[PD3-6] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Elements in a Bamboo Salt and Comparison of Its Elemental Contents with Those in Other Salts.

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The majority of table salts are bay salts and chemical salts. However, chemical salts are known to have a different composition in biological electrolytes and quality of bay salts are getting worse due to the increasing seawater contamination. These facts may have led to the increasing usage of various health-promoting salts. Bamboo salt was introduced in 1986 as a solution to replace table salts to eliminate those detrimental effects, to promote general health and to treat diseases. Although all bamboo salts from different manufacturers have been used for the same health and medical purposes, each manufacturer utilizes different manufacturing process. An ICP analysis was used to study the changes of elemental contents in a bamboo salt during the manufacturing steps as well as these contents in various bamboo salts and other salts. After the first step, contents of Li and Sr in the bamboo salt were increased in comparison with those in the raw material, bay salt. As the next steps continued, contents of K, Ca and Ba were continuously increased. At the completion of the final step, contents of Mg and P were decreased and those of Cu, Mn and Mo were gradually increased. Bamboo salts contained lower contents of Mg, Al, Si, B and P, but higher contents of K, Ca, Fe, Cu, Mn, Zn, Li, Ba, Sr and Mo than bay salt.

[PD3-7] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Absence of Association of Glutathione S-Transferase Polymorphisms with Cerebrovascular Disease

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Glutathione S-transferase polymorphisms (GST) were examined in 98 cases with cerebrovascular disease (CVD) to test the hypothesis that GST polymorphisms confer a risk to an individual to develop CVD. Tobacco smoke is a major cause of both cancer and vascular disease. We therefore were stratified the subjects with CVD for smoking status, and then examined whether polymorphisms in this detoxification enzyme gene, GST, influence risk of CVD. Neither GSTM1 nor GSTT1 genotypes in the CVD group was significantly different from the control group (n=230), even in smokers. We attempted the combined analyses for GSTM1 and GSTT1 genotypes in CVD for smoking status. No significant association observed between the combined genotypes and CVD. We also classified the subjects and control group into four types according to Sasang Constitutional Medicine, Korean Traditional Oriental Medicine, and investigated the association among GST genotypes, CVD, and Sasang constitutional classification. Our observations do not confirm the effect of the GSTM1 and GSTT1 genotypes as a risk factor for CVD, even in smokers. Furthermore, we first attempted to evaluate the efficacy of Sasang Constitutional Medicine, and to find an association with CVD.

Poster Presentations - Field D4. Analytical Chemistry