
Targeted food surveillance – Preservatives in preserved fruits and vegetables

Centre for Food Safety

Food and Environmental Hygiene Department

February 2014



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 preserved fruits and vegetables.
- In view of this, a targeted food surveillance project conducted by the CFS is continued in 2013 to assess the situation.



Types of samples

- The CFS collected 450 samples for testing from October to November 2013.
- Types of samples
 - preserved vegetables (such as cucumber, radish, leaf mustard, rakkyo, ginger and chilies)
 - preserved fruits (such as dried mango, dried pineapple, raisin, apricots, plums, dried apple ring, sour peach and olives)
- Testing items
 - preservatives (including sulphur dioxide, benzoic acid, sorbic acid and parabens)

Unsatisfactory samples

- There were 2 unsatisfactory food samples. The overall satisfactory rate was 99.6%.

Sample	Unsatisfactory testing item	Result
1 raisin sample	Sulphur dioxide	2300 ppm ⁽¹⁾ *
1 raisin sample	Sulphur dioxide	3700 ppm ⁽²⁾ *

(1) The detected levels exceeded legal limits (1500 ppm), but they are of low toxicity. Upon normal consumption, it is unlikely to pose adverse health effect on consumers.

(2) The detected levels exceeded legal limits (1500 ppm), but they are of low toxicity. Upon normal consumption, it is unlikely to pose adverse health effect on consumers. Long term excessive consumption of raisin with the same level of sulphur dioxide may affect the digestive system.

* For individuals who are allergic to this preservative, there may be symptoms of breathing difficulty, headache and nausea

Follow up actions

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



Advice for the trade

- Use of preservatives is regulated under the Preservatives in Food Regulation, Cap.132 BD. The maximum penalty for conviction is a fine of \$50,000 and imprisonment for 6 months.
- Adhere to Good Manufacturing Practice (GMP) and comply with the legal requirements when using preservatives.
- The trade should source food from reliable suppliers and maintain a good recording system in accordance with the Food Safety Ordinance to allow source tracing if needed.

Advice for consumers

- Patronize reliable retailers.
- Take a balanced diet so as to avoid excessive intake of certain harmful substances as a result of frequent consumption of a small range of food items.