

PIXE analysis of mineral content in food waste samples

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Abstract

In this study, we demonstrated that food waste was possible to change the delicious food menu with devised cooking arrangements, therefore we can reduce food waste rate.

Mineral content of waste food samples were analyzed using PIXE at NMCC. Many inorganic elements were detected in waste food samples. The main components of mineral in waste samples were K, Ca, Mg, P, Fe and Cu. Those components were essential nutrients for human body. In some case, Ca and Fe showed higher value in waste parts of food than edible parts.

These results also suggested that eco-cooking is a near ecological action in daily life and play an important role of environmental protection.