

Survey on today's dietary life and analysis on iodine content

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Abstract

In ancient times Japanese dietary life was primarily based on seafood. Lately, however, westernized diet and popularization of processed food are believed to change the situation of iodine intake as a result of decreased or excessive intake of marine food. The purpose of the present research is to figure out the situation of iodine intake in the case of the Japanese today. Analysis through PIXE on minerals in iodine contained in school lunch and mass-marketed food was conducted. A questionnaire survey research on dietary life situation is conducted in order to study intake situation. PIXE analysis in the present study detects iodine from food with seaweed, fish and shellfish. Above all, high percentage of iodine is detected from kelp and brown seaweed. Regular dietary habit with seaweed is assumed to significantly increase iodine intake. A questionnaire survey on dietary habit shows that the highest rate of about half of the respondents eat out or eat mass-marketed packed lunch in office. They are in the habit of buying precooked food at convenience stores or supermarkets. The survey also shows a frequent use of mass-marketed granulated soup powder and inclination toward simplified dietary habit. The present study implies the necessity to make a clear comprehension of the situation regarding iodine intake on the basis of analysis on iodine from granulated soup powder and noodle soup with due consideration to their absorption rate.