Targeted Food Surveillance — Potassium Bromate in Flour-made Products

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January 2008
Introduction

- Background
  - Potassium bromate can be used as a flour-treatment agent to produce high volume of flour-made products with fine crumb structures. Potassium bromate is usually decomposed during food processing.
  - The Joint WHO/FAO Expert Committee on Food Additives (JECFA), however, has concluded that potassium bromate is not appropriate for use as a flour-treatment agent due to the potential carcinogenicity in experimental animals.
  - Potassium bromate is not allowed to be used in flour in the Mainland. However, in some countries, such as the United States and Japan, limited use of potassium bromate in flour is allowed during food processing.
From 2006 to September 2007, CFS collected 30 samples of flour for analysis of potassium bromate under its food surveillance programme. Potassium bromate was not detected in all the samples.

Subsequent to the detection of potassium bromate in potato chips imported from the United States and Japan by the Mainland authority, there has been concern on the residual amount of potassium bromate in flour-made products.

Objective

The Centre for Food Safety recently conducted a targeted food surveillance project to assess the use of potassium bromate in flour-made products.
Types of samples

- 55 food samples including biscuit, bread, potato chip, prawn cracker and corn flake were collected for testing of potassium bromate.

- Potato chip/prawn cracker: 31% (17)
- Biscuit: 29% (16)
- Corn flake: 25% (14)
- Bread: 15% (8)
Overall results

- No potassium bromate is detected in the samples.
Advice for trade

- Should not add potassium bromate into flour due to its potential carcinogenicity in animal studies.

- Should purchase food ingredients from reliable suppliers.

- Should ensure all food sold are fit for human consumption.
Advice for consumers

- Purchase flour-made products from reliable shops.

- Take a balanced diet so as to avoid excessive exposure to food additives from a small range of food items.