases and testes were removed. Sodium dodecyl sulphate-polyacrylamide gel electrophoresis (SDS-PAGE) was perfomed after gel filtration chromatography were performed for cytosolic fraction. After electrophoresis, the gel was cut into protein spots and subjected to PIXE analysis.