Targeted food surveillance – Preservatives in preserved fruits and vegetables

Centre for Food Safety
Food and Environmental Hygiene Department





Introduction

Background

- Preservatives (e.g., sulphur dioxide, benzoic acid and sorbic acid)
 are commonly used in preserving fruits and vegetables
- The Centre for Food Safety (CFS) notes that there had been levels of excessive preservatives detected in samples of dried fruits and pickled vegetables.

Objective

 The CFS has conducted a targeted food surveillance project recently to assess the use of preservatives in preserved fruits and vegetables.





Types of samples

No. of samples: 371

Types of samples

- pickled vegetables (such as cucumber, radish, leaf mustard, rakkyo, ginger and chilies)
- dried fruit (such as dried mango, dried pineapple, dried raisin, apricots, plums, blueberries and olives)

Testing items

preservatives (including sulphur dioxide, benzoic acid and sorbic acid)





Unsatisfactory samples

There are 14 unsatisfactory food samples. The Overall satisfactory rate was 96.2%.

Sample	Unsatisfactory testing item	Result
8 preserved vegetables (including bamboo shoots, radish, leaf mustard, skinned green chili pepper, dried tomato, dried sweet potato)	Sulphur dioxide	200 – 2000 ppm
	Benzoic acid	2,600 – 4600 ppm
6 preserved fruits (dried fig, raisins, dried apricot)	Sulphur dioxide	2400 – 3000ppm
	Sorbic acid	670 – 850 ppm

The preservatives concerned are commonly used in food processing. The detected levels exceeded legal limits. These preservatives are of low toxicity and should not pose significant health effects on consumers upon normal consumption.





Follow up actions

- Trace source of food items in question.
- Request vendors to stop sale and dispose of incriminated food items.
- Take follow-up samples.
- Issue warning letters to concerned vendors.
- Take prosecution actions if there is sufficient evidence.





Advice for trade

- Use of preservatives is regulated under the Preservatives in Food Regulations, Cap.132 BD. The maximum penalty for conviction is a fine of \$50,000 and imprisonment for 6 months.
- Adhere to the "good manufacturing practice" (GMP) and comply with the legal requirements when using preservatives.
- Source food and ingredients from reliable sources.





Advice for consumers

- The preservatives concerned are commonly used in food processing and are of low toxicity. They should not pose significant health effect on consumers upon normal consumption.
- Buy food from reliable suppliers of food.
- Maintain a balanced diet to minimize risk.



