
Targeted food surveillance – Preservatives in preserved fruits and vegetables

Centre for Food Safety

Food and Environmental Hygiene Department

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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 previous samples of dried fruits and pickled vegetables.

■ Objective

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

Types of samples

- No. of samples: some 460

- Types of samples
 - pickled vegetables (such as cucumber, radish, mustard greens, rakkyo, ginger and chillies)
 - 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

- Overall satisfactory rate was 91.4%.
- There are 40 unsatisfactory samples

Sample	Unsatisfactory testing item	Result
25 preserved vegetables (including mustard greens, rakkyo, ginger, chillies and choi sum)	Sulphur dioxide	200 – 710 ppm
	Benzoic acid	320 – 1600 ppm
15 preserved fruits (including dried raisin, apricots, plums, kumquat, blueberries and olives)	Sulphur dioxide	560 – 4200 ppm
	Benzoic acid	760 ppm
	Sorbic acid	160 – 2300 ppm

Summary

- The CFS notes that 9% of the samples of a targeted food surveillance project on the use of preservatives in preserved fruits and vegetables were unsatisfactory.
- 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.

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.
- The CFS will remind the trade that they should adhere to the “good manufacturing practice” and comply with legal requirement via various communication channels.

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.