

Survey on Popular Food Items: Traditional Local Snacks

Centre for Food Safety

Food and Environmental Hygiene Department

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Background

- Hong Kong is renowned as a gourmet paradise. Traditional local snacks are one of the featured food in the locality.
- Traditional local snacks are getting more and more popular to be sold in chained snacks shops, supermarkets, Chinese style cake shops, shopping malls, snacks kiosks and tourists areas. They are not only the favourites of many local people, but are also the best buy souvenirs for the tourists.
- In view of this, the Centre for Food Safety (CFS) has conducted a survey on popular food items on “Traditional Local Snacks” recently to assess the safety of these foods.
- Tests covered microbiological and chemical analyses.

Types of tests

Microbiological analysis

- As most of the traditional local snacks are kept or displayed under ambient temperature for prolonged period, their hygienic condition is of public concern.
- Microbiological analysis included tests of pathogens such as *Bacillus cereus*, *Clostridium perfringens*, *Salmonella* and *Staphylococcus aureus*.

Types of tests

Chemical analysis

- It covered hazards which are commonly present or used in the traditional local snacks, namely, aflatoxins, colouring matters and preservatives.
- Aflatoxins
 - Peanuts and nuts are the commonly used ingredients of many traditional local snacks. These ingredients and their products (e.g., peanut oil) may contain naturally occurring aflatoxins. Long term intake of food with aflatoxins may lead to liver cancer.
- Food additives
 - Use of colouring matters makes the snacks colourful and more attractive to the consumers. Application of preservatives prolongs the shelf lives of foods. These are the food additives commonly used in food.

Types of food tested

- 308 samples of various traditional local snacks were collected from more than 160 retail outlets for testing.

Type of food	Number of samples	Percentage
Preserved fruits	88	29%
Traditional cakes	64	21%
Indigenous snacks	38	12%
Crispy snacks	37	12%
Traditional sweets	30	9%
Peanut, legume and nuts	23	8%
Others	28	9%
Total	308	100%

Preserved fruits

- Samples included preserved rakkyo, preserved papaya, preserved peach, preserved prune, preserved orange, preserved gooseberry, preserved lemon, preserved ginger, aeroplane olive, “Ka Yi Che”, preserved tangerine, fingered citron, preserved pummelo, dried papaya, sweetened peach and ten scent olive.



Traditional cakes

- Samples included “Kong So” biscuit, walnut cookie, chicken biscuit, fried rice cracker, blind-man cake, wife cake, lime preserved egg cookie, Chinese almond cookie, big wafer, “Shao Bing”, spring onion pancake, sugar onion cake, egg cookies.



Indigenous snacks

- Samples included steamed rice cup cake, Chinese banana roll, sesame roll, steamed white sugar cake, glutinous rice ball, steamed rice flour dumpling, doughnut.



Crispy snacks

- Samples included soft flour cake, crispy egg floss, Chinese sweet pastry, cow ear cookies and crispy “Ma Fa”.



Traditional sweets

- Samples included peanut candies, dragon's beard candy, maltose and Ding Ding candy.



Peanut, legume and Nuts

- Samples included Nam Yu peanut, Peanut cracker, broad bean and stir-fried chestnut.



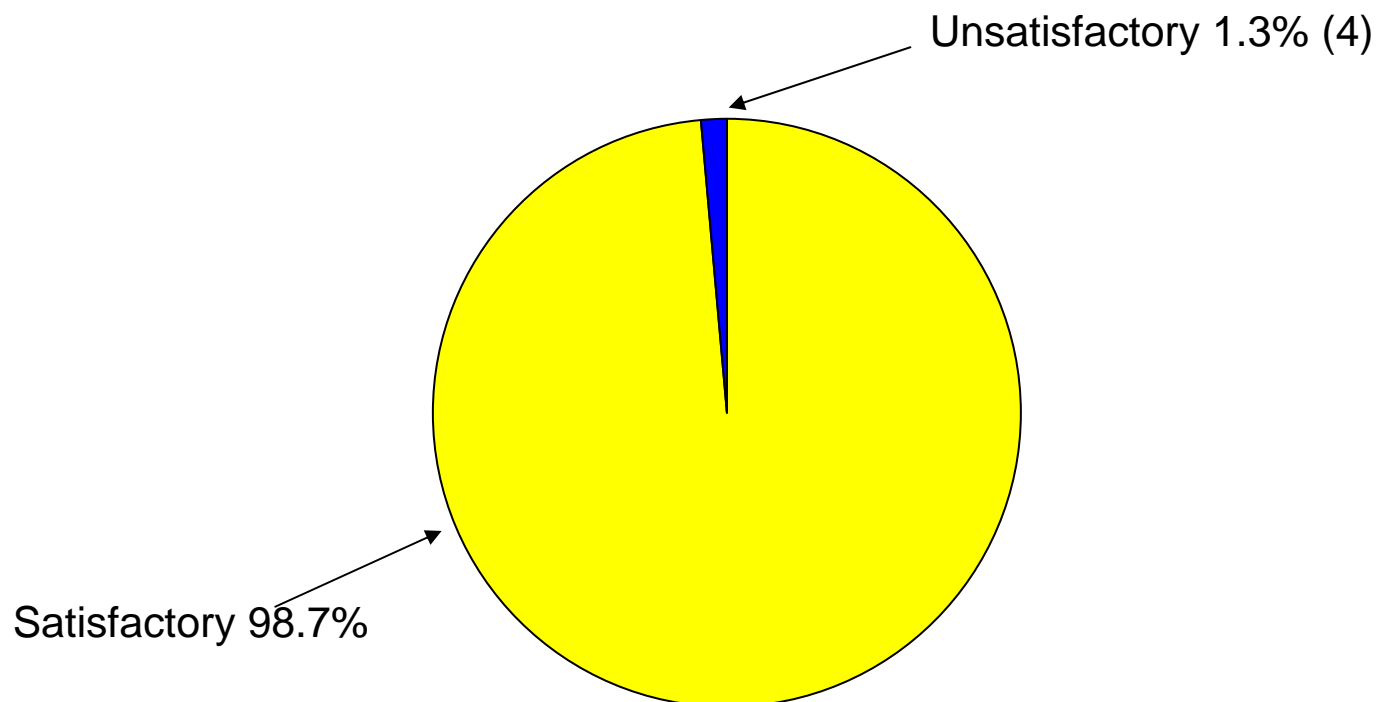
Others

- Samples included vegetarian liver, vegetarian sausage, salted quail egg, grilled squid snack, grilled sweet potato and Lo-mei.



Overall results

- There were 4 unsatisfactory samples. Overall satisfactory rate was 98.7%.



Unsatisfactory results

- The 4 unsatisfactory samples are shown below:

Sample	Unsatisfactory testing item	Result
Rice cracker with peanut	Aflatoxin	0.025 ppm ⁽¹⁾
Lo shui cuttlefish	Staphylococcus aureus	13000/g ⁽²⁾
Preserved pummelo	Benzoic acid	1400 ppm ⁽³⁾
Vegetarian Sausage	Benzoic acid	2200 ppm ⁽³⁾

⁽¹⁾ The detected level exceeded legal limit. Although there is a concern of the carcinogenic potential of aflatoxin, immediate health risk upon normal consumption at the level detected is unlikely.

⁽²⁾ Staphylococcus aureus may cause gastrointestinal upset such as vomiting, abdominal pain and diarrhoea.

⁽³⁾ While benzoic acid detected in the preserved pummelo exceeded legal limit, it is not permitted to be used in vegetarian sausage. Benzoic acid is of low toxicity and should not pose adverse effect on consumers.

Follow-up actions

- Issue warning letters to concerned vendors
- Request vendors to stop sale and dispose of incriminated food items
- Trace source and distribution of food items in question
- Keep close monitoring of the situation. If resumption of sale of the concerned product is detected, the CFS will take follow-up samples for analysis
- Take prosecution actions if there is sufficient evidence

Advices to trade

- To minimize the risk of aflatoxin, the trade should obtain raw materials from reliable suppliers; verify the specifications for quality product (e.g., decontamination process for reduction of aflatoxin level) and maintain good storage conditions including:
 - dry and cool environment
 - stock rotation should be on a first in first out basis
- To use food additives properly by complying with the legal requirements and follow “good manufacturing practice” (GMP)
- Food premises should always follow the “5 Keys to Food Safety” during food preparation to prevent foodborne disease

Advices to consumers

- Patronize licensed and reliable retailers
- Observe the packing and do not eat foods that are expired, look mouldy, damped, with abnormal smell and discoloured
- Observe the food storage condition and do not choose foods which are improperly stored (e.g., food without proper cover)
- Maintain a balanced diet to minimize risk